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## REPORTS TO THE SCIENTIFIC GRANTS COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

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Conclusion of First Report on the Life-History of Contagium, by Dr. Braidwood and Mr. Vacher, in JOURNAL of February 10th.

Second Report on the Life-History of Contagium, by Dr. Braidwood and Mr. Vacher, in JOURNAL of February 10th, March 3rd and 31st, and May 5th.

Interim Report of Investigations on the Electric Currents of the Brain, by Dr. Caton, in JOURNAL of May 5th.

Experiments on the Biliary Secretion of the Dog, with reference to the Action of Cholagogues, by Dr. Rutherford and M. Vignal, in JOURNAL of May 5th and June 9th.

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## TWO HARVEIAN LECTURES

ON

### BRIGHT'S DISEASE AND ITS TREATMENT:

CONSIDERED MAINLY IN RELATION WITH ARTERIAL TENSION FROM BLOOD-CONTAMINATION.

*Delivered before the Harveian Society of London, November 1875.*

BY THE LATE FRANCIS SIBSON, M.D., D.C.L., F.R.S.,

Consulting Physician to St. Mary's Hospital; Vice-President of the British Medical Association; etc.

#### LECTURE I.

MR. PRESIDENT,—When you so kindly conveyed to me the invitation of the Council of this Society to be its first Harveian lecturer, I felt that this great honour was, if possible, increased by being conveyed through yourself, my dear and frequent fellow-worker in the wards of St. Mary's Hospital.\*

The illustrious name and labours of Harvey have been so richly illustrated by the long roll of distinguished Harveian orators at the Royal College of Physicians, that I need not occupy your time by speaking of this great physician, whom we all honour as one of the two or three greatest advancers of medicine in England; but I shall make the subject of my lectures the relation of Bright's disease to those organs, the true physiology of which Harvey did so much to establish.

Before I begin with the subject of these lectures, I would pay my sincere homage to the young school of medicine, of which school you, sir, are so eminent an example, that is labouring in this country and abroad to enlarge and fix our knowledge of disease and of the action of remedies; and that, not by the pursuit of a vague and superficial routine, but by rigid and scientific investigation. When I spoke, Mr. President, of the young school of medicine, I turned to them from the great name of Harvey; and I regard them as the lineal descendants and heirs of his labours, and of the labours of all true workers in our profession. The workers of the present day stand upon the platform that has been erected by the labourers of the past, and they work upwards from that platform. They have thus this immense advantage that, while they receive all the knowledge and traditions of their predecessors, they advance forwards into new fields of knowledge; and, in doing so, they test and accept the truths and they test and reject the errors of the past; and the results of every-day experience are jotted by observation, science, and reason.

Bright's disease, whatever its force, acute or chronic, fatty, granular, or lardaceous, by interfering with the function of the kidney, lessens excretion of the broken-up tissues, and, by causing an undue accumulation of that *débris*, contaminates the whole volume of the blood circulating in the body. The escape or the non-escape of the albumen with the urine is not, I need scarcely say, the essential part of the disease. The weeping of the albumen in the acute fatty and lardaceous forms of the affections leads to disintegration of the blood and wasting and softening of the tissues; and the non-escape of the albumen, in cases of granular kidney, saves the blood and the tissues; but in both sets of cases a contaminated fluid circulates through every part of the body; affecting on the one hand the nervous system, and all the structures; on the other, rendering the flow of blood difficult through the smaller vessels. The blood is, therefore, unduly retained in the arteries, and they become tense. The quantity of blood may be great, as it often is in granular kidney; or it may be small, as it often is in fatty or lardaceous kidney; but whether the blood be increased or diminished in quantity, the arteries, be their diameter increased or diminished, contract firmly on their fluid contents, and are tense.

The influence of this tense state of the arterial system bears backward upon the heart, inducing enlargement and hypertrophy of the left ventricle, forwards on the capillaries, and intermediately on the whole arterial tree, from the root of the aorta to the finest arterioles.

I shall examine in this lecture the physical evidence of arterial tension in Bright's disease and its influence on the heart and arteries; and in my next lecture I shall consider the nature of the sphygmographic tracings characteristic of this disease, and those cases that present remarkable arrest and accumulation of those secondary influences that tend to lessen arterial tension, and then pass to the treatment of the disease.

Acute Bright's disease from cold, when it attacks, as it usually does, those who are young and free from disease of the heart or arteries, presents us with albuminuria, from affection of the kidney, in its most simple form; and the clinical study of that form of Bright's disease is, therefore, more easy and free from complication than any other. Of nine fatal cases of acute Bright's disease, not due to scarlet fever, in three the heart was large and in four it was very large, the left ventricle being usually hypertrophied. There was no complication in any of these cases of general disease primary to and preceding, or secondary to or following, the acute Bright's disease. There was no other influence, besides the actual hæmorrhage and weeping of albumen from the kidneys, to cause wasting of the tissues or destruction as well as direct loss of the red corpuscles. The wasting influences of the loss of red blood-corpuscles and albumen, and of the saturation of the tissues with serum, exercised, however, a strong influence tending to cause wasting of the heart as well of all the tissues. In spite of these wasting influences, however, the heart was enlarged in all those cases, and was greatly enlarged and hypertrophied in more than half of them; and there was, therefore, demonstratively some powerful cause at work, overriding the wasting influence of the disease and causing great enlargement of the heart. The two cases of acute Bright's disease not from scarlet fever, in which the heart was natural in size, would seem to say at first sight that the wasting influence of the disease is *per se* sufficient to balance the heart-enlarging effect of the disease; but the clinical history of those two cases removes them altogether from the cases of primary acute Bright's disease, and places them, like those from scarlet fever, among the secondary forms of the disease, for, in one of them, the affection of the kidney followed an attack of small-pox, which occurred some weeks previously; and in the other case, the acute disease of the kidney came on during an attack of acute rheumatism, and was accompanied by purpura with fatal hæmorrhage from and into the stomach and bowels.

The accompanying valuable table of fatal cases of acute Bright's disease, drawn up by my friend Dr. Greenfield, who kindly supplied me with it for my Lumleian lectures, gives an important illustration of the principles just stated. Dr. Greenfield gives nine cases of acute Bright's disease, in which there had been no scarlet fever. In three of them, the heart was rather large; in five of them, it was very large; and in one, its size is not noted. In seven of them, the left ventricle was hypertrophied, and in two its thickness was not noted; but, in one of these two, the heart weighed twenty-seven ounces, and, in the other one, twelve ounces. Two of his cases had ascites, while one of these two had pleural hæmorrhage; and in one of these the heart weighed eleven ounces, and in the other twelve ounces, so that the tendency of the heart to increase in size, owing to the acute Bright's disease, was manifestly held in check, not only by the exhausting loss of blood due to the disease itself, but also by the secondary or other affections implanted upon the disease.

The St. Mary's Hospital cases of acute Bright's disease from scarlet fever number only five; and in two of these the size of the heart was natural, in three it was rather large, and in none of them was it very large. Dr. Greenfield's cases of this class amount to seven; and in them, as in those in my tables, the heart is much less frequently enlarged than in his cases of primary acute Bright's disease. Thus the heart was small in one of his cases, was of natural size in two, was large in three of them; while in one its size was not noted, but as in that one the left ventricle was of moderate size, it may be inferred that

\* These lectures were delivered during the presidency of Dr. Broadbent.



the dimensions of the heart were natural. The left ventricle was hypertrophied in three of Dr. Greenfield's cases. These cases afford clinical evidence that, in acute Bright's disease from scarlet fever, the wasting effect of the primary disease, added to the wasting effect of the drain of red corpuscles and albumen, tend to counterbalance the natural influence of the disease of the kidney, to cause hypertrophy of the left ventricle and enlargement of the heart. Such influence is, however, actively at work, since, but for the power that is exercised, the heart, like the rest of the body, would have dwindled in size, whereas it was larger in one-half of the cases.

The cases of Bright's disease with fatty or large white kidney, in which the heart was rather or very large, which amount to two-fifths of the whole number of those cases (eight and fourteen respectively, or twenty-two in fifty-four) give an exact repetition of the clinical lesson afforded by the cases of acute Bright's disease, from which disease, indeed, the fatty kidney springs. Thus, among the whole of those cases, in only one instance was a secondary wasting disease, in this case phthisis, added to the primary and continuous waste of albumen, due to the kidney affection. In none of these cases was there notable emaciation of the body; the true wasting of the tissues being marked in many of them by the general dropsy.

The cases of lardaceous kidney and of suppurative disease of that organ, due to affections of the bladder and urethra, with enlargement, need not occupy us here; for they are few, and are given in the table in your hands, and correspond in general tendency with the cases of the same kind with fatty kidney.

The valuable clinical labours of Dr. G. Johnson, Dr. Dickinson, and many other observers, and everyday work at the bedside, have made us all familiar with the great vital differences between the two important forms of Bright's disease—the fatty kidney, with scanty highly albuminous dense urine and general dropsy; and the granular kidney, with abundant watery urine containing traces of albumen, and with little or no dropsy. The kidneys refuse to do their proper work in both forms of the disease, so that in both of them the blood becomes poisoned with the retained and accumulated *débris* of the tissues, and the arteries are therefore rendered tense. While, however, the granular kidney parts freely with the water of the blood, and the body, being thus drained, is free from dropsy, the fatty kidney sets free the albumen of the blood, retaining its water, which, escaping from the tense arteries, saturates the structure with general dropsy. The tissues are thus rounded and softened in cases with fatty kidney, the heart being enlarged, as we have just seen, in only two-fifths of them; while the tissues remain firm and are not wasted in cases with granular kidney, the heart being enlarged in three-fourths of the cases.

The frequent occurrence of hypertrophy of the left ventricle in Bright's disease, and especially in cases with granular kidney, is so well established that it is sufficient if I here refer to it as the heading of this section of my lecture. The frequency of the occurrence of great enlargement of the heart in the cases of Bright's disease, amounting to 277, examined after death in St. Mary's Hospital, during the first nineteen years of its existence, and the relative size of the heart, in 248 of those cases in which the size of the heart is stated, is exhibited in the table which I place in your hands.

The heart was very large, the left ventricle being almost always hypertrophied, in two-fifths of those 248 cases in which the size of the heart was stated (107); it was large in one-fifth of them (47); it was of natural size in more than one-fourth of them (67); and it was small in one-ninth of those cases (27).

There were some cases in which the heart was very large, some in which it was of the natural size, and some in which it was small (except in acute Bright's disease), in each of the different forms of kidney disease that are rightly grouped under the common name of Bright's disease. The proportion, however, in which the heart was affected depended very much on the different forms of Bright's disease, as will be seen from the following brief comparative analysis of those cases.

The heart was very large in nearly three-fifths (60 in 106), large in nearly one-fifth (20 in 106), of the cases with contracted granular kidney; while it was of natural size in a little over one-fifth (25 in 106), and was small in only one in twenty-six (4 in 106) of those cases; the comparison being necessarily limited in this and in the other groups of cases to those instances in which the size of the heart is stated. The proportions are very different in cases of fatty or large white kidney, following upon acute Bright's disease, since among these the heart was small in more than one-fourth of the cases (15 in 54), and was of natural size in nearly one-third of them (17 in 54); while it was very large, the left ventricle being nearly always hypertrophied, in nearly one-fourth of the cases (14 in 54), and was large in fully one-seventh of them.

Cases of lardaceous disease of the kidney, and those with disease of that organ, chiefly suppurative, due to stricture of the urethra or disease

of the bladder or prostate, rank nearly with cases of fatty kidney as regards the size of the heart. Thus the heart was small in nearly one-fourth (3 in 14 and 3 in 13), and of natural size in one-half (7 in 14 and 7 in 13 respectively), of each of those forms of Bright's disease; while it was very large in nearly one-fourth (3 in 14), and large in one, of the cases with lardaceous disease of the kidney; and it was very large in only one and large in two of the thirteen cases with suppurative disease of the kidney from stricture or affection of the bladder or prostate.

Acute Bright's disease stands alone in not presenting every variety of size of the heart, since, while in every other form of the disease we are considering the heart was small in a greater or less proportion, in the acute form the heart was not small in one instance; whilst it was very large in fully one-fourth of those cases (four in fourteen), it was large in nearly one-half of them (six in fourteen), and was of natural size in but a little over one-fourth of them (four in fourteen).

We have just seen that, in each form of Bright's disease, except the acute, though much less frequently when the kidney is granular, the heart in certain cases is unduly small; and that, in each form of Bright's disease, though much more frequently when the kidney is granular, the heart in certain cases is unduly large; and I shall now inquire whether, in those different forms of the disease, there are any points in common that may account respectively, on the one hand, for the diminution, and, on the other, for the increase of the size of the heart.

There are two influences at work that appear, from clinical evidence, to modify the size of the heart; one of these is wasting disease or emaciation, whether induced by the great weeping of albumen and the disintegration of the blood, or by the escape of serum into the tissues; the other is, on the one hand, incompetence of the mitral or aortic valve, whether from intrinsic affection of the valve, from enlargement of the left ventricle, or dilatation of the aorta; and, on the other hand, disease of the aorta and the arteries.

It will be seen that these two influences, which are themselves usually caused by the kidney-disease, exercise an important and opposite effect on the size of the heart, and especially of the left ventricle; and that, while the wasting disease and emaciation tend to lessen the size of the heart, valvular disease of the heart and disease of the aorta and arteries tend to increase the size of the heart, and especially the left ventricle, the right ventricle being also implicated when the mitral orifice is incompetent.

I shall first inquire into the influence of the large weeping of albumen from the blood, disintegration and imperfect repair of the red corpuscles, wasting disease and emaciation, and dropsy, on the size of the heart; and I shall first examine those instances in which the heart was small and of natural size, and then those in which the heart was enlarged, the left ventricle being hypertrophied.

The heart, which was small in one case in nine of the whole number (27 in 248), was so in only one in thirty of the cases with granular kidney (4 in 128); but in one in four of all cases of fatty (15 in 54), lardaceous (3 in 14), and suppurative (3 in 13) kidney, and kidney with calculus (2 in 8). In all but two of these cases, there was general disease of an exhausting character, such as phthisis (12), low form of inflammation (2), empyema and diarrhoea (3), or ascites (1), or caries of vertebrae (1), or abscess of the kidney itself, and in all but one or two there was emaciation. Thus, taking it for granted that the natural influence of the poisoned blood and arterial tension was to cause enlargement of the heart, there was in these cases an exhausting influence tending to emaciate the body and to lessen the size of the heart in general disease, added to the constant drain of albumen in all the cases, except the four with granular kidney.

The heart was of natural size in one in four of the whole of the cases of Bright's disease (63 in 248), in one in four of those with granular kidney (26 in 128), in one-third of those with fatty kidney (17 in 54), and with acute Bright's disease (4 in 14), and in one-half of those with lardaceous and suppurative kidney. About three-fourths of these cases (46 in 63) presented cerebral diseases or affections of the heart and arteries, which constitute the second influence that apparently tends to modify the size of the heart in cases of Bright's disease. This influence, looked at as a question of simple statistics, according to the evidence supplied by the table of fatal cases examined in St. Mary's Hospital, seems to exert the exactly opposite effect to that first influence of which I have just spoken—wasting disease and emaciation.

If we look, for instance, at the fifty-four cases with fatty kidney, we find that, in the group of fifteen in which the heart was small, in none of these was there valvular incompetence; in two of them, there was slight atheroma of a valve; and that in all the rest the heart was healthy; and not one with partial pericarditis; while, in these cases, the number was exactly increased in relation to the influence of wasting



disease, or thirteen, or all but two of them, were thus affected or were emaciated. If we now turn to the other end of the scale, we find that, among the fourteen cases in which the heart was enlarged, often to a great degree, there was wasting disease or emaciation in no single instance, while there was valvular incompetence in six, and organic pericardial adhesions in one, of the cases; there was atheroma of the valves or the aorta in four instances, and in only three was the heart healthy. Putting aside the great increase of size, we thus see that, as regards these two influences, there is an exactly opposite polarity.

In the large and important class of cases with granular disease of the kidney, including those in which the kidney was enlarged with cysts, was natural in size, and was contracted, we still find the two contrasted influences, each exercising its proper forces at, so to speak, the opposite pole. Thus, among the four cases with small hearts, none had affection of the heart and arteries, and all had wasting disease; and, among twenty-nine with a heart of natural size, three had valvular incompetence and eight had simple atheroma of the valves or aorta; while three-fourths of these, or twenty-two, had wasting disease or emaciation. These relative numbers are nearly reversed, but not so closely so as in the cases with fatty heart; among the seventy-five patients in whom the heart was large or very large, one-third of these, or twenty-four, had valvular incompetence or organic disease of the heart, not including pericarditis; one-third, or twenty-six, had atheroma without valvular incompetence of the valves, aorta, or coronary artery; and in one-third, or twenty-four, the heart was quite healthy, except as regards its size.

These records afford conclusive clinical and after-death evidence that, when the heart is greatly enlarged and the left ventricle is hypertrophied in cases of Bright's disease, the heart and its valves, and the aorta, are much more frequently diseased than when the heart is of natural size or small. I have spoken of this diseased condition of the heart and its valves and the arteries as an influence tending, in conjunction with Bright's disease, to enlarge the heart. The threefold question must here present itself to us, if we would make a scientific estimate of these facts, first, Do the valvular and other diseases of the heart, and the affection of the aorta, added to the Bright's disease, tend to increase the size of the heart? or (secondly) does the proved power of Bright's disease to cause enlargement of the heart, also cause, firstly, valvular incompetence from the increase of the size of the heart and the aorta; secondly, cause fibroid and fatty degeneration and atheroma of the walls and valves of the heart and of the aorta; and, thirdly, inflammation of the interior and the exterior of the heart? or (thirdly) are these three classes of conditions—the occurrence of the Bright's disease, the enlargement, namely, of the heart, on the one hand, and the disease of the heart and its valves and that of the aorta, on the other—the coinciding affection due to a common cause? I believe that an affirmative answer must be given to each of these questions in different cases. I shall take it for granted that the occurrence of disease of the valves of the heart and of the heart itself had an influence in many cases, in concurrence with the Bright's disease itself, to induce enlargement of the heart; for we know that, when there is no Bright's disease, those morbid changes directly tend to induce enlargement of the heart; and we see, as I have shown in these tables, the frequency of the occurrence of valvular and aortic disease in the cases of enlarged heart, and their rare occurrence when the heart is small or of natural size.

The second question—Does the Bright's disease ever, or generally, cause the affection of the valves of the heart and of the aorta?—is a very important one, and brings me face to face with a subject that is now causing much discussion.

In certain cases, with great enlargement of the heart, the valves are incompetent, although their structure is healthy, and these cases may occur in every form of established Bright's disease. Thus, in a patient of Sir James Alderson affected with fatty or lardaceous kidney, the right kidney weighed ten ounces, the left eleven ounces; the heart weighed twenty-one ounces; the walls of the right auricle and ventricle were exceedingly thin; the valve-flaps were healthy, but the valve was incompetent, owing to the size of the aperture. In another case, under my care, a man aged 47, with fatty disease of the kidney, the heart weighed twenty-three ounces; the mitral valve was only slightly thickened; the left ventricle was large, and its walls were very thin; and the mitral valve would nearly close under the influence of the pressure of water.

The aortic valve, like the mitral and bicuspid, sometimes becomes intompetent under the influence of the dilatation of the aorta, owing to the great arterial tension induced by the contamination of the blood in Bright's disease, and the consequent obstruction to the flow of blood through the smaller vessels. In one case that I watched for years, an aortic regurgitant murmur came into play towards the end

of the case. The regurgitation was not great, and, when the tension and size of the aorta lessened, it disappeared for a time to reappear when the aortic tension again increased. Thus the occurrence of the incompetence, by relieving the man, again restored the competence.

Atheroma, thickening, which may be either atheromatous or fibroid degeneration, and fibrinous concretions, usually from endocarditis affecting the mitral and aortic valves, and atheroma of the aorta, were present in a certain number of cases of Bright's disease, scattered through the whole of the former affection.

*Atheroma and Thickening of Valves.*—In one of the St. Mary's Hospital cases of acute Bright's disease, a man aged 47, with great enlargement of the heart (sixteen ounces), the mitral valve was thickened. In another of them, the aortic valve was fatty, the aorta being much dilated; but, as this patient was an old man aged 73, and as the acute attack was in this case evidently implanted upon old standing granular affection of the kidney, this case cannot here be classed with those of acute Bright's disease.

Among Dr. Greenfield's well observed nine cases of acute Bright's disease, not from scarlet fever, there is one patient (a girl aged 14) in whom there were concretions on the mitral valve, which was very thick, so that in this case there was evidently endocarditis affecting that valve and producing thickening of its flaps. Among Dr. Greenfield's seven cases of acute Bright's disease from scarlet fever, there is one patient (a girl aged 8) who presented, as in the instance just quoted, a small vegetation on the mitral valve, with thickening of its flaps; and in this case, as in the other, endocarditis had evidently produced these effects. In another patient of this group (a girl aged 13), there was opacity of the mitral valve and commencing atheroma of the aortic valve; and in this case the changes in those valves were, doubtless, due to endocarditis.

These three cases observed by Dr. Greenfield are especially important; for in them we can with precision attribute the inflammation, vegetations, thickening, and atheroma of those valves to their parent cause. We have already seen that, in acute Bright's disease, the heart is greatly enlarged, owing evidently to great arterial tension, due to the difficulty of sending the poisoned blood through the smallest vessels. It is the natural effect of the struggle of the heart to carry on its overwork.

*Fibrinous Concretions.*—The fatty or large kidney grows out of acute Bright's disease, being the chronic stage of the acute affection when it does not end in recovery. The fatty kidney is, therefore, like its parent affection, a primary kidney-disease. It is, indeed, more invariably a primary kidney-affection than acute Bright's disease, which sometimes attacks a granular kidney, and, when it does so, I need not say that the original disease remains unchanged after the acute attack has disappeared. We may, therefore, look to cases of fatty kidney to teach us the effect of the kidney-disease, in its simplest forms, in producing secondary affections of the valves of the heart. There were concretions on both the mitral and aortic valves in two, on the mitral valve alone in two, and on the aortic valve alone in one of the fifty-eight cases of fatty kidney; and we may, therefore, conclude that one in ten of those cases were affected with endocarditis. Again, the mitral and aortic valves were both thickened or atheromatous in two instances, the mitral valve alone in seven, and the aortic valve alone in one instance. We thus have an aggregate of fifteen cases in fifty-eight, or fully one in four of the whole, in which one or other, or both of the valves of the heart were thus affected in cases with fatty kidney. The heart was large or very large in eight of these cases; was rather large in three; was of natural size in one, and was small in two of those cases, and in one its size was doubtful. It is probable that, in the majority of these cases, the affection of the valve, probably, as a rule, inflammatory in its first start, was secondary to, and caused by, the Bright's disease. It is impossible, however, to say in what proportion of these cases the affection of the valve was secondary to, or caused by, the affection of the kidney; for the great majority of these patients were of mature age, and it is probable that, in a fair proportion of them, the affection of the valve was primary.

[To be continued.]

ALARMING reports were presented to the metropolitan asylums' managers on Saturday, showing the progress of small-pox in London. At Homerton, not only had the small-pox hospital three over its number, but the fever hospital has been pressed into the service, and 233 out of 236 beds were occupied. Of 826 beds provided, 813 were filled. Resolutions were adopted, requesting the Local Government Board to communicate with the Privy Council, with a view to steps being taken by the sanitary authorities to provide accommodation for small-pox patients not coming within the category of paupers.



# AN ADDRESS ON SOME SUBJECTS IN OBSTETRIC MEDICINE.

*Delivered before the Obstetrical Society of London, on Wednesday,  
January 3rd, 1877.*

By WILLIAM O. PRIESTLEY, M.D., F.R.C.P.,  
President of the Society.

GENTLEMEN,—To-night we terminate another session and mark another year in the age of the Obstetrical Society. The past year has not been uneventful, and several contributions have been brought before the Society of more than passing interest.

At the very beginning of the session, Dr. Routh brought before the Society an instance of the Removal of a large Fibroid Tumour of the Uterus by abdominal section. The case was interesting in several respects, and specially so in the way that hyperpyrexia following the operation was successfully controlled by the use of an ice-bath. Five days after the operation, the temperature rose to 105 and 106 deg., and other grave symptoms accompanied this increase of temperature. The patient was then placed bodily in an ice-bath, and kept in it for three-quarters of an hour, after the plan recommended in cases of acute rheumatism with perilous rise of fever-heat. The temperature sank under this treatment to 100 deg., and shortly afterwards to 97 deg., while consciousness returned. A second rise of temperature a week later to 104 deg. was treated in the same way, with a like result; and the patient, after being tapped by the vagina and relieved of intensely fetid pus which had gravitated into the retro-uterine *cul-de-sac*, eventually recovered. The results which have hitherto attended the attempts to remove fibroid tumours of the uterus by surgical proceeding have not been very encouraging. With the exception of one other successful case by Mr. Bryant in an early volume of the *Transactions*, I believe Dr. Routh's is the only instance of recovery after removal of a large uterine fibroid by abdominal section recorded in the proceedings of this Society. A considerable number of like operations have been undertaken by Dr. Atlee, Dr. H. R. Storer, Mr. Spencer Wells, Professor Kœberle, and others, in various parts of the world; but of these more than two-thirds of the patients died—a much larger proportion than after ovariectomy. The treatment of fibroid tumours of the uterus is no doubt one of the problems of the future. Fibroid tumours are much more frequent in women than ovarian tumours; but fortunately they are, in the majority of instances, of much slower growth and attended by less grave symptoms in progress, and the ultimate results are less threatening. By far the largest proportion of fibroids, when once discovered, are most judiciously treated by non-interference surgically. The discomforts may be relieved by appropriate remedies; the hæmorrhage, if occurring, can be controlled by rest and styptics; and a prospect may be afforded that, with the arrival of the climacteric, activity and inconvenience will subside. There are, nevertheless, some cases which are attended with such persistent and alarming hæmorrhage, or with pain and inconvenience from the bulk or position of the tumour, that the practitioner would be only too glad were it possible to look forward to an operation for its removal with no greater fear of a fatal issue than appears from the latest results of ovariectomy. Enucleation of the tumour by the vagina, in all its modifications, is a most hazardous proceeding. The large plexuses of veins and the erectile character of the tissues surrounding the womb in the true pelvis eminently predispose to phlebitis, diffuse cellular inflammation, and blood-poisoning; so that a simple incision into the cervix is attended with more risk than a similar incision elsewhere, and the danger increases with the magnitude of the operation. The peril is always enhanced by the difficulty experienced in preventing the retention of septic matters in the neighbourhood of the wounded surfaces, and their consequent absorption. A case in illustration of this subject was reported to the Society by Dr. Thomas Chambers.

When improvements in surgery obviate this source of danger to the patient, we may possibly procure more favourable results than heretofore. The history of ovariectomy has taught us that the fears formerly entertained concerning the great sensitiveness of the peritoneum, and the danger incurred by wounds of this membrane, were greatly exaggerated. It has further taught us that much greater danger is incurred by its contact with septic matters produced by wounds, than by exposure to the outer air. In the case of the major proceedings, when we have a choice between the two, the index of experience, indeed,

seems pointing somewhat in favour of abdominal section rather than of operation *per vaginam*, as being more manageable in its after-treatment, and giving a better chance of recovery. The experience of Péan, of Kœberle, of Hegar, of Spencer Wells, and others, indicates a distinct advance in this direction. Dr. Thomas Keith of Edinburgh, one of the wisest and most conservative of modern surgeons, told me recently he believed that, when all the details had been as carefully mastered as in ovariectomy, it would become a much less hazardous operation to remove large fibroids by abdominal section, particularly if the cervix uteri could be utilised as a stump, as recommended by M. Péan.

Mr. Wells informs me that he has recently removed a pedunculated tumour of the uterus by abdominal section from a patient who was bedridden from the discomfort it produced, and that she recovered without an adverse symptom. Such semidetached tumours are, no doubt, the most favourable for removal; but commonly they are just those which give least annoyance and least call for operative interference. It should be remembered that all operations which involve the laying open of the peritoneal cavity rank with the capital operations of external surgery. In their gravity and risk of life, they are beset with perils at every step, and they should not be undertaken without very adequate reasons.

The discussion which arose on Dr. Meadows's communication concerning the Diagnosis of a Nulliparous Uterus, and the specimens illustrative of the subject exhibited by Drs. Braxton Hicks and Edis, afford sufficient proof—if such proof were necessary—of the desire which exists to reduce the results of observation to a scientific and precise basis. Investigation has not yet enabled us to speak with any degree of certainty concerning the *post mortem* differences which exist between a nulliparous and a multiparous uterus; but the points dwelt upon by the various speakers on this topic deserve the careful attention of the medical jurist in the future. The arching of the fundus of the uterus, the relative size of the organ, and the fissured condition of the cervix, conjoined with other signs, afford only some presumptive evidence of pregnancy, if certain sources of fallacy be guarded against. But if it be true, as asserted by Dr. John Williams, that the condition of the blood-vessels during pregnancy is so changed as to leave a permanent alteration in their walls which may be henceforth recognised on section, a further sign of undoubted importance may be added to the evidences of previous delivery.

The same praiseworthy desire to solve some of the scientific problems of gynaecology appeared in the respective contributions of Dr. John Williams on the Mechanical Action of Pessaries, and of Dr. Braxton Hicks on the Cause of Uterine Displacements.

Two very interesting papers have been contributed during the session by members of the profession who do not practise obstetric medicine, and to whom therefore the Society is specially indebted for these additions to its *Transactions*. Mr. Hutchinson, the distinguished surgeon, has brought forward a series of observations on Diseases of Sheep incident to Parturition and on the "navel ill" in lambs. These form an interesting contribution to the study of comparative parturition and its diseases. Dr. Langdon Down contributed an admirable paper on the Obstetric Aspects of Idiocy. The paper of Dr. Langdon Down, as well as those by Mr. Godson and Dr. Cooper Rose, have brought prominently before the Fellows a question of great practical importance to them in the exercise of their vocation, viz., the frequency with which forceps ought to be employed in ordinary midwifery practice. A sort of revolution may be said to have taken place in the views entertained by medical practitioners on this subject. At one time, the forceps was used but rarely in proportion to the absolute number of deliveries. In 1850, Dr. Churchill computed that the forceps was employed by British practitioners only about once in 362 labours. In France and Germany at the same time, the forceps was used with more than twice this frequency, and the maternal mortality was considerably higher than in Great Britain, while the number of children saved was only about a half per cent. more. Anterior to that period, the short forceps was almost exclusively used. Dr. Collins, who was master of the Dublin Lying-in Hospital for seven years from 1826, taught that the forceps was quite inapplicable in difficult labour, unless the child's ear could be reached with the fingers, showing that he only used short forceps, and this only in the easiest cases. Nearer our own time, Dr. Robert Lee, who had one of the largest consulting midwifery practices in London, and is still living, always objected to the long forceps as a dangerous instrument. The result was a large proportion of craniotomy cases, and a sacrifice of infant-life which we now believe might have been spared.

With the advance of time, and a more accurate knowledge of the statics of parturition, of the dangers which beset both mother and child when pressure is over-prolonged in the maternal passages, and a better appreciation of the mechanical action of the forceps, as well as



the possession of improved instruments, the forceps has gradually come to be used with greater frequency and at the same time with happier results, and many craniotomy cases have been avoided by the employment of long forceps. During Johnston and Sinclair's term of office in the Rotunda Lying-in Hospital, Dublin, the forceps was employed in about one to every sixty deliveries, and some practitioners use it with still greater frequency. Dr. George Johnston, in his report of the Rotunda Hospital for the year ending November 1875, states that the forceps was employed about once in every nine cases. These figures, however, only bear on a limited number of deliveries. The danger now is lest the forceps should be used with mischievous recklessness, and without due consideration of all the issues involved. Allusion has been made in debate more than once to the fact that Dr. Hamilton of Falkirk had, mainly from the timely use of forceps, been able to publish two successive series of cranial deliveries, one of 600 and another of 750, without losing a single child; and the propriety has been mooted of applying forceps as often as once in every five cases. I am bound to say that, guided by somewhat extended and varied experience, in London, in the country, and in a densely populated manufacturing town, where deformity of the pelvis was not infrequent, I can see no valid reason for such constant recourse to instrumental interference. Unfortunately, the effect of suggestions of this kind is not always foreseen in all its consequences. Medical practitioners in town and country are led to believe that, because these doctrines are seriously discussed before the Obstetrical Society of London, they are the more advanced views of eminent obstetricians on the subject, and, unwilling to be behind their contemporaries in matters of practice, hasten to adopt them. An eminent surgeon recently informed me that he had within a short time been called in to repair serious lacerations which had been produced by the use of forceps; and, on inquiry, he found that the patients had been only two and four hours respectively in labour from its commencement before instruments were employed, and, so far as he could learn, there had previously been no urgent or threatening symptoms.

With our present knowledge, I think it may be fully conceded that, when the forceps is required, and it is employed by experienced and skilful hands, it will do less harm to the mother than long continued pressure of the presenting part on the maternal structures, and further, that its timely use may be the means of saving infant life. Excluding the cases in which complications occur, and where, for safety of the mother or child, delivery must be completed at the earliest possible period, the difficulty is to know *when* to interfere in each individual instance. Although we know that danger to both mother and child increases with the duration of labour, yet it is obvious that time alone cannot be taken into account. One patient may encounter greater peril from severe or continued uterine contraction against rigid structures in two hours than another patient in six hours, and a variety of matters have to be weighed before concluding that instruments are necessary. Obstetric practitioners in remote and isolated localities are perhaps not always in the best condition of mind for weighing nicely these various considerations. Wearied by long journeys and night-watching, distracted by demands for their services in different places at the same moment, they require all the moral support which authorities can give them in favour of patience and prudence. One who has experience and dexterous hands may have large success from the frequent and unnecessary use of forceps, but the absence of misadventure by no means proves its necessity. Another, endeavouring to imitate, may produce a series of disasters. One corollary we may deduce from this is, that all practitioners in midwifery should be thoroughly instructed in the mechanism of natural and morbid labour, and in the use of instruments. To use forceps with the greatest dexterity, it is probably best to adhere to one form, and that the long forceps, because it will answer for all forceps cases, and the hands thus grow familiar with its form and curves. The next point is to determine *when* the forceps should be rightly applied in a cranial presentation, and how to strike that just balance between too long a delay on the one hand, and too hasty an interference on the other. The rule should be, not as Dr. Collins propounded it, in past years, "wait until nature is absolutely exhausted", but rather see what nature can effect, and then supply the deficiency. To interfere when all is going on favourably, although it may be slowly, is to do away with all those safeguards, so far at least as the mother is concerned, with which nature has surrounded the parturient processes. More especially, it is apt to interfere with the full and perfect contraction of the uterus after delivery, and the gradual and progressive dilatation of the maternal canals which tends to prevent their laceration. There is no doubt a safe middle path between the two extremes of practice. Whenever the head is arrested in its progress through the pelvis, and there exposed to such pressure as to raise apprehension either for the maternal structures or the child's cere-

bral circulation, the skilful hand may proceed at once to deliver. When the head lies at the floor of the pelvis, and the passages are dilatable, there may be less hesitation in deciding on this course, even when the indications are somewhat doubtful, because the operation is simple, and generally easily performed. When the head is arrested at the brim, the operation is more complex and difficult, and greater care must be taken in forming a decision. Especially is this care necessary when the os uteri is imperfectly dilated; because, although experience has taught us that the long forceps may, in emergency, be applied before the os is fully dilated, it must at least be *dilatable*, or it will oppose obstinate resistance to efforts at traction, and may be severely lacerated.

The history by Dr. Galabin of two cases of delivery, in which labour was impeded by extensive Malignant Disease of the Cervix Uteri, has, for the second time, raised the question whether Cæsarean section should not in these cases be performed, instead of some operative proceeding *per vias naturales*. An opinion was expressed during last session that it would be better in all cases to have recourse to Cæsarean section. In this opinion I cannot concur, nor do I think that obstetrical authorities generally will endorse it. In some cases of undoubted malignant disease of the cervix uteri, where the affection is limited, no interference at all may be required, and, even where disease is more extensive and involves both labia uteri, it is surprising sometimes to see what Nature will effect in overcoming the obstacle without serious detriment to mother or child. In other instances, again, some artificial dilatation, or one or more incisions into the lateral margins of the os uteri, may be all that are required to favour delivery, and this is far less hazardous than the capital operation of Cæsarean section. When malignant disease is so advanced that deposit is thrown out into the adjacent structures, and such impediment exists to delivery by the natural channels as to forecast grave laceration of the maternal parts, and possibly evisceration of the fetus as well, then timely abdominal section probably becomes the more conservative operation, and affords a better chance both to mother and child.

The Society will still have in fresh recollection the interesting communication by Mr. Jessop of Leeds on a case of Extra-uterine Fœtation for which Abdominal Section had been performed. This, I believe, is the first of the kind occurring in Great Britain in which the lives of both mother and child were saved, although, as pointed out by Dr. Wiltshire, Keller of Strasburg has related nine cases in which four of the mothers recovered and seven children were saved.

There can be no doubt that Mr. Jessop and his colleagues exercised a wise discretion in electing to remove the fœtus by abdominal section in the case reported; for the mother's life was in jeopardy, and yet there was evidence that the child was alive. But I ventured to remark during the discussion that the recital, marvellous though it was, on account of the perils surmounted, could not be taken as a justification for like interference when no such imminent peril to the woman is present. There can be no uncertainty about the grave position in which a woman is placed who is the subject of extra-uterine fœtation in any of its forms. During the whole progress of gestation, there is the ever present danger of rupture of the containing sac, and the subsequent internal hæmorrhage and collapse. If this catastrophe be avoided, intercurrent peritonitis is rarely absent, with all its forms of functional derangement and suffering. Later, comes the inconvenience and peril, in many instances, of spontaneous suppuration after the death of the fœtus and its slow extrusion from some forced outlet. Fortunately, extra-uterine fœtation is not very common, but cases occur with sufficient frequency to give most medical men in large practice an opportunity of encountering an example from time to time, and every experience tending to better and more successful treatment is to be welcomed. Hitherto, the weight of experience has been overwhelmingly on the side of postponing an operation until foetal life is extinguished, and the suppurative process is well advanced. Dr. Campbell, who wrote a standard work on *Extra-uterine Fœtation* in 1842, collected a sum of fifty-one operations. The accounts of all are not very complete; but, of thirty cases (as I understand the figures) in which gastrotomy was performed or the breach dilated after suppuration had set in, twenty-eight patients recovered. He gives twelve cases of gastrotomy performed after the suppurative process was well advanced, in which ten were successful; but, of nine women operated on during the existence of foetal life or soon after its extinction, the whole died. Dr. Parry of Philadelphia has, during the last year, published a volume on the same subject, which brings out later results from a much more extended series of cases. In twenty cases of primary gastrotomy, the maternal mortality was 70 per cent., or 17.35 per cent. greater than when the cases are left to nature, and the infantile mortality was 60 per cent. On the other hand, in thirty-six cases of secondary gas-



trotomy performed some time after full term, not including those in which the operation was merely to assist the efforts of nature, the mortality was only 38.88 per cent. The conclusion is irresistible that, as a rule, so long as the vascular and nervous excitement inseparable from the progress of gestation are present, it is unwise to interfere, and that an operation is more likely to be successful after the puerperal state has subsided.

Dr. Parry believes the most prudent course, when the patient is not in immediate peril, is to wait until suppuration is fully established, and then enlarge any opening made by nature to evacuate the contents. As Mr. Jessop very justly pointed out, every rule must have its exceptions; and, if urgent signs of danger present themselves at any time during the progress, they must be met by attempts at a remedy which, under other circumstances, should be avoided.

In the two last cases which I have seen, there has not even been a clear history of suppuration established. In both instances, the children died towards the term of gestation; became encysted, and afterwards gradually shrivelled *in situ*, the mothers recovering so entirely, that only some limited swelling remained as evidence of the pre-existing large tumour. As this is not an uncommon termination, it is an additional reason for not exposing the patient during the period of pregnancy to the serious risk of abdominal section in the expectation of a possible danger in the future which may never arise.

But, if it be better to abstain from interference generally during the progress of extra-uterine foetation, there are additional and urgent reasons for not entertaining the suggestion which was made during the discussion on Mr. Jessop's paper, that we should open the abdomen in cases of early tubular pregnancy, with the view of removing the tumour, as in ovariectomy.

It is true that Fallopian pregnancy is a particularly dangerous form of extra-uterine foetation; that gestation rarely advances beyond the third month without rupture and collapse; but, in these cases, no parallel can be drawn with cases of ovarian disease, as the excitement of pregnancy renders all operative proceedings more hazardous. Moreover, the diagnosis of tubular foetation is, in the majority of cases, so obscure until actual rupture takes place as, in the present state of our knowledge, to be almost impracticable.

As an illustration of the difficulty in diagnosis, I may mention that, not long ago, I saw a patient whom I believed to be the subject of extra-uterine foetation, and whom I recommended to return to her ordinary medical attendant, a man of much experience, that he might watch her progress, and be ready for any emergency which might arise. A few weeks later, her medical man brought her back to me. He was now in much anxiety, because foetal movements had become very distinct; and he thought, although the patient seemed quite well, that some operation ought to be performed to save her from untoward consequences later. I advised him not to interfere, and he then asked my sanction for another opinion—a point I readily conceded—as he proposed to take his patient to a surgeon of great reputation for the treatment of abdominal tumours. To my surprise, the second opinion so far differed from mine, that it was clearly in favour of the case being one of normal pregnancy, and not extra-uterine at all.

Eventually, however, the term of gestation was passed and the foetal movements ceased. Then, without serious symptoms, the child became converted into an apparently innocuous mass, slowly shrivelling and diminishing until but little indication of its previous existence could be detected at a later period.

When rupture of a tubular foetation has actually occurred and the patient is in the face of a deadly peril, it then becomes a question whether it might not be justifiable to cut down upon the locality for the purpose of removing the offending mass from the cavity of the peritoneum. In such circumstances, we meet a desperate case by a desperate remedy; but no spirit of adventure, no desire for fame as operators, should induce us to expose a patient to so serious an operation as is here contemplated, on the mere assumption of a fact which may in reality have no existence.

I venture to speak strongly on such matters as these, because I take it to be one of the duties of your President to moderate between views which may seem to be extreme, and to attempt to try them by a judicial standard. I frankly own myself attached to a conservative exercise of our rapidly improving branch of the medical art. At the same time, I am most anxious not to take a reactionary part in opposing any useful innovation. I render all honour to the pioneers of progress, but I desire in advancing to keep a fair equipoise; and I hold that, when we are entrusted with such important issues, we ought to prove each step of progress, and not be led away by an *ignis fatuus* which may end in fatal disaster.

When I observe an almost feverish anxiety, well intentioned though it be, to interfere before the emergency has distinctly arisen; or, in the

course of affections like pelvic hæmatocele, for example, where the natural tendency in a large proportion of cases has been indubitably proved to be towards a favourable termination, I am forcibly reminded of the exclamation of a great statesman in reference to the meddling policy of a political opponent, "Why cannot you leave it alone?" I desire it to be understood that these remarks do not apply to exceptional cases in which peril or inconvenience is great, and where it is obvious some attempt commensurate with the evil must be made to abate or remove the difficulty. When such an occasion presents itself, it must be met courageously and fearlessly; but I believe it requires higher mental training to watch patiently and wait, than to act when the necessity for action comes.

In Mr. Lawson Tait's case of Vesico-vaginal Fistula cured by operation after a series of unsuccessful attempts, which might well have appalled the most enthusiastic of surgeons, the Society had an opportunity of learning what may be achieved by indomitable perseverance, and of deducing the fact that scarcely any case is so bad but may be repaired if both skill and patience are untiring.

Other interesting matters, it may be recollected, have been brought before the Society, and some new instruments have been exhibited. Notably, a new blunt hook by Professor Lazarewitch of Russia; an ingenious thermo-cautery invented by Dr. Paquelin of Paris, exhibited by Dr. Oscar Prevôt of Moscow; and the beautiful apparatus for transfusion, demonstrated in action by Dr. Roussel of Geneva. Concerning the question of transfusion, I may inform the Society that the Committee appointed on this subject has reported to the Council that twelve meetings have been held, and many instruments have been presented and examined. The Committee suggested that a physiologist should be appointed to carry out a series of experiments on animals; and for this purpose the Council have granted a sum not to exceed £50.

Since last January, we have received intelligence of the decease of three honorary foreign Fellows; and we have to mourn the loss of six ordinary Fellows, whose names must regretfully be erased from the Society's list.

The names of deceased honorary Fellows are Professor Tracy of Melbourne; Professor Channing of Boston, United States; and Professor Simon of Heidelberg. I must crave your indulgence while I say a few words concerning the lives and labours of each of the remarkable men who were chosen by this Society to rank as honorary Fellows.

Dr. Richard Thomas Tracy of Melbourne, Australia, died on the 7th of November, 1874; but intelligence had not been received of his decease when I delivered the annual address last January. From obituary notices in the *Australian Medical Journal* and in the *Medical Times and Gazette*, we learn that Dr. Tracy was born at Limerick in Ireland, on the 19th of September, 1826; and was educated at the Limerick County Infirmary and at Trinity College, Dublin. During his pupilage, he volunteered as an assistant medical attendant during the famine fever, then desolating Ireland, and almost succumbed to an attack of that disease caught from a patient. Having passed the College of Surgeons in Ireland in 1848, he visited the hospitals of Paris; and eventually went to Glasgow, where he became Resident-Surgeon to the Hospital for Cholera. Cholera was then rife in Glasgow. The hospital contained seven hundred beds; and for four months, during the prevalence of the epidemic, he never left the hospital. In 1849, he took the degree in Medicine in the Glasgow University; and, being disappointed in a negotiation for a share of a practice which he proposed to acquire in London, he determined to go to Australia. After various adventures at the gold-diggings and elsewhere, he settled in Fitzroy, Melbourne; and, in that as yet imperfectly organised colony, began to develop his resources. He became not only a prominent medical practitioner, but took an active part in all social matters—in the building of the church, and in the enrolment of volunteers. He avoided politics, but became a magistrate for the local bench, and officer of health for the district. In 1855, he started, in conjunction with Dr. John Mound, a lying-in hospital and infirmary for women and children; and somewhat later he took part in the formation of a medical society and the publication of a medical journal. His natural energy, his perspicacity, and his sound judgment, would have given him a leading place in any branch of the medical profession; but he inclined especially to the cultivation of obstetric medicine, and earned so much success and prestige in this department that he became the leading authority in the new country. His contributions to obstetrics were always of the most practical kind, and showed him so thorough a master of his art that, when a Medical School and University were instituted at Melbourne, he was chosen by common consent lecturer and examiner in Obstetric Medicine. In 1871, he was elected a honorary Fellow of this Society as a representative scientific gynaecologist in the antipodes. He contributed a paper to our own *Transactions*, and



made a communication to the Royal Medical and Chirurgical Society on Ovariectomy. He was the first to perform ovariectomy in Australia; and, coming to England in 1873, he watched the operations of Mr. Spencer Wells with the greatest assiduity. At this time, he was in failing health; and returned to Melbourne in April 1874, knowing that his fate was sealed and quite resigned to it. He died seven months later, of malignant disease of the mesentery; and, at his funeral, the whole town of Melbourne went into mourning for him. *The Argus* newspaper of the date said, "he was a chief among the people, who had lived a honoured life and left a cherished name behind him".

Dr. Walter Channing of Boston, United States, who died on the 27th of July, 1876, at the age of ninety, was a Nestor in his profession. The particulars of his career have been chiefly gathered from an obituary notice in one of the Boston newspapers, signed with the initials "T. W. H.", and from the *Boston Medical Journal*. He was one of a remarkable family, and his personal fame was in a manner overshadowed by his eminent brother, the Rev. William E. Channing, a great American preacher, with whom his identity was often confused. It is recorded of the subject of this memoir that, in answer to an inquirer at his own door, he said that he was not the Dr. Channing who preached, but the one who practised. Dr. Walter Channing was for a long period the recognised head of Obstetric Medicine in New England. He was the first Professor of Obstetrics and Medical Jurisprudence in Harvard University, an office which he held for nearly forty years. He was besides associated with Dr. Jackson, of American celebrity, in charge of the Massachusetts General Hospital from its commencement. He received its first patient, and held office in it for twenty years. Besides various contributions on Obstetric Medicine, some of which are to be found in the library of this Society, his most important work was entitled *Etherisation in Childbirth Illustrated by five hundred and eighty-one Cases*. This volume was regarded in America as the standard work on the subject. Dr. Channing was one of the first, if not the first, in his own country to use ether in childbirth; and I well recollect his enthusiasm on the subject in writing to Sir J. Y. Simpson in the early history of anaesthesia. Besides his devotion to obstetrical science, Dr. Walter Channing was a keen naturalist, and was one of the founders of the Boston Natural History Society. He was a prominent supporter of the anti-slavery movement, the temperance movement, the peace movement, and of the efforts for the prevention of pauperism. Regarding himself as a citizen as well as a physician, he spoke and wrote on a variety of domestic topics; and in the Boston Library is a long list of his numerous writings. He seems to have had an impulsive and ardent disposition, great fertility of mind, and a large fund of wit and humour. His life, like his mind, was crowded with divergent activities, and he was always ready for a new interest. He outlived nearly all his contemporaries. His final illness was without suffering, and his death painless.

Professor Gustav Simon of Heidelberg was born at Darmstadt in 1824. He graduated at Heidelberg in 1847; and was nominated extraordinary Professor at Rostock in 1861. He then became known to the scientific world through a remarkably learned work on *Excision of the Spleen*, a book in which every case to be found in ancient and modern literature where the spleen was accidentally or intentionally removed is recorded and criticised with the greatest acuteness. In 1867, he was transferred to Heidelberg, and remained Professor there until his death, which took place on the 28th of August, 1876. While in Heidelberg, he occupied himself with gynaecology as well as general surgery; and in summer he gave lectures on this subject, which were largely attended by foreigners attracted by his reputation, as well as by practitioners and students of his own country. His work on *Vesico-Vaginal Fistula* was remarkable for the demonstration it gave of the superiority of silk over wire sutures, the utility of which had been before so much dwelt upon. This gave the first impulse of returning confidence in organic as opposed to metallic sutures; and, conjoined with the proofs he gave of the good results of the suture without the use of the catheter, may be said to have given an entirely new aspect to this operation. The dispensing with the use of the catheter after closing vesico-vaginal fistula was received as a startling innovation by almost all our own operators; but subsequent experience has, I believe, proved that the retention of a catheter may, in many cases, be avoided, and that, in others, its occasional use only is required. Simon is said to have operated for the cure of vesico-vaginal fistula two hundred and fifty times. He was the first surgeon who successfully extirpated the kidney for disease. The patient submitted to the operation in 1869, and, according to the last accounts, was still living. Other innovations due to Professor Simon were a mode of examining the interior of the bladder by rapid dilatation of the urethra, and a mode of exploring the interior of the pelvis and abdomen by the introduction of the whole hand and part of the forearm into the rectum. Mr. Spencer Wells,

who knew Simon well, and to whom I am indebted, as well as to Dr. Tuckmann, for some particulars of this sketch, assures me that, under his guidance, he was enabled to reach the kidney by this way of examination. I do not attempt to enumerate all his works. His contributions to Clinical Surgery were very numerous; and his originality and industry marvellous. In the opinion of very competent authorities, few men have done so much good work for surgery in general, and gynaecology in particular. His memory has received a graceful tribute in a warm eulogy by Dr. Braun in the *Berliner Klinische Wochenschrift*. Dr. Braun says: "He was one of the most famous, as well as the most dexterous, operators in Germany, and possessed all the qualifications for this in the highest degree. Belonging to no school, he became everything by his own zeal and by his own strength. All who knew him recognised his open honest character, and his singleness of purpose. All who personally came in contact with him, were they patients, pupils, acquaintances, or friends, all felt themselves irresistibly drawn towards him, and to all such his memory will be imperishable." In 1870, Simon began to feel symptoms which must have been the precursors of his last illness; and in 1875 he thought it prudent to retire for a time from his duties as Professor. On the day preceding his death, he had been feeling unusually well, but was seized with dyspnoea in the evening, and was so distressed that he begged to have tracheotomy performed. This apparently gave him some relief, but it was only temporary, as he passed away without any great struggle on the night of the following day. A necropsy proved that he had died of aneurism of the ascending aorta. His death caused great sensation in Germany; and a stately funeral, attended by a multitude of mourners, testified to the great esteem in which he was held by all classes. On his death-bed were found the proof-sheets of a book, which has since been published, *On the Treatment of Surgical Diseases of the Kidneys*.

The names of the deceased ordinary Fellows are Frederick Augustus Stutter, M.D., Farnboro' House, Upper Sydenham; Fred. Turton, Atlow House, Wolverhampton; Henry Hardinge, M.D., 18, Grafton Street, London; Sir John Cordy Burrows, J.P., F.R.C.S., Old Steyne, Brighton; Thomas Taylor Griffith, F.R.C.S., Consulting Surgeon to the Wrexham Infirmary; and William Sudlow Roots, F.R.C.S., F.L.S., Surgeon to the Royal Establishment at Hampton Court, an original Fellow of the Society.

All these names have rendered some service directly or indirectly to gynaecology according to their sphere or opportunity, and while living desired to participate in the advantages shared by the Fellows of this Society. Sir John Cordy Burrows of Brighton and Mr. Griffith of Wrexham were notable characters in their respective localities, and were so esteemed for their public as well as their professional services, that their townsmen observed a general mourning on the day of their funerals.

Notwithstanding these grievous losses, the Society is undoubtedly in a most active and flourishing condition. The number of Fellows now exceeds seven hundred, and no less than eighty-two ordinary Fellows have been elected during the past year. As an indication of the attractive character of its proceedings, I may state that, sometimes more than one hundred Fellows and visitors have been present at the meetings, and the average attendance at each meeting during the session has been nearly seventy. The successful *conversazione* given by the kind permission of the President and Fellows in the Royal College of Physicians, was attended by medical practitioners from all parts of the country. Especial thanks are due to the *Conversazione* Committee for their exertions on that occasion, and particularly to the honorary Secretaries and Dr. Grigg for bringing together so large and interesting a collection of instruments and works of art.

The demand for the *Transactions* has been so considerable that the Council have ordered twice the former number of copies to be printed, and the financial condition, notwithstanding all that has been undertaken during the year, is, as the Treasurer's report shows, most satisfactory. It only remains for me, in retiring from the Chair, to which through your favour I was elected two years ago, to acknowledge my profound sense of the advantage I have gained in presiding over a Society possessed of so much vitality. The earnestness which pervades its proceedings may well attract and secure some converts; and it is at least a sign of health and vigour, and I have already seen its influence as an incentive to renewed exertion. I have to thank the Society very cordially for the way in which it has facilitated the conduct of business, and the responsive manner in which it has respected the decisions of the Chair. To the Council and other office-bearers I have to acknowledge my indebtedness, and more especially to the honorary Secretaries and Treasurer, my thanks for their constant aid on all occasions.

In taking my leave, I must warmly congratulate the Society in



having secured for its next President so distinguished a representative of obstetric medicine as Dr. West. Dr. West's name is as familiar with us as a household word, and it is respected throughout the world where gynæcology is cultivated. To our new President I am personally indebted for the most unselfish services, during a period of severe illness and anxiety, which any one brother physician can render to another, and its recollections of these is always vividly before me. I can only say that, had I known Dr. West could have been persuaded to accept the Presidency of the Obstetrical Society at any earlier period, I would gladly have postponed my term of office until I could have had the advantage of his example and precept as my predecessor.

## CASE OF ACUTE ARSENICAL POISONING FROM THE USE OF GREEN PAINT.

By JOSEPH FARRAR, L.R.C.P.Ed., Bradford.

A YOUNG man, aged 22, was taken very ill on the night of December 13th, 1876, with vomiting and purging, accompanied with pain in the abdomen of a colicky character, and so severe as to be best expressed by the word excruciating. Along with these conditions were great weakness and quickness of pulse (120), faintness, paleness of the face, pinched features, but with the eyelids somewhat red and puffy, and cold clammy perspirations of an intermittent nature. The tongue was raw-looking, with portions of its upper surface denuded of epithelium, sore to the touch, and somewhat enlarged in size. There was no lead-line along the gums.

For a few weeks previously, he had been ailing from an attack of enteric fever, attended towards its termination with congestion of the lungs, and he was now, during convalescence, amusing himself by making large Christmas cards, etc., which he painted with colours chiefly of a bright green; and not being aware of the subtle nature of the paints, and not being much accustomed to their use, he exercised none of the usual precautions adopted by the artisans of the trade to prevent the entrance of the materials into the system. On the contrary, his habits were such as to present the most favourable conditions for these poisonous substances to find their way into the economy; he neglected to wash his hands before meals. Beneath his finger-nails had accumulated large quantities of material, and he was in the habit of holding the brushes between his teeth; besides which, he worked long and energetically, without much intermission, in a room small and heated, which would be greatly improved if it could be ventilated. The green paint shown me was marked "POISON, Scheel's Green".

By way of treatment, the patient had a sinapism applied to the seat of pain, followed by linseed poultices as hot as could be borne. Internally, an astringent, containing tincture of opium, was given every hour so long as the diarrhoea and pain lasted, with half an ounce of brandy; the latter to be given more frequently if the faintness continued. His food was now to be chiefly milk, ground-rice, beef-tea with bread-crumbs, etc., administered in small quantities, frequently repeated.

The patient's condition at once improved. The vomiting and purging ceased, and, by next day, the astringent was stopped. Pain in the abdomen was still, however, complained of for six or seven days, its presence being intermittent, and the paroxysm often very severe, to allay which it was necessary to administer anodynes. After the second day, a mixture of iodide of potassium was given, with the view of eliminating any portions of lead which might also have been present in the system, from the handling of the other paints, etc. The patient is now recovered from the more immediate effects of the poison; his bowels, tongue, appetite, etc., normal, though weakness is still complained of, and slight feelings of uneasiness in the abdomen.

**REMARKS.**—The above is another in the long list of cases arising out of the use of arsenical colouring matters, and it suggests the question whether the manufacturers, or the vendors of such dangerous substances, should not issue with each portion sold, printed instructions regarding the subtle character of the poisonous material, and the great care necessary to be exercised during its manipulation. It is not sufficient to print the word "poison" on the containing vessel, as is evidenced by this case. As a rule, the green colours most pleasing to the eye, whether in paints, wall-papers, or other articles, are those containing arsenic as their colouring ingredient; a body which, though the very best as regards effectiveness, etc., is yet the very worst as regards its danger to those who happen to be within its influence.

## CASE OF INTRATHORACIC TUMOUR (LYMPHO-SARCOMA) WITH SECONDARY DEPOSIT IN THE SUPRARENAL CAPSULE.

By BYROM BRAMWELL, M.B.,

Physician and Pathologist to the Newcastle-upon-Tyne Infirmary. Joint-Lecturer on Pathology in the University of Durham College of Medicine.

WILLIAM JONES, aged 30, labourer, was admitted into the Tynemouth Union Workhouse on October 28th, 1872, complaining of shortness of breath on exertion, cough, great emaciation, and debility.

**Previous History.**—Seven years ago, he had three or four small chances, which were not followed by secondary symptoms. With this exception, he did not know what a day's illness was until January of the year in which he was admitted. He at that time caught cold while blasting rock in a cold damp tunnel, which was often full of gunpowder-smoke. He began to cough and spit; the expectoration at times was streaked with blood; he rapidly lost flesh, and, in the middle of April, was obliged to give up this work. He thought his cough was brought on by the inhalation of the gunpowder-smoke. He had been working off and on as a labourer until five weeks before admission. For the last five weeks, he had been confined to bed.

**Condition on Admission.**—His general appearance at first sight would lead one to suppose that he was suffering from renal dropsy. The face was puffed and swollen, especially about the eyelids. On more careful examination, it was seen that, instead of the characteristic pallor of Bright's disease, the face had somewhat of a dusky hue; the neck, too, was swollen, chiefly on the right side, above the clavicle. The slightest exertion made him, he said, "wonderful short of breath". He had a frequent short hard cough; the expectoration was scanty, consisting chiefly of saliva; his voice was husky; he spoke in a whisper. He complained of a dull boring sort of pain, much worse when he lay on his right side, between the superior internal angle of the right scapula and the spine. He was extremely emaciated; he said he used to be very stout and muscular. The right pupil was considerably larger than the left.

**Respiratory System.**—On inspection, the upper part of the thorax, anteriorly, was seen to be swollen; the clavicles did not stand out; there was pitting on pressure over the swollen part. Several large veins were seen coursing over this part of the chest; the right brachiocephalic vein was distended and stood prominently out. The left side of the chest did not expand even on full inspiration; the movement of the right side was normal. The left side, at the level of the nipple, measured during expiration an inch more than the right. Vocal fremitus was absent over the lower half of the left chest. On percussion, there was dullness anteriorly over the whole of the left chest; the dullness was absolute from an inch below the left clavicle. Transversely, the absolute dullness extended on the one side as far as the right border of the sternum; on the other, over the lateral region of the chest. Posteriorly, there was absolute dullness over the lower two-thirds of the left lung; over the upper third, the percussion-note was much impaired, the resonance being greatest in the suprascapular region and close to the spine. Together with the dullness, there was a feeling of great resistance. On the right side, anteriorly, there was absolute dullness over an area of the size of a hen's egg, about the second right costal cartilage. There was impaired percussion from the right border of the sternum to within two inches of the right nipple. Over the rest of the right chest, the percussion-note was, if anything, hyper-resonant. On auscultation, there were tubular breathing and increased vocal resonance over the upper third of the left lung, back and front. Over the lower two-thirds, the respiratory murmur and vocal resonance were absent. In the right infraclavicular region, the breathing was tubular; over the rest of the right lung, puerile respiration was heard. The respirations, when at rest, numbered eighteen per minute. The slightest movement made the patient feel very short of breath and brought on the cough.

**Circulatory System.**—There was marked pulsation both to sight and touch in the pit of the epigastrium. Dull heaving pulsation could be felt over the middle and lower sternal and left mammary regions. At the second right costal cartilage, there was well marked pulsation; it was more distinct and apparently not so deep-seated as the pulsation over the sternal region. On auscultation, the heart-sounds were loudly heard all over the front of the chest, most distinctly at the second right costal cartilage and over the lower half of the sternum. The sounds were normal in character. Posteriorly, over the whole of the left side and over the upper third of the right side, the heart-sounds were distinctly heard. Radial pulse 108, soft and weak; the right being very much weaker than the left.

**Digestive System.**—Hepatic dullness measured five inches, extending as high up as the sixth rib. He had great difficulty in swallowing: solids seemed to stick half way down, choked him, and caused him to make a grimace. He could not swallow liquids freely, as they made him cough. His appetite was poor; the tongue was moist, slightly coated. The bowels were constipated. His urine was normal. He slept badly, often dreamed, and woke in a fright. The skin was cool to the touch, smooth and moist. Temperature in the axilla, 99.3 deg. Fahr. His family history was very good. So far as he knew, none of his near relatives had died of consumption.

**The Treatment** consisted in the administration of—1. Plenty of good nourishing food, milk, beef-tea, and eggs; 2. Two ounces of wine and a pint of ale daily; 3. Seven grains of iodide of potassium in an ounce of infusion of gentian three times a day; 4. An opiate when required.

October 31st. He complained of tenderness, on pressure, over the sixth, seventh, and eighth left ribs in the line of the nipple. On auscultation, over the tender spot a pleural friction-sound was heard. The pupils were to-day equal.

November 2nd. Friction was now heard, chiefly with inspiration, over the whole of the lower half of the left chest. Below the right clavicle, a soft systolic murmur was faintly heard; no second sound could be perceived here. At the second right costal cartilage, both heart-sounds were heard free from murmur. Radial pulse, 114; respirations, 22.

November 5th. He spat a little blood to-day. He complained of great pain between the right scapula and the spine. He said his swallowing was worse. The right pupil was one-third larger than the left. The systolic murmur under the right clavicle was much louder, and was heard in the great vessels of the neck, in the left infraclavicular region, at the painful spot between the right scapula and spine (it was here very distinct), and for a considerable distance down each side of the spinal column.

November 8th. The cedema of the face was less; at the root of the neck on each side, small nodules about the size of peas could be distinctly felt.

November 18th. The absolute dullness on percussion now extended over the whole of the left chest and over the right side anteriorly to within two inches of the right nipple. The percussion-note was impaired as far as the nipple. (See Fig. 1.) The liver-dullness measured

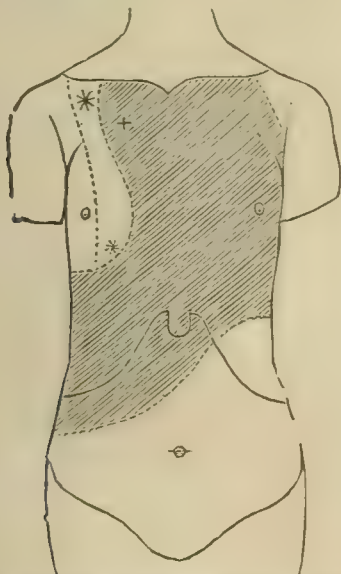


Fig. 1.—Front of Thorax and Abdomen. The shaded portion shows the extent of dullness at an advanced stage of the case. The area of hepatic dullness is also shown. The larger asterisk (\*) points to the position of the systolic murmur first heard; the smaller one (°) to that last heard. This murmur was very limited in area.

six inches and a half. The right radial pulse was imperceptible. The urine was normal.

November 25th. Superficial cedema of the front of the chest was greater. The glandular enlargement at the root of the neck was more distinct. The hollow between the left scapula and the spine was effaced; the scapula looked as if it were pushed backwards by the

swelling. Breathing and swallowing were very much worse. He was most anxious to have something done. My friend Dr. Page saw the case with me and agreed in thinking it advisable to puncture the left chest. This was done between the seventh and eighth ribs. More than a pint of thick matter was withdrawn. (The matter would not flow through the aspirator; a full-sized trocar was, therefore, introduced.) A probe passed through the wound was felt to come into contact with a solid body. On microscopic examination, the matter drawn off was found to consist of pus, blood, and much granular debris. He was ordered to be stimulated freely, and to have a mixture containing iron and quinine.

November 26th. He was sunken and collapsed. Radial pulse, 120; respirations, 36. Over the upper part of the left chest, there was a high tympanitic note, but no vesicular murmur.

December 4th. He spat up a quantity of thick white creamy-looking matter, which, under the microscope, was seen to consist of squamous epithelium-cells and small corpuscular bodies, round in form, granular, about the size of human red blood-corpuscles, on the addition of acetic acid, not resembling pus. In addition to the systolic murmur below the left clavicle, another murmur was now heard at a point two inches to the lower and inner side of the right nipple. This murmur was only heard over a very limited area; was systolic and very harsh in character.

December 14th. He was dying. The nurse saw he had been stuffing his fingers into his mouth and pulling at his throat, as if he wished to tear something away.

The *post mortem* examination was made twenty-six hours after death. The body was much emaciated; the face was slightly swollen; glandular enlargement was most distinct at the root of the neck. On opening the thorax, a solid mass of the size of a child's head (apparently, from its colour, the consolidated left lung) stood prominently out in the left mammary region; above and to the right of this, and situated immediately over the ascending portion of the aortic arch, was another solid

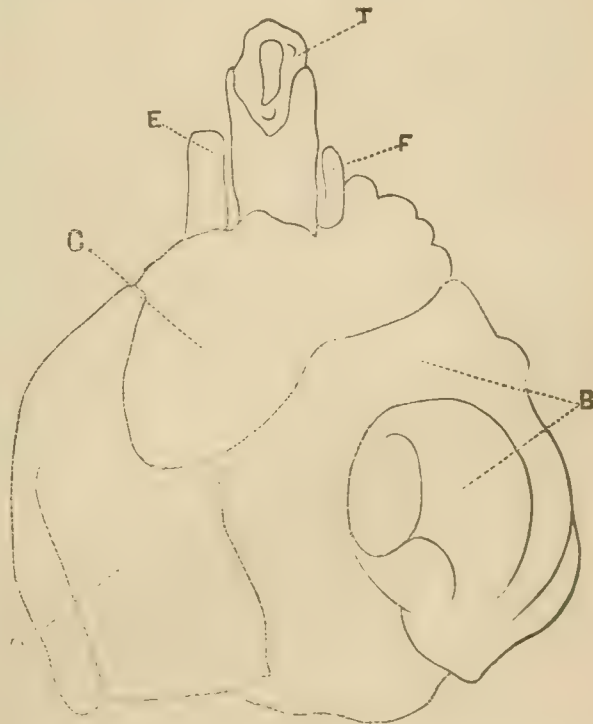


Fig. 2.—Semi Diagrammatic View of the Thoracic Viscera from the front. A, Right Lung; B, Left Lung; C, Porta of the Lung situated over the Aortic Arch; D, Trachea; E, Right Internal Jugular Vein, which was distended by dense cedema; F, Left Internal Jugular Vein.

mass, of the size of a large orange, of a pinkish-white colour. The upper lobe of the right lung was in contact with, and overlapped somewhat, the smaller nodule. The heart was pushed to the right side of the middle line, and was partly covered by the right lung. The left lung, adjacent portion of the parietal pleura, and the pericardium, were coated



with recent lymph. At the apex and base, the lymph was in layers fully half an inch thick. There was some foetid pus in the lower part of the left pleural cavity. The right lung was attached by old adhesions of some length to the anterior wall of the chest. The thoracic viscera were removed *en masse*. (See Figs. 2 and 3.) The tumour was

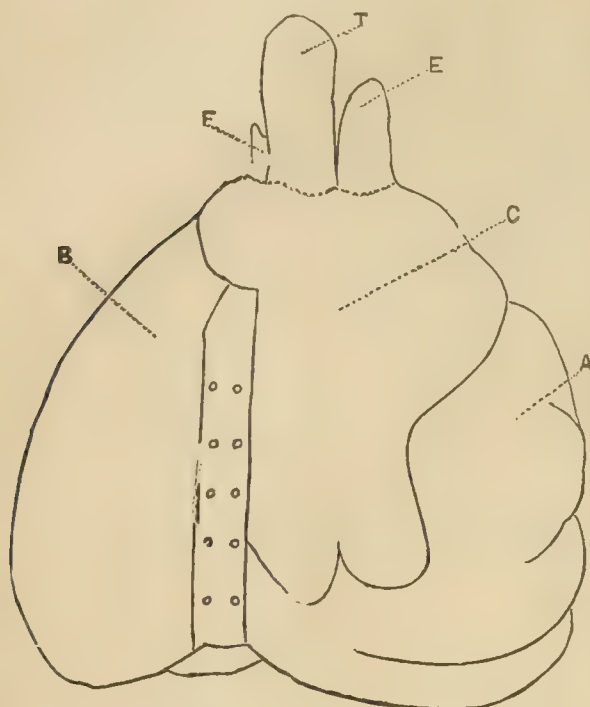


Fig. 3.—Semi-Diagrammatic View of the Thoracic Viscera from behind. The letters are the same as in Fig. 2. The aorta is seen.

made up of two great masses. The smaller, situated in the upper part of the chest, chiefly to the right side of the middle line, completely surrounded the aortic arch and origin of the great vessels, and was adherent to these structures. This portion of the tumour was in contact in front with the upper lobe of the left lung and a portion of the anterior wall of the chest; below, it was bounded by the reflected edge of the pericardium; above, it had made its way along the course of the great vessels into the neck. The superior vena cava and the veins forming it were embedded in the substance of the tumour. The right internal jugular vein was blocked up by a dense old coagulum. The lower portion of the tumour, situated chiefly to the left of the middle line, was, throughout the greater part of its extent, surrounded by the upper lobe of the left lung, which was, as it were, expanded over it. Anteriorly, it was also in contact with the heart and pericardium; posteriorly, with the aorta, œsophagus, spinal column, and a small portion of the posterior wall of the right chest. The portion of tumour in contact with the heart was made up of many small nodules closely packed together.

The lower lobe of the left lung was solidified, infiltrated with corpuscles of the same form and size as those forming the tumour. The bronchial tubes were enlarged and filled with thick yellow matter. The right lung was congested, especially at the base, but otherwise healthy. On opening the pericardium, the heart was seen to be small and kidney-shaped. The right border of the heart formed the convexity, the function of the left auricle and ventricle the concavity of the kidney. The under portion of the heart was pressed upon by the nodular portion of tumour already described. One nodule had inserted itself between the root of the aorta and the superior vena cava at its junction with the right auricle. The left ventricle was much atrophied.

Several large glands were found in the neck. The liver was much enlarged, congested, and rather fatty. The spleen was slightly enlarged. The left suprarenal capsule was the size of a large orange, of a pinkish-white colour, nodular on the surface, and of a brain-like consistence. The suprarenal vein was distended with the same matter

which formed the tumour. It was at least of the size of the renal vein and joined that vessel. On microscopic examination, the structure of this mass was found to be the same as that of the thoracic tumour. The right suprarenal capsule was considerably enlarged, but natural in structure. Both kidneys were enlarged, pale, and somewhat fatty; the right contained a large cyst. A gland of the size of a walnut was found attached to the pyloric end of the stomach. The brain and spinal cord were not examined.

On section, the thoracic tumour was of a delicate pink colour; in some parts of a brain-like consistency; in others, firmer. A white milky juice exuded from the cut surface. On microscopic examination, it was seen to consist of a corpuscular and a fibrous element. (Fig. 4) The cor-

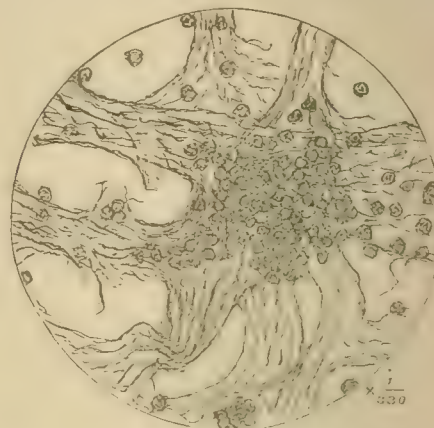


Fig. 4.—Microscopic appearance of the Tumour.

puscles, in size rather less than a human red blood-corpuscle ( $\frac{1}{1000}$ th to  $\frac{1}{4000}$ th of an inch), were of a granular appearance. Some of them contained bright refractive points. Their form was for the most part round. Some, when isolated, were seen to be surrounded with fine granular matter, which was prolonged into two delicate fibres, making the corpuscle resemble a delicate fibre-cell. The fibrous element consisted of blood-vessels, delicate fibres, and connective tissue. The fibres were for the most part arranged in bundles. The corpuscles adhered thickly to the surface of the fibres; the delicate process of a corpuscle was in several instances seen to be continuous with the delicate fibre of a bundle. Masses of corpuscles were also seen lying between the bundles of fibres. Bundles of fibres often diverged, as it were, from a common base. In places, the corpuscles were grouped together in strings, with fibrous tissue intervening.

REMARKS.—The diagnostic points of this case were most interesting. When first seen, the patient's general appearance was that of renal dropsy; but the state of the urine, the venous engorgement, and the physical signs derived from the examination of the chest, showed that obstruction to the venous circulation at the root of the neck was the cause of the œdema. What, then, was the nature of this obstruction? Was it due to a solid tumour or an aneurism, complicated with copious effusion into the left pleural cavity, the left lung being compressed upwards and adherent to the upper part of the anterior wall of the chest? Either would explain the physical signs and symptoms. The points in favour of a solid growth were:—

1. The early history of the case; viz., the hæmoptysis, cough, and progressive emaciation.
2. The absolute character and great extent of the dulness, the presence of tubular breathing and increased vocal resonance, and the absence of all moist sounds in the left infraclavicular region.
3. The extensive area over which the heart-sounds could be heard.
4. The extreme state of emaciation, which was anterior to the dysphagia.
5. The great venous engorgement and superficial œdema, though sometimes seen in aneurism, were much in favour of a solid growth. Stokes, in his work on *Diseases of the Heart and Aorta*, lays great stress upon the so-called "tippet-like" swelling at the base of the neck as a diagnostic of intrathoracic tumour. He states that this form of swelling is more characteristic of cancer than of aneurism.
6. The absence of erosion of the thoracic walls.

The physical signs in favour of aneurism complicated with copious effusion into the left pleural cavity were:—

1. The dulness on percussion and well marked pulsation over the

aortic area (the second right costal cartilage), and the superficial character of the heart-sounds over this dull area.

2. The dullness on percussion, absence of respiration, vocal resonance and fremitus over the lower two-thirds of the left chest.

3. The great displacement of the heart.

4. The much greater frequency of aneurism than of solid growth.

5. The constant pain of a boring character at one localised spot.

The pressure-signs, viz., the difference in the strength of the radials, the difference in the size of the pupils, the character of the cough and of the voice, and the dysphagia, were equally in favour of aneurism or of tumour. The absence of murmur (I am now speaking of the case as first seen) was rather in favour of aneurism than of tumour, many of the best authorities stating that, in aneurisms of the thoracic aorta, uncomplicated by cardiac valvular lesion, murmur is more frequently absent than present. Stokes, speaking of the differential diagnosis of intrathoracic cancer and of aneurism, says: "If we suppose a case in which the evidence on both sides were equally balanced, the existence of a soft single systolic bellows murmur should incline our opinion towards cancer. Bellows murmur in aneurisms of the arch is a more rare circumstance than has been supposed." The character of the murmur, when it did appear, was in favour of a solid growth. The murmur was single, systolic, of long duration, and *not followed by the second sound*.

Taking all the physical signs into consideration, the balance of evidence, when first seen, was to my mind in favour of solid tumour complicated with copious effusion into the left pleural cavity. The subsequent progress of the case, the increased cedema at the root of the neck, the gradual progressive displacement of the heart, the appearance of the infraclavicular systolic murmur, the obliteration of the right radial pulse, the appearance of a friction-sound over the lower half of the chest, the glandular enlargement at the root of the neck, and the feeling of a solid body by the probe when the thorax was punctured, showed conclusively the presence of a solid tumour within the thorax.

*The Nature of the Tumour.*—To the naked eye, it exactly resembled encephaloid cancer. On microscopic examination, it was found to be a lympho-sarcoma. The greater part of the tumour evidently consisted of enlarged bronchial glands. The nodule over the aorta corresponded in position to the remains of the thymus gland, an organ which is frequently the seat of these growths. The large size of the tumour is noteworthy. Its position in the thorax and its relation to the various structures fully explain the symptoms and physical signs seen during life. It is somewhat remarkable that, when at rest, there was little or no increase in the frequency of the respirations. The slightest exertion, however, made the patient very short of breath. The condition of the suprarenal capsule was a remarkable feature of the case, and tends to show the close physiological relation which these organs have to the lymphatic glandular system. The absence of pigmentation of the skin proves that all forms of disease of the capsules are not necessarily attended by bronzing. The case mentioned by Sir William Jenner at a meeting of the Pathological Society of London, in which there was pigmentation, the capsules being healthy, but the solar plexus injured by a mass of enlarged glands, confirms the opinion of Quekett, that the discoloration of the skin depends upon modifications in the solar plexus, and that the frequent occurrence of disease of the capsules with bronzing is accounted for by modifications induced in the solar plexus through the numerous filaments which supply these organs.

The early history of the case favours the idea that the disease originated in the thorax, and suggests the supposition that the enlargement of the bronchial glands was due to irritation, the result of inhalation of gunpowder-smoke.

## A CASE OF LITHOTRITY WHERE NITRIC ACID INJECTIONS WERE EMPLOYED.\*

By REGINALD HARRISON, F.R.C.S.,  
Surgeon to the Liverpool Royal Infirmary.

THE solvent action of nitric acid upon the *débris* of a phosphatic calculus was well illustrated in the following case, which in many respects is similar to one recorded by the late Mr. Southam of Manchester, and alluded to by Dr. W. Roberts in his Observations on the Solvent Treatment of Phosphatic Calculi. (*On Urinary and Renal Diseases*, second edition.)

William C., a police officer, aged 45, was admitted into the Liverpool Royal Infirmary, under my care, on March 9th, 1875. The

patient had recently been under the observation of my friend Dr. J. S. Clarke, who, having diagnosed the existence of a stone in the bladder, advised his admission into the Infirmary.

Upon examination, I found a single stone, rounded and having a diameter of two inches and a quarter. The urine was alkaline, and contained pus. Though the stone was large, I deemed the case not unfavourable for lithotripsy. The patient required some preparatory treatment, and I was not able to commence lithotripsy till April 5th. I repeated the crushings during April and May twelve times.

The patient never experienced any unfavourable symptom, and a very considerable quantity of broken-up stone was passed. As in Mr. Southam's case, to which I have alluded, it appeared to me that fresh phosphatic depositions were taking place almost as fast as the others were removed. I resolved, therefore, to use nitric acid injections.

On May 27th (two days after a crushing), I had the urine of twenty-four hours' collection. This was analysed by Dr. J. Campbell Brown, who gave me the following report. The quantity of urine submitted to analysis was sixty ounces; this was found to contain 74.029 grains of phosphoric acid as alkaline earthy phosphates; 250.516 grains of phosphoric acid as alkaline phosphates; in all, 324.545 grains of phosphoric acid passed in twenty-four hours. On the termination of this twenty-four hours, I injected into the bladder half a pint of tepid water with two drachms of diluted nitric acid.

All the urine passed during the subsequent twenty-four hours was kept and analysed by Dr. Brown, with the following result. The quantity of urine submitted to analysis was seventy-eight ounces; this was found to contain 96.237 grains of phosphoric acid as alkaline earthy phosphates; 461.94 grains of phosphoric acid as alkaline phosphates; total, 558.177 grains of phosphoric acid passed in twenty-four hours.

Thus it appears that not only was a larger quantity of phosphate of lime and magnesia dissolved in the urine after treatment with nitric acid, but there was a still greater increase in the quantity of phosphoric acid passed in the form of alkaline phosphates. It is to be noticed that the quantity of urine on the day after treatment was greater than on the day before; and that, if, instead of estimating the total phosphates, we estimate the percentage of phosphates in the urine, we find that the percentage of alkaline earthy phosphates was very nearly the same after as before treatment, namely, increased from 0.272 to 0.282, and that the percentage of alkaline phosphates was increased from 0.95 to 1.35. But the absolute increase of phosphates is much more marked.

On nine subsequent occasions, the lithotrite was employed, and, on every second or third day afterwards, the bladder was injected as before with nitric acid in tepid water. Further observations, though made in a rougher manner, showed the increase of the alkaline phosphates after each injection; it was also noticed that the fragments passed were much more finely triturated than previously.

Under this treatment, the patient made a good recovery and left the infirmary quite well on June 21st. The total quantity of broken-up stone collected weighed four drachms. The use of the acid appeared to me at once to stop any further deposition of phosphates, and to facilitate the removal of the pieces as they were broken up by the lithotrite.

Dr. Roberts concluded his observations on Mr. Southam's case with the remark (*op. cit.*, p. 313): "This method is evidently capable of wider application than is now made of it by surgeons."

## CASE OF SUICIDE BY HYDROCYANIC ACID.

By JOHN W. TRIPE, M.D.,  
Medical Officer of Health and Analyst for the Hackney District.

THE following case of suicide by hydrocyanic acid having been under observation almost from the moment of the poison being taken until death occurred, and some minutes having elapsed before any symptoms were observed, as well as some acts of volition having been performed during that period, I consider it to be of sufficient importance to justify me in bringing it under notice.

In the early part of July, I was called at about 9.15 P.M. to see D. A., who was said to be dying from poison. On my arrival at his house, which was nearly opposite to mine, I found him sitting in a chair supported by two persons, gasping for breath, with his mouth wide open, eyes prominent and glistening, and his pupils slightly dilated and insensible to light. The skin was clammy, the fingers contracted, the muscles of the arms relaxed, the pulse scarcely perceptible, and the lips as well as the tongue purplish. There was a strong smell of prussic acid in his immediate vicinity, and his breath

\* Read at Southport before the Lancashire and Cheshire Branch.



smelt slightly of it. His clothes were damp in several places from some of the acid having been spilt on them, and there was a very small quantity of vomit on his beard and clothes. Some mustard and water had been given to him, part of which, I was informed, he had swallowed. As there was not any ammonia in the house, I ran out for some, and, on my return in about two minutes, found that the heart's action had ceased, whilst the breathing was irregular and gasping, and continued so for about two minutes, when he ceased to live. I applied the ammonia to the nostrils, and poured a little mixed with water into his mouth, but it was not swallowed. He lived altogether, as nearly as I can judge, about eight or nine minutes from the time of taking the poison.

Directly after death, I searched his clothes, and found in his breast coat-pocket an ounce-bottle labelled "Acid Hydrocyanic (Scheele's)", quite empty, stoppered, pressed down to the bottom of the pocket, evidently with the intention of preventing it from falling out, and covered with a pocket-handkerchief, also firmly pressed down. The limbs were relaxed for some time after death; indeed, I was unable to ascertain when rigor mortis first set in.

At the inquest, the following evidence was given. He had been drinking largely of brandy for some days, so as to become very irritable and excited. About 9 P.M., he was so violent that his wife and daughter went to the front gate to seek for protection, as there was no other male person in the house besides D. A. He followed them to the front door of the house, which is about five yards from the gate, and remained there some minutes; then walked down the steps, five in number, passed by them into the street, and walked steadily for a distance which I subsequently measured and found to be just over thirty yards. They watched him whilst he walked this distance, and are quite sure that he never raised his hands to his mouth; indeed, on the contrary, he kept them down during the whole time. Having got as far as opposite to the middle gate of a house two doors off (they are double-fronted houses, with side-gates), he suddenly fell on one knee, the trouser-leg of which was cut, and then on his face, without making any struggle or effort to save himself. Two gentlemen, who saw him fall, raised him up and carried him to the house, and were quite certain that he never struggled. His daughter also stated that, as he passed her, she noticed a very strong smell of prussic acid.

I made a *post mortem* examination two days afterwards. The body was pale and the countenance composed; indeed, it became so within a few minutes after he died. There was not any smell of acid in the room; but, immediately on opening the peritoneum, a strong smell of the acid was observed by myself and the gentleman assisting me; more so, indeed, than on opening the stomach. I removed the stomach from the body before opening it, and took it away for examination, when I found it considerably congested, many of the vessels being enlarged and full of blood. The heart was slightly fatty and relaxed, the lungs dark and emphysematous, and the liver soft and degenerated. A few drops of blood only escaped during the necropsy, as I did not open the large vessels.

As other engagements prevented me from analysing the contents of the stomach that day, I was obliged to defer it until the next, which was more than two and a half days after the taking of the poison. On filtering a little of the fluid contents of the stomach, I could not detect the acid either by smell or by chemical tests; but, on distilling the remainder, I obtained a quantity equal to about two minims of Scheele's acid. The stomach contained only about two ounces of a thick fluid and a few pieces of candied fruit, and did not smell of brandy or any other spirit.

## THERAPEUTIC MEMORANDA.

### TREATMENT OF CHRONIC DIARRHŒA.

I AM prompted by a note on "Remedies for Chronic Diarrhœa," by Mr. Miall of Bradford, which appeared in the JOURNAL for December 30th, to state my experience of the value of the liquor bismuthi et ammoniæ citratis in the treatment of chronic looseness of the bowels. It is the best remedy with which I am acquainted for the condition in question. I first learned its use, several years ago, from a very able therapist—the late Dr. Alexander Fleming. When I was his house-physician, I saw him prescribe the medicine with excellent results in cases of chronic dysenteric diarrhœa. The dose I have been accustomed to give is one drachm of the pharmacopœial solution of bismuth thrice daily. Since reading a paper on the Treatment of Chronic Diarrhœa by Lime-water, published some time ago in the *Practitioner*, and written by Professor Cleland of Galway, I have usually ordered a draught containing one drachm of the liquor bismuthi in one ounce of

aqua calcis. A few months ago, I saw, with a medical friend, a little girl who had long been treated unsuccessfully for chronic dysenteric diarrhœa. We prescribed the solution of bismuth and lime-water, and the patient was soon quite well.

JAMES SAWYER, M.D.Lond., M.R.C.P.; Physician to the Queen's Hospital, Birmingham.

### THE TREATMENT OF SUFFOCATIVE GOITRE.

As long ago as 1860, I well remember, when a pupil of Mr. John Tyler Featherstone, assisting that gentleman to insert a seton composed of six cords of silk into a large goitre which was compressing both in the mesial line and bilaterally the larynx of a boy aged 10. The seton remained in, as far as I remember, about eight weeks, being from time to time moved about so as to induce inflammatory action and to give outlet to the resulting pus. The case was entirely successful, and I saw the patient only a few years ago—a perfectly healthy man, with no affection whatever of the breathing or vocal functions.

Subsequently, while practising in Derbyshire, I have met with a great number of cases of bronchocele; but only a very small proportion of them could be described as of the suffocative type. In one case, that of a young woman aged 18, I followed out the same plan of treatment which I had remembered as so successful, and with good results. After the seton had been in some ten days, suppuration began, and the tumour was gradually lessening in size; but the patient was suffering from heart and kidney affection, and, after taking cold, pneumonia ensued, ending in uræmic poisoning and death seven weeks after the commencement of the treatment.

In the slighter cases, when seen early, I have generally found that the iodide of potassium ointment rubbed into the swelling once or twice a day, with the administration internally of both the iodide and bromide, or, in cases of an anæmic nature by no means uncommon, of the iodide of iron with bromide of potassium, will, if the treatment be steadily persevered in, produce a complete cure.

I may just remark that I found these cases by no means confined to Derbyshire or to a limestone formation. I had several cases under my care from the neighbouring counties of Nottingham and Stafford.

J. HORNSEY CASSON, M.R.C.S.Eng., Acting Surgeon to the Western General Dispensary, etc.

## CLINICAL MEMORANDA.

### TEMPORARY INSANITY AFTER CHLOROFORM.

THE interesting report of a case of "profound intoxication following anæsthesia by ether" in the JOURNAL of December 30th, reminds me of, I believe, an unusual case, which occurred in my practice about eight years since, of temporary insanity following the inhalation of chloroform. A woman had undergone the operation of removal of a cancerous tumour under the full influence of chloroform. On recovering consciousness, she manifested an intense aversion to myself, who had operated, so that it was absolutely necessary for me to leave the application of sutures, bandage, etc., to the surgeons who had assisted me. Meanwhile she was constantly muttering to them her desire that they should "kill" me. This condition had entirely passed off by the time of my next visit on the following day, and she had no recollection of the circumstance. She had previously expressed her determination that no one but myself should perform the operation; so there was no dislike of me.

In the other case, the operation is stated to have been tedious, and the quantity inhaled necessarily large. Doubtless, as with alcohol, the first effect of ether is as a stimulant, and then larger doses act as a depressant, thus giving it a similarity of action to chloroform; and thus the question may be raised, how far ether is superior to chloroform in protracted operations. But the point to which I wish to call attention is the intoxicating effect of chloroform in my case. It may be more common than I am aware of, but I have never read of a similar case. I think it an excellent plan to administer a good dose of brandy and water before the inhalation of chloroform, thus giving a stimulus to the heart's action, and guarding it against the depressing effect of the anæsthesia. In a case of an old woman aged 87, whose finger I removed about three years since, it acted remarkably well, appearing to assist the anæsthetic action of the chloroform.

I hope this brief communication may elicit from other practitioners reports of any similar cases which have occurred in their practice, with practical observations and suggestions thereon. JOHN EWENS, Surgeon to the Hospital for Women and Children, Bristol.

## REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN  
THE HOSPITALS AND ASYLUMS  
OF GREAT BRITAIN.

## KING'S COLLEGE HOSPITAL.

CASE OF PROBABLE HÆMORRHAGE INTO THE PONS VAROLII:  
ALTERNATE HEMIPLEGIA: ELEVATION OF TEMPERATURE ON  
PARALYSED SIDE: RECOVERY.

(Under the care of Dr. JOHNSON.)

FOR the following interesting notes we are indebted to Mr. Edgar Thurston, Assistant House-Physician.

J. S., aged 38, was admitted on August 17th, 1876. He had been very intemperate. For three days prior to admission, he had been drinking hard, and, while intoxicated, fell from a scaffold, a distance of about eight feet, but did not alight on his head. He was brought to the hospital unconscious, foaming at the mouth and breathing rather stertorously. The face was flushed, and he was perspiring on both sides of the body. The angle of the mouth was drawn up on the right side, the left angle being lower than the right and the left naso-buccal fold obliterated. The tongue, when protruded, pointed to the right side. He could not move the right arm, which hung helpless by his side; but put his left hand to the back of his head, as if in pain. Sensation was impaired in the right hand and also in the right leg, in which no motion occurred when the sole was tickled or pricked with a pin. Motion and sensibility of the left leg were unimpaired. He answered some questions, the voice being thick. Both pupils were minutely contracted. The temperature was equal on the two sides of the body.

August 18th. He was constantly lying on the right side. Respiration was snoring and very shallow. He was wandering and attempting to get out of bed. There was slight motor power in the right arm. Reflex excitability was more marked in the right leg. There was only slight twitching when the left eyeball was touched; he could move both eyeballs equally well in all directions. He complained of pain and numbness all over the left side of the head and beneath the occiput.

August 20th. His breathing was laboured. He made no attempt to grasp an object with either hand when told to do so. He moved both legs equally well. There was a discharge of about an ounce of clear serous fluid from the right ear.

August 21st. There was slight loss of reflex excitability on the right leg. The pupils were still contracted. He was muttering continually.

August 22nd. There was harsh snoring inspiration all over both lungs, especially the left lung in front, and fine crepitation at the bases. Tracheal râles were heard. He had sordes on the teeth. He attempted to get out of bed.

August 23rd. He was more conscious. Breathing was very shallow, there being scarcely any motion of the ribs and the abdominal wall moving but little.

August 26th. By means of a tuning fork, it was ascertained that hearing was better on the right side than on the left, the patient stating that he heard the sound best with the right ear each time of inquiry. The right foot appeared to be sensibly warmer than the left to the hand. The temperature in the right popliteal space was 92.8 deg., in the left 91.8 deg. The tongue was still protruded to the right, but less so than formerly. The pupils were less contracted.

August 29th. The membrana tympani were examined with the otoscope, but no difference between the two could be detected.

A series of observations was made with the sphygmograph, in order to compare tracings from the radial arteries on the two sides of the body. The tracing of the right radial artery exhibited a high and vertical primary uprise with a well pronounced dicrotic wave, whereas that of the left side exhibited a low and sloping uprise, with a flat top and ill-defined dicrotic wave. These facts are of very great interest, as affording clear indication of diminished tension in the arteries of the right side of the body as compared with those of the left, this being, doubtless, connected with the elevation of temperature on the paralysed side. It is stated by Lorain, in his *Etudes de Médecine Clinique*, "that, in all cases of hemiplegia, the pulse is more full on the paralysed side", and tracings are brought forward to bear out the statement. This, however, Dr. Johnson has found to be incorrect in the ordinary

case of hæmorrhage into the corpus striatum, and there can be little doubt that the statement is erroneous.

August 30th. His hands were cold. Respiration was snoring and laboured. The pupils were still slightly contracted.

September 4th. He was more conscious. The pupils were not contracted. The temperature was equal on the two sides of the body.

September 6th. He was reading a book; was quite conscious and answered questions well. He had much more power in the right arm, with which he could squeeze fairly well. He could move the right leg very well. There was less paralysis of the left facial muscles.

From this time, the patient's condition rapidly improved. He complained constantly of pain in the back of the head, and was always somewhat confused in his head. When he walked, his gait was unsteady, owing to the dragging of the right leg. He regained the use of his right arm completely. The tongue could be protruded in the middle line. The pupils were normal, and the paralysis of the left side of the face disappeared almost completely, being indicated only by slight drooping of the left angle of the mouth. The deafness in the right ear continued to a slight extent. The patient left the hospital in the condition just described.

This case is one of very great interest, and, though the patient recovered, there can be no doubt as to the existence of a lesion in the lower half of the left lateral region of the pons Varolii, the diagnosis resting on the condition of alternate hemiplegia, the contracted state of the pupils, and elevation of temperature on the paralysed side of the body, which combination of symptoms could not have been produced by a lesion in any other part of the brain. In a case such as this, it naturally suggests itself that, corresponding to the rise of temperature on the side of the paralysis, there should be a diminution of arterial tension; and that this really was the case was proved most conclusively by the sphygmograph, it being found impossible to decide the question by tactile sensation alone.

## GERMAN HOSPITAL, DALSTON.

CASE OF APHASIA WITH LEFT HEMIPLEGIA: HÆMORRHAGE AND  
SOFTENING IN THE RIGHT SIDE OF THE PONS VAROLII.

(Under the care of Dr. HERMANN WEBER.)

FOR the report of the following case we are indebted to Dr. Altdorfer Resident Medical Officer.

F. K., aged 35, paperhanger, on October 27th, while at work, suddenly lost consciousness, and, at the same time, power over the left limbs. He had had no premonitory symptoms, except pain in the left eye.

On October 28th, when admitted, he was semiconscious, breathing with stertor; the left arm and leg being completely, and the left side of the face partially, paralysed. Sensation was unimpaired. The uvula was drawn to the left. He was unable to swallow or articulate. The pupils on both sides were equal, rather narrow, not quite fixed, but acting only slowly under the influence of light. The heart-sounds were normal, pulse 104. There was general mucous rhonchus. He had constipation, and retention of urine, which, when removed by the catheter, was found to be acid, free from albumen, and of specific gravity 1021.

October 30th. There was slight power of movement of the left leg; none of the arm. The face was nearly symmetrical. He was able to swallow, though with difficulty. Articulation was somewhat improved. He had difficulty in finding the right words, which, however, when suggested, were readily pronounced. His voice was thick. The right hand was always kept under the left side of the back of the head, where he complained of pain. Pulse 56. There was much rhonchus. He was able to pass urine.

Dr. Weber diagnosed local thrombosis of the right crus, or right side of the pons Varolii. The patient at first improved under the use of aperients and bromide of potassium; but, at the end of a fortnight, right-sided pleuropneumonia developed itself, from which he died on November 19th.

*Post Mortem Examination.*—There were signs of pleuropneumonia on the right side with recent effusion. The heart was normal, with the exception of atheromatous changes, and some ossification in the bases of the aortic semilunar valves. The abdominal cavity was normal. There were some atheromatous patches in the basilar artery and its branches; much transparent fluid in the subarachnoid space and in the pia mater, with many blood-points in the brain-substance, which was so cedematous that the fluid ran down the hand during the examination of single slices; the gyri on both sides were otherwise normal. In the centre of the anterior portion of the right half of the pons Varolii was a small hæmorrhagic spot, with softening of the



surrounding substance, showing under the microscope large granular cells and fatty degeneration of some minute arteries; the left half of the pons and the posterior portion of the right were not diseased.

REMARKS.—The diagnosis that the seat of the intracranial lesion was either in the right side of the pons or in the crus immediately adjacent to the pons was based on the marked difficulty of swallowing and articulation, combined with the complete motor paralysis of the limbs of the left side. The aphasia was attributed not to actual disease of the corresponding gyri, but to the shock received by certain parts of the brain, and changes in the circulation and function connected with it.

### WORKSOP DISPENSARY.

TWO CASES OF ACUTE RHEUMATISM TREATED WITH SALICIN.

(By J. W. HAMILL, M.D., Surgeon to the Dispensary.)

CASE I.—Charles H., aged 46, carpenter, of delicate constitution, frequently exposed to wet and to variations of temperature, had last June an attack of acute rheumatism. He had, he said, had a like attack four years ago, but this had not left evidence of any heart-affection. When I saw him, on June 16th, there had been pains in the joints for a fortnight. He had pains and tenderness, with considerable swelling in most of his joints; and had to be lifted in and out of bed. His temperature was 100 deg.; pulse 116. The urine was scanty, high coloured, and deposited urates copiously. There were profuse sweating, thirst, and anorexia. I prescribed alkalies, bicarbonate and nitrate of potash, with ten grains of Dover's powder every four hours; and cotton-wool to be wrapped round the joints. Beef-tea, farinaceous food, etc., were also ordered.

On June 19th, the general condition was about the same. I substituted for the alkalies fifteen grains of salicin every four hours. Two aperient pills were also given.

On June 20th, the pain was a great deal relieved. There was considerable movement in the affected joints, the patient being able to draw up the legs. He said that "he had a more natural feeling, and that the deadness had left his joints".

June 21st. Pulse 75; temperature normal. The appetite was returning. There was free movement in the joints. The urine was quite clear and abundant; and the patient slept as well as when Dover's powder was prescribed.

June 23rd. Pulse 40. There was no pain unless in the shoulders on movement, and this seemed to be in the deltoid muscles. He was ordered to have a tonic of bicarbonate of potash and compound tincture of cinchona.

June 26th. There was no pain anywhere, unless some "starkness" in the shoulders. He came to the surgery afterwards.

This case shows the complete removal of the fever in five or six days under the salicin treatment; the temperature falling to normal in seventy-six hours, and the pulse from 116 to 75 in the same time.

CASE II.—Mary K., aged 25, married, while under treatment for a tumour of the neck on July 3rd, had severe rheumatic pains, more especially in the lower extremities. These pains culminated in a severe attack of acute rheumatism.

On July 8th, the temperature was 103 deg.; pulse 120; tongue coated; urine scanty, with copious deposit of urates. She had profuse sweating, extreme pain, redness and swelling in the joints, more marked, however, in the joints of the left side. The redness was so great at some joints, that, considering the abscess of the neck and the generally debilitated condition of the patient, there was doubt whether the swelling was not the commencement of pyæmic abscesses; but there were no rigors.

On July 8th, salicin was given in doses of fifteen grains every four hours; beef-tea and milk being ordered as nourishment.

July 9th. The temperature was 102 deg.; pulse 116. The pain was not much diminished; it was very severe in the right ankle and knee, wrist, and fingers.

July 10th. Temperature 101.2 deg.; pulse 108. The pain had left the ankle and knee of the right side; the swelling, however, remained, but there was free movement without pain in these joints. The pain was more severe in the joints of the left side. The sweating was less. I opened the abscess in the neck to-day, and a large quantity of healthy pus was evacuated.

July 11th. Temperature 100.6 deg.; pulse 104. The pains to-day were very erratic. Through some neglect, no salicin was given the whole day; and on the next day (July 12th) the temperature was 102 deg.; pulse 104, with intense pain in the fingers and shoulders; the joints of the lower limbs being free from pain. I ordered the powders to be given every two hours.

July 14th. Pulse 95; temperature 99.6 deg. The pain, swelling, and redness had left all the large joints; the limbs could be moved freely; a little pain still remained in one shoulder, thumb, and middle finger. The urine was clear and abundant; appetite good; and the patient slept well. The powders were continued every four hours.

On July 16th, the patient was up; the pulse being 84.

The temperature on July 17th was 98.8 deg.; and the patient declared herself free from pain in every part.

It is interesting to notice in this case how the temperature ran up when the powders were stopped for a day, and how, on their resumption, it was reduced  $2\frac{1}{2}$  deg. in twenty-four hours. Salicin was taken a week in this case before it controlled the fever; and it is reasonable to infer that, by larger doses, the disease could have been cut short in half that time.

## REVIEWS AND NOTICES.

CYCLOPEDIA OF THE PRACTICE OF MEDICINE. Edited by Dr. H. VON ZIEMESSEN, Professor of Clinical Medicine in Munich, Bavaria. Vol. v: Diseases of the Respiratory Organs, by Professor Jürgensen, of Tübingen; Professor Hertz, of Amsterdam; Professor Reuhle, of Bonn; and Professor Rindfleisch, of Würzburg. Translated by Gerald F. Yeo, M.D., of London; A. Braxton Ball, M.D.; Francis Delafeld, M.D.; Frank P. Foster, M.D.; John C. Jay, jun., M.D., of New York; and Edward W. Schauffler, M.D., of Kansas City. Translation edited by Albert H. Buck, M.D., of New York. Pp. 712. London: Sampson Low, Marston, Low, and Searle. 1875.

THIS handsome volume is fully in keeping as regards printing and general arrangement with those which have preceded it. In addition to a copious index at the end, and a sketch of the matter contained in each article at the commencement of the volume, there is prefixed to each article a list of the principal authors upon the subject treated of: thus, as a work of reference, the value of the book before us is, beyond question, great. Some of the articles are, however, extremely diffusely written, and it requires abundant leisure and no little patience to gather from them the valuable matter which they undoubtedly contain. We think the articles on pneumonia and catarrhal pneumonia will be most complained of in this respect. Professor Jürgensen's article on pneumonia might be condensed to half its present bulk with great advantage. Its arrangement is faulty. We have, for instance, to read through the section on etiology, and in part that on the pathology of the disease, before (at page 43) we arrive at any definition of the anatomical lesion under consideration. It is, indeed, only in the section on treatment, at page 144, that the author gives us his view respecting the true nature of pneumonia, thus completing his definition. This is inconvenient, for, accepting the definition given of croupous pneumonia as "an acute inflammation of the alveoli and bronchioles, in which a fibrinous exudation is poured out upon the free surface of the mucous membrane and there coagulates"; and further agreeing with the author that it is "a constitutional disease, of which the pulmonary inflammation is merely the chief symptom", a morbid (as apart from a local) cause being indispensable to explain its local and general symptoms, we do not think that his views respecting the etiology of the disease, as thus defined, will be generally accepted.

Professor Jürgensen regards Pneumonia as a disease which by no means attacks, as it has been generally considered to do, comparatively sound persons. He considers that one attack predisposes to future attacks, and urges the frequency with which the disease occurs towards the end of cachectic, carcinomatous, diabetic, and other diseases, and in persons confined in prisons, as evidence of its preference for debilitated constitutions. Again, the author holds that whilst an attack of pneumonia may terminate within twenty-four or thirty-six hours, it in some cases "lingers for months in so latent a form, that it is impossible to say when the primary affection ends and the sequelæ begin". All practical physicians will admit the truth of these observations as applied to diseases which they are in the habit of loosely grouping under the name "pneumonia"; but few, we think, would admit them as applicable to a disease so stringently defined as the croupous pneumonia here referred to.

The section on treatment includes a preliminary *résumé* of the main points which have been previously considered, and is, we think, the best part of the article. The indications for active treatment are firmly stated and insisted upon. We do not think, however, that sufficiently strong evidence of the usefulness of the cold bath is brought forward to convert English physicians to its frequent employment in this disease. Professor Jürgensen grimly enough brings as foremost evidence in favour of the usefulness of this treatment, a *post mortem* table of

thirty-eight cases. He also compares the mortality yielded by two hundred and thirty cases, and six hundred and fifty-two cases treated respectively by the antipyretic and routine methods, and finds that the antipyretic yields 25 per cent. mortality, the routine gives 32 per cent., showing 9.6 per cent. in favour of the more modern treatment—a mortality, however, he admits still very high. A more favourable result is obtained from two hundred and forty-eight cases treated by himself in the Kiel and Tübingen polyclinics on the hydrotherapeutic system (combined with stimulants); yet these cases show a mortality of a little more than 12 per cent. A glance at the remarks showing the anatomical lesions present in the fatal cases, proves them almost all to have been secondary pneumonias, supervening upon otherwise fatal maladies—a fact which again shakes our confidence in the tables as representative of pneumonia in the strict definition of that disease. If we accept these tables as such, however, and compare them with the results obtained by other methods of treatment, we do not find the contrast favourable to the cold bath system.

In Appendix G of Dr. Sturges's recent work on *Pneumonia*, will be found some tabular statements of results of treatment, which may be thus summarised: under homœopathic treatment, three hundred and ninety-eight cases in four groups, mean mortality 8.79 per cent.; non-homœopathic, but mainly expectant treatment, one thousand three hundred and ninety-two cases in four groups, mean mortality 5.25 per cent.; medicinal treatment with moderate depletion, two thousand nine hundred and forty-nine cases in five groups, mean mortality 6.39 per cent.; active medicinal and depletory treatment, four groups (numbers not stated), mean mortality 16.2 per cent. In the treatment of catarrhal pneumonia, Herr Jürgensen is also a strong advocate for baths, but not at so low a temperature as in croupous pneumonia. He regards the special danger in croupous pneumonia to arise from cardiac exhaustion, mainly dependent upon the fever; hence his anxiety to control the high temperature, and to keep up the heart's power by regulated stimulants. In catarrhal pneumonia, on the other hand, he considers the danger to arise chiefly through pulmonary atelectasis; and he advocates the employment of tepid baths, combined with the cold douche, to stimulate the respiratory movements. He sometimes prefers to apply a hot douche to the region of the medulla oblongata with the same view.

We must pass by the chapters on embolic pneumonia, hyperæmia, anæmia of lung, pulmonary hæmorrhages, atelectasis, collapse, and atrophy, all of which are very fully treated by Professors Jürgensen and Hertz.

The article by Hertz on Pulmonary Emphysema (61 pages) is exceedingly good, and well translated. Professor Hertz doubts the truth of the generally accepted doctrine, that the thickening of the alveoli occasionally to be observed in emphysema is due to hypertrophy, or new formation of connective tissue. He regards the condition as being rather due to surrounding tissue, compressed and blighted by the inflated vesicle. We should not agree with the dynamical principles of normal respiration upon which Professor Hertz founds his explanation of the inspiratory and expiratory phenomena of emphysema (pp. 376, 377), but they are those generally accepted. The new feature in the treatment of emphysema advocated by Professor Hertz is the employment of Waldenburg's apparatus for inhaling compressed or rarefied air—a method of treatment which should, we think, be subjected to a careful trial at some of our large chest-hospitals.

In the historical sketch introductory to Professor Reuhle's article on Pulmonary Consumption, the important contribution of our countryman Addison to the pathology of the disease is not referred to—an omission the less excusable as the works of that able physician no longer remain buried in the *Guy's Hospital Reports*, but have been republished in a collected form by the Sydenham Society. This article is very full and complete. Professor Reuhle adopts, without hesitation, Freund's observations on the early ossification of the first rib as predisposing to apex-disease. It would have been interesting had statistics been given in support of the accuracy of this statement: it certainly has not occurred to us to find ossification of the first rib much more common in phthisis than in other diseases; but it may be so. We looked to the paragraph referring to albuminoid degeneration of the abdominal organs, to see if any explanation were offered of the much greater frequency with which albuminoid disease of the spleen (sago-spleen) occurs in phthisis than of other organs. The preponderance is very great, at least in this country, but the point is not referred to by Professor Reuhle.

We are glad to find miliary Tuberculosis carefully separated from phthisis; and even chronic and acute tuberculosis are deemed worthy of separate consideration, the subject being handled in the last chapter of the book by Professor Rindfleisch. This last chapter is exceedingly tersely and ably written, and vigorously translated. The author speaks

from his own decided conviction, and references to other authors are less numerous. As a chapter in a cyclopædia it may be less valuable, but judged on its intrinsic merits and authorship, it is the best section of this excellent volume.

FOOD-CHART, giving the Names, Classification, Composition, Adulterations, Tests, etc., of the Alimentary Substances in General Use. By R. LOCHE, L.R.C.P., etc. London: 1876.

We have given part of the title of this chart, as an indication of the comprehensive plan on which it was framed. There would, however, have been one drawback to the plan if thoroughly carried out; viz., that the chart must have been placed against the side of a large wall, or else have been printed on a series of charts giving full and reliable information on these important subjects. There can be no doubt that it would be a great assistance to a busy practitioner to have a chart affording reliable information as to the composition of various articles of food, and of their digestibility; and perhaps another chart affording a classification and analyses of the various alimentary principles. Other charts might be prepared for the analyst, showing the adulterations usually met with, and a brief but reliable *præcis* of the best methods of detecting them. The author proposed to himself to do all this in one chart, measuring about three feet by two, which was impossible; but what we have chiefly to object to is, that the matter is neither reliable nor up to the knowledge of the present day.

Without discussing the "classification of the constituent alimentary principles", which might as well be left out, we will proceed to an examination of the table of alimentary substances, their composition, adulterations, and tests. The first is "aërated waters". None of the various kinds are specifically mentioned; but we are told, under the heading of adulterations, that "air, lead, copper, sulphuric acid, tartaric acid, capsicum, cream of tartar, and organic impurities, albuminoid nitrogen (*sic*), and ammonia from foul water", are met with. If a person looked to the chart to see what adulterations were likely to be found in lithia-water, for instance, we can conceive his astonishment on reading the list. If we next look at the "tests for purity", "remarks", etc., of aërated water, we find: "The microscope. Dilute sulphuric acid: evaporate, and suspend in the residue for some hours a bright steel point (*sic*). If copper be present, the point will be coated with it. Chloride of barium: taste on evaporation. Lithium. Pure aërated waters should be clear and sparkling", etc. On examining the list of adulterations, we do not find any that can be detected with the microscope; and no tests are given for organic matter. To whom are these tests likely to be useful? Certainly not to the analyst, scarcely to an ordinary medical practitioner, and most decidedly not to non-professional persons. If we follow the list through, we find, under almost every heading, articles inserted as being used for adulteration which undoubtedly are not used now. If we look to "confectionery", we see that almost all poisonous colouring matters which could by possibility be mentioned are set out, whilst it is well known that they are rarely met with now in confectionery, instead of being, as the chart would lead any one to suppose, of common occurrence. The same remark applies to plaster of Paris, chalk, white lead, terra alba, which are to be found in the list. The foreign matters said to be found in butter, bread, flour, coffee, tea, etc., might, perhaps, have been detected twenty years ago, but certainly would not be found in these articles of food at the present time.

Some of the tables give useful information, such as "subsistence diet", "adult diet", and "active labourers' diet" (Dr. Playfair, "Oxford and Cambridge training-diet", "Banting's diet"). The analyses of condensed milk show that the Anglo-Swiss milk contains more casein and sugar of milk, but less butter and water, than the other companies' milk; and that it is, therefore, better suited for infants. The analyses of cow's milk differ rather considerably; and one, that of Haidlen, differs from any we have made, as it gives more casein than sugar, and only .52 per cent. of ash. As regards the composition of flour, whilst analyses of flours from different countries are given, the more important information as to the constituents of various kinds, such as fine whites, tails, fine sharps, and coarse sharps, is not to be found. The analyses of bilberries, strawberries, apples, pears, etc., are useful, if correct. The table of the digestibility of food is also useful, although the results somewhat differ from those given by Dr. Letheby and other authorities.

We have freely pointed out the errors in the chart, in the hope that another issue may be printed on smaller sized charts to be obtained separately, each complete as regards the subject treated, and brought up to our present knowledge by a thorough and complete revision. If the *analyses of the adulterations and tests for the analysis* were added, their usefulness would be much improved.



BRITISH MEDICAL ASSOCIATION:  
SUBSCRIPTIONS FOR 1876.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JANUARY 6TH, 1877.

HOMICIDAL INSANITY: MEDICAL EVIDENCE AT  
CORONERS' INQUESTS.

A CASE has just occurred at Macclesfield which well illustrates the difficulty of deciding upon the exact time at which there should be medical interference with the freedom of the subject. A man may fall into a desponding state of mind, and have delusions respecting his business and worldly affairs; he may imagine that there are secret conspiracies against him, and that a wife or friend is secretly administering poison to him. In the opinion of his medical attendants and friends, he is in a condition which would justify confinement in an asylum; but a medical man naturally hesitates to sign a certificate unless there be some overt act which shows that his patient is a *dangerous* lunatic. In one instance which came to our knowledge, the Commissioners liberated a lady who had reached the stage we have mentioned short of the perpetration of actual violence; and they censured the medical attendant for signing a certificate for her confinement in an asylum.

In the Macclesfield case, there were all the incipient symptoms of homicidal insanity. The man Halliwell had delusions respecting his business, great despondency, dread of impending poverty, a sullen state of mind, restlessness at night, and there was a complete change of character. Although up to this time he had offered no violence to his wife and family, the symptoms were properly considered to be such as to justify his being sent to an asylum. Steps were taken for this purpose, but were not completed, when, on December 21st, he without any warning suddenly strangled his son.

An inquest was held on the same day, and the evidence showed that the accused, Robert Halliwell, had caused the death of his son, a boy aged 13, by manual strangulation. Dr. Vaux, who examined the body soon after death, described the external appearances which he found on the neck of deceased, and which were such as to satisfy him that the boy could not have strangled himself. Shortly after the witness had examined the body, he saw the accused. He found him in a dull stupid state; and, after many questions put to him without receiving answers, he asked him "*why* he had done the act". He replied, "*Impulse*". When asked *how* he did it, he said, "*My hand*". He was stupid and appeared dazed, and refused to answer any more questions.

As the case must come before a criminal court for trial, we abstain from making any further comments at present. The cause of death was clear. That it was the result of homicide, and not of suicide or accident, was also clear; and the verdict of the jury, fully justified by the evidence, was to the effect that the deceased had died from strangulation effected by his father—in other words, a verdict of "*wilful murder*" against the accused.

An attempt was made during the proceedings to introduce evidence touching the state of mind of Halliwell; but it is a settled point of law that this is no part of the duty of a coroner's jury. This important question, involving as it does criminal responsibility, is always reserved for a superior court. The jury appear to have been under a great misapprehension on this point; and the coroner very properly set them right, and declined to receive evidence respecting the man's state of mind. Had he acted otherwise, the deposition would not have been

received, and he would have exposed himself to censure for ignorance of the duties of his office. The coroner was, therefore, fully justified in rejecting the reception of evidence which he knew to be utterly irrelevant.

This inquest brings out two irregularities connected with the medical part of the inquiry. We desire to call attention to these as a warning to medical witnesses in future cases.

1. Dr. Vaux is reported to have asked the accused "*why* he had done it"—i. e., committed the act of murder; and "*how* he had done it". The accused was not then in custody; consequently, although suspected, he was not a prisoner in a legal sense. Our judges have always denounced the practice of extracting evidence by a cross-examination of persons accused of a heinous crime like murder, whether this is conducted by a medical man or a policeman. As members of our profession have no privilege in giving evidence, whatever is said by the accused in reply to a question, must be stated in court by the medical witness. All questions, the answers to which tend to convict an accused person, are, therefore, most improper. If they do not call for censure from the learned judge who tries the case, they are sure to bring down upon the witness the denunciations of counsel employed for the defence. In Halliwell's case, the witness stated that he put these leading questions in reference to an act of murder, in order to test the state of mind of the accused; but this is no justification of the practice. The state of mind can be tested at another stage of the inquiry, without extracting from a man direct admissions of his guilt.

2. The other important medical point in this case was adverted to by the coroner in his address to the jury. Mr. Allen, a medical man who knew the accused, and who had been previously consulted about his mental condition and his removal from the house, drew up a certificate for his committal to an asylum after he knew that the boy had been strangled, and he attempted to procure the signature of a magistrate to this document. In the absence of any explanation of the facts, this appears to have been a very strange proceeding on the part of a medical man. It was unfortunate that the certificate was not signed and acted upon two or three days earlier; but when an act of murder has been committed, for which a person must be tried and may be made criminally responsible, a medical man is not justified in issuing a certificate for his confinement in an asylum. Under these circumstances, the case falls within the jurisdiction of the local magistrates and police; and, whatever opinion a medical man may have of the state of mind of an accused person, it is his duty to wait until he is legally summoned to express it.

ACCIDENTAL POISONING IN HOSPITAL DISPENSARIES.

An inquest lately held at Chelsea has brought to light certain facts, which show that there is a want of proper care in some hospitals in reference to the custody of dangerous medicines. A girl named Outten, employed as a housemaid in the Chelsea Hospital for Women, secretly procured a box of opium pills from the dispensary, and distributed them broadcast among some of her friends. It was proved that she did not know that the pills contained any drug dangerous to life.

A man named Randall, to whom she had given a number of these pills, took four of them. The quantity of opium contained in them was four grains. The usual symptoms of narcotic poisoning followed; and that the man died from the effects of opium was proved, not only by the nature of the symptoms, but by the appearances in the brain and its membranes. On hearing the evidence of Mr. Leonard, the medical man who attended the deceased, the jury returned a verdict to the effect that the deceased died from poisoning with opium.

Some of the persons to whom the girl gave the pills had the discretion to make no use of them, and thus escaped with their lives. There was nothing on the box to indicate their dangerous nature.

Here the matter might have ended with a simple censure upon the authorities of the hospital for allowing boxes of opiate pills, prepared

for the general use of patients, to lie about so that an ignorant housemaid could purloin them, and through her ignorance, make such a mischievous use of them. But the secretary to the hospital, not satisfied with the verdict of the jury, has rushed into print in defence of the authorities and, we presume, of the system by which noxious drugs in the form of pills may be made accessible to the housemaids of a dispensary. We have read his letter addressed to one of the daily papers, and we must express our opinion that it aggravates the case against the authorities by the special pleading and false reasoning which it displays.

That Mr. Leonard, who was called to the case first, suspected apoplexy as the cause of death is not surprising. He was not aware that the man had taken opiate pills obtained clandestinely, and the symptoms of apoplexy are not always or at once distinguishable from those of opium-poisoning in some of its forms. Then, again, it is objected to the medical inference of the cause of death, that the body of the unfortunate deceased showed what the secretary vaguely describes as "a terribly diseased condition of several of the vital organs, such as would render the young man's death at any moment, and from natural causes, very probable." The conclusion here drawn is subsequently modified by the admission that death might have been *accelerated* by opium, the writer obviously forgetting that, in English law, what accelerates causes. Another statement made by this apologist for neglect, which requires notice, is that "*four grains* of opium, although a strong dose, is by no means an unusual one in certain forms of practice." We trust that the gentleman who entertains these views will not be allowed to prescribe opium for the patients in the hospital. Four grains of opium taken at once are sufficient to destroy the life of a young man not accustomed to the use of the drug. The deceased was not at the time labouring under tetanus, or hydrophobia, or any disease requiring an unusual dose of opium.

We think our readers will agree with us that such an attempt to palliate a gross act of carelessness in the dispensary department of a hospital is not likely to benefit the institution. The managers will, no doubt, take care that, in future, pills containing dangerous drugs will be kept under safe custody, so that ignorant housemaids may not find any facility for "slipping clandestinely into the dispensary and stealing them".

#### COLOUR-BLINDNESS.

THE attention of the public has recently been directed, in the columns of one of our contemporaries, to an anomaly of vision which affects, in a significant degree, the safety of a large portion of the community. The question has been raised of the probability of a recent railway accident having been due to a mistake in the interpretation of signals, on the part of the engine-driver, dependent on colour-blindness. It has been satisfactorily shown that this was not the case, but it is easy to account for the interest which the subject has excited.

The consequences of faulty perception of colours, which, in the cases of those engaged in certain arts and manufactures, are only annoying, become grave sources of peril when the subjects of the defect are employed in railway and maritime service. Hence a systematic examination of the eyesight of those entering these services is imperatively necessary; and a definite report on the subject should be required of every examining surgeon. This would add but little to his labours, for the method of detection of the fault is sufficiently simple; the coloured letters supplied as part of Snellen's test-types meet every need. If this be generally carried out, the public mind may rest contented, for thus the congenital form of colour-blindness would be effectually recognised, and only those cases of loss of power of perception of colour which come on gradually and are symptomatic of disease of the optic nerve, or other parts of the nervous system, would remain undetected. These cases are relatively so few in number, and associated with so much general impairment of vision, that they need excite no alarm.

Three principal varieties of colour-blindness are recognised, green-blindness, blue-blindness, and red-blindness. Of these, red-blindness, called Daltonism after its discoverer, is most important. It is especially frequent among the northern nations of Europe. In Russia and in Sweden, the proportion is believed to be greatly in excess of that in other countries. Wilson, in Edinburgh, found 17.7 per cent. affected; Dalton, in England, from 8 to 12 per cent.; Seebeck, in Prussia, 12.5. In France, on the other hand, Favre, in his examination of railway servants, found about 2 per cent. affected; and Ricco of Modena, who has given special attention to the subject, has met with but three cases whilst practising among a population numbering 33,000.

The explanation of the causes of colour-blindness has always had the greatest interest for physiologists, and many have offered solutions of the problem.

It is well known that red-blindness (to take the most important variety of colour-blindness) may be imitated in two ways; by intercepting the red rays of light by means of a bluish-green glass, or by dulling the sensibility of the retina for red light by prolonged looking at an object of that colour. It is, therefore, natural to suppose that the fault may originate either in an absorption of the red rays by some coloured substance situated within the eyeball anterior to the retinal layer which is sensitive to light, or to some accidental or congenital anatomical defect, such, for instance, as paralysis, atrophy, or absolute want of those retinal elements which are sensitive to red rays. At the head of those who held the former opinion was Dalton, who believed the defect to be due to a blue colouring of the vitreous humour, a theory which anatomical investigation has completely set aside as untenable. The theory accepted by most modern physiologists is one which is supported by the theory of perception of colours propounded by Dr. Thomas Young and perfected by Professor Helmholtz, and maintains that of three sets of retinal fibres which perceive respectively red, green, and violet, the first set is wanting in sensibility. Other explanations have been recently proposed. Hochecker and Leber hold that the retina, although anatomically sound, is not sensitive to either wave of a certain length, and that Daltonism is due to insensibility of the retina to the least rapid vibrations which are produced by the extreme red of the spectrum. The late Dr. Woinoff of Moscow, whose singularity of vision (he was colour-blind in one eye only) gave his investigations a rare value, held with Hering of Prague that the eye affected with red-blindness was insensible to red and to green, which is neither correct nor necessary for purposes of explanation. Galezowski of Paris explained the perception of colour on the supposition that the retinal cones act as ordinary cones of glass, decomposing white light in rings or concentric zones at their bases, and that each of these zones was intended to receive and perceive one single colour according to its refrangibility. Histological examination has proved the fallaciousness of this theory.

Among the most recent and most painstaking contributions to our knowledge of the subject is that of Dr. Ricco of Modena, in the *Italian Journal of Ophthalmology* for 1876. He there maintains, after a series of carefully recorded experiments, performed by means of the spectroscope, rotatory polarisation, and coloured cards, that the explanation most consonant with observed facts is that which attributes the defect to an insensibility of certain retinal fibres which are normally sensitive to red. This, however, can only be regarded as the most rational hypothesis yet offered. The question is still pending an exact solution.

THE late Dr. Sibson held the office of physician to the Artists' Annuity Fund, and the vacancy which was caused by his lamented death has been filled by the election of Dr. Buzzard.

As many as 15,873,934 packets and boxes of medicine were stamped in the year ending March 31st last, the duty being 1½d. where the price was 1s. The amount of revenue received on patent medicines was £123,136 10s 10½d.



DR. MERCER, the Medical Superintendent of the East Riding Lunatic Asylum at Beverley, has died suddenly this week.

M. BAILLARGER has been elected Vice-President of the Académie de Médecine de Paris; M. Bouley will, during the year 1877, occupy the chair as President.

AT the Quarter Sessions of the county of Huntingdon, it was stated that, while the population of the county has decreased, the amount of lunacy within its boundaries has increased. It was resolved to take steps, in conjunction with the counties of Bedfordshire and Hertfordshire, to enlarge the Three Counties Asylum at Arlesley.

A LADY, who had taken her maidservant, when attacked with small-pox, through the streets, with a view of procuring medical assistance for her, has been fined £3 by the Clerkenwell police magistrate for having improperly exposed a person who was thus suffering from an infectious disease.

NEWS from Gibraltar to the 26th ult. states that, small-pox having appeared in an epidemic form among the flocks of goats near Los Barrios, orders have been issued for preventing milk, or goats' flesh, or live stock from the infected districts from coming into Gibraltar. A competent person has been appointed to visit the district and report thereon.

IN consequence of the continued increase in the small-pox epidemic, the managers of the metropolitan asylums have held a special meeting and agreed to measures calculated to meet the emergency. Reports were presented, stating that the hospitals are more than full of small-pox cases, and that there had been an increase of fifty-six patients since Saturday last.

A CORRESPONDENT of the *Liverpool Mercury* writes: "The executive committee of the Congregational Union, representing one of the most important Dissenting bodies in England, has just had the Contagious Diseases Acts under discussion. It had been intended to condemn the Acts, as the Wesleyan Conference had done, but such remarkable statistics had been sent from Plymouth, showing the extraordinary amount of good which had been done there by the existing law, not only in diminishing vice, but also in reducing the ranks of the vicious by reclaiming them and restoring them to friends, that the opponents of the Acts found themselves unprepared with a reply, and the supporters were able to carry the previous question."

#### UNIVERSITY OF LONDON.

NOTICE is given that the Senate have appointed a Meeting of Convocation to be held on Tuesday, January 16th, 1877. Members of Convocation who may wish to bring forward any business at the meeting are required to give to the clerk specific notice in writing not later than the 26th instant.

#### UNIVERSITY COLLEGE HOSPITAL.

IT is gratifying to be able to announce that the Council of University College Hospital, after conference with the medical staff, have decided to give up two-thirds of the clinical fees, in accordance with our suggestion made some months ago. We published, some months since, in these columns a statement of the facts, and they were found to be unanswerable. The Council have very wisely decided to restore the privileges of the medical staff just as they were at the foundation of the hospital, when one-third of the clinical fees was paid over to the Council for general purposes, and the balance was left in the hands of the medical staff, at their absolute disposal. We are fully convinced that this action of the Council will greatly redound to the credit of the hospital with the general public; and we are satisfied that, now the necessity for increased exertion on the part of those whose duty it is to raise the income of the institution arises, it will result in more efficient management, and be, at the same time, the means of materially increasing the usefulness of this important charity. Too little publicity has of late been given to the work and requirements of the University

College Hospital; and, if the decrease of £1,600 a year in the permanent income which this change will cause be the means of inducing the Council to rearrange the management of their financial affairs, it will have done as much good to the interests of the patients as it has brought justice to the profession.

#### ALLEGED HOSPITAL NEGLECT.

A PARAGRAPH with this heading has appeared in most of the daily papers this week, with reference to a patient treated at St. Bartholomew's Hospital. As we have generally found that such paragraphs present only a distorted view of the facts, and as the house-surgeon is often unjustly blamed, or appears to be blamed, we have followed our usual custom of making direct inquiry into the facts of the case, and are happy to say that they do not furnish any foundation whatever for any charge of neglect. The patient was brought to the Casualty Room shortly after one o'clock, with a lacerated wound above one eye and general bruises and injuries to the arm. More than one newspaper then sums up the matter, briefly rather than accurately, in the words: "He was taken to the hospital, and told to go home"; and reports further that his companion said or "swore" that the patient was not asked to remain in. In reality, the patient was kept lying down, and under observation, until nearly five o'clock; and, although at first he was somewhat dazed and stunned, he had no vomiting, nor stertor, nor serious symptoms, and he seemed after a time to recover himself, and was able to speak sensibly and to walk. The house-surgeon examined the wound with his finger, found no fracture, and the dresser tied an artery and put in a suture. The man's companion, who said that the patient was not asked to go in, only stayed with him half an hour, and it was after his leaving that the house-surgeon, Mr. Hubert Weiss, offered to take the patient in. He repeated the offer to two men who came later, but the man said he had a comfortable home and would rather go. He came twice as an out-patient and reported himself better, but ten days after the injury he died at his own house under the care of a private practitioner, who found, *post mortem*, a fracture of the inner table of the skull, but nothing that could have been detected from without. The intelligent jury returned an open verdict and added a rider, that "the Hospital people should attend better to their patients".

#### THE ADMIRALTY ARCTIC COMMITTEE.

THE Admiralty must certainly have felt itself to be in very great straits before, at this stage of the matter, it resorted to the expedient of satisfying, or at least of parrying, the public interest in the causes of the Arctic disaster, by instituting a domestic and private "inquiry" in lieu of publishing the official reports which have long been in its hands, and have been often demanded. To the unofficial mind the matter seems a simple one; there are copies of Captain Nares's written medical instructions as to the use of lime-juice in the Admiralty books, and there are Dr. Colan's reports, and the report thereupon of the Medical Director-General, as we know from Admiral Hall's official statement as Secretary of the Admiralty. These documents could of course be published on a couple of sheets of foolscap, and they would furnish the data required to complete our knowledge. A formal application for copies of these documents—which we made six weeks ago—was met with refusal. It is not very difficult, perhaps, to draw hostile inferences from this withdrawal from publication of documents of so simple and obviously public a character, but we refrain from doing so; meantime, however, we may mention that, having applied to the Medical Department of the Navy for information as to the objects and composition of this Committee of Inquiry, we find that department wholly without any other information than that derived from the public papers. It might have been supposed that, if a *bond-fide* inquiry into a medical question were contemplated, it would be that the inquiry would be carried out. But the Admiralty seems to consider that every one is likely to know better what are the

uses of lime-juice to prevent scurvy than its own medical officers, and is not at all disposed to consult on the subject the head of its own medical service, although—or can it be because?—he is the highest living authority on the subject. We may be excused if we do not look forward with absolute confidence to the conclusions of a committee instituted under such circumstance and appointed under such auspices. Admiral Hope is a very distinguished officer; but we are disposed to think that a question of medical hygiene lies more strictly in the province of Sir Alexander Armstrong, if a scientific result be desired. If the question were one of armaments, we should have great confidence in a quarter-deck jury; as it is one of medicine, the sincere desire to solve it is hardly discernible in the present proceeding, which is, we venture to think, rather political than politic.

#### SMALL-POX AND VACCINATION.

DR. SCHWARZGRUBER of Harland communicates to a recent number of the *Medicinisches Chirurgisches Centralblatt* an instructive instance of the efficacy of vaccination. An epidemic of small-pox appeared in August. The first patient was a girl aged 5, who had not been vaccinated; she had the disease in a very severe form, and died after ten days' illness. In the same house was another family with four children, two vaccinated and two unvaccinated. The two unvaccinated children—a girl aged 13 and a boy aged 2½—took small-pox and died; the two vaccinated children escaped. A third family was visited by the disease; in it also were four children, two vaccinated and two unvaccinated; the former two had small-pox and one died, while the two vaccinated escaped, though constantly exposed to the infection. In a fourth family, an unvaccinated girl aged 9 had a dangerously severe attack of small-pox, but escaped with the loss of an eye. A vaccinated boy aged 4, in the same family, had the disease in a very mild form. In a fifth family of eight children, of whom seven were vaccinated, six of the vaccinated children had mild attacks of small-pox, four not being confined to bed; while, in the unvaccinated child, the disease proved fatal. The course of events in other families was similar. In all, there were thirty cases of small-pox among vaccinated persons, with only one death, which may be attributed to the patient having gone while scantily clothed from a warm room into the cold air. Of the non-vaccinated (the only ones in the place), eight had small-pox; of these, seven died and one recovered with the loss of an eye.

#### SMALL-POX IN ST. GILES'S.

THE arrangements for isolating cases of fever and small-pox in the densely populated and poverty-stricken district of St. Giles's-in-the-Fields, which have recently been the subject of public correspondence, afford a striking example of that system, "how not to do it," which prevails in that locality, as in many others, in sanitary matters. It would appear that the Board of Works of St. Giles's, though possessing, under the Sanitary Act, full powers to provide a hospital of their own or to make arrangements for the reception of cases of infectious disease, occurring in classes above the position of paupers, with the authorities of the Fever and Small-pox Hospitals, has hitherto neglected to provide such accommodation. This, however, is not perhaps to be wondered at, when we recall to our readers' recollection the fact that the same local authorities which permitted, nay even justified, the wretched system under which Gibson perished so miserably in their workhouse in 1864, are still paramount in this parish. Hitherto, it has been our pleasing duty to chronicle the attempts frequently made by health-officers to enlighten their respective sanitary authorities on the subject of the provision which should be made for the effective isolation of the contagious sick; this correspondence, however, discloses the melancholy fact that a medical officer of health has been found who exhibits himself in the public papers as the exponent of the principle that isolation is sufficiently effected when a patient stricken with small-pox is placed in a separate room, in a building used as a common lodging-house and frequented nightly by from one hundred to two hundred persons. Mr. Lovett doubtless fully knows

the feeling of the body of which he was recently a member, and which elected him from among a number of talented competitors to fill the position of health-officer, but he would do well to insist on their adherence to a higher order of sanitary provision than is popular among them, or than that which he lays down on this occasion.

#### THE REMOVAL OF SMALL-POX PATIENTS.

ON Tuesday, Mr. Donaldson held an inquiry relative to the death of Ada Harris, aged 19, a needlewoman. John Sturges said that, on Thursday morning, December 28th, he was employed to convey the deceased from Wellclose Square to the Small-pox Hospital at Homerton. On arriving there, he found she was dead. Dr. Blackburn, assistant medical officer to the hospital, said that death was due to malignant small-pox; but he added that the conveyance in which the deceased had been brought to the hospital was unfit for the purpose. An assistant relieving officer of St. George's East, named John Barnes, stated that the order for the removal of the deceased was signed on the evening of the 27th; but, it being very wet, and the deceased having had some medicine prescribed for her, he thought it better to defer removing her until the following morning. With regard to the conveyance, the ambulance generally used broke down a short time ago, and the deceased was accordingly taken to the hospital in a brougham which is now in temporary use. Dr. Blackburn repeated that the brougham was unfit, as the deceased was obliged to remain in a sitting position. The jury expressed an opinion that a proper ambulance should be brought into requisition in future, and returned a verdict in accordance with the medical evidence.

#### PUBLIC HEALTH IN EGYPT.

DR. GRANT of Cairo writes to us:—The public health of Egypt was never better than it is now. At Cairo, the weather is milder and warmer than it usually is at this season. The horse-disease (which very much resembled blood-poisoning from serpent-bite, although from some other specific poison acting in the same way) has ceased, after cutting off more than three-fourths of the equine animals. The sanitary regulations have latterly been very strict and fairly carried out, so that no danger to the public health is now anticipated. As the rise of the Nile has been above the average this year, the summer will in all probability be free from any epidemics that would be encouraged through the water being contaminated by the dead bodies thrown into the river and canals. As long as there is a large and quick flow in the river, this is not so much to be dreaded; yet it is not desirable that dead animals should be thrown into the water which the people have to use for culinary and other purposes. In a country like this, however, it is almost impossible to prevent it, unless in and near large towns, such as Alexandria and Cairo; and even there sanitary regulations cannot be carried out to the letter, because the Sanitary Board has no executive. The rules and regulations laid down by the Sanitary Department have to be carried out under the direction of the Police Department. The result of this is that they are not acted up to at all, or very imperfectly so; and what is applicable to one administration under this government is applicable to all. The whole system is a game of chance, played by tricksters, and the result is a failure.

#### THE PUBLIC HEALTH.

IN London last week, 1,978 births and 1,510 deaths were registered. Allowing for increase of population, the births were 195 and the deaths 263 below the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which, in the two preceding weeks, had been equal to 21.6 and 21.8 per 1,000, further rose to 22.6. The 1,510 deaths included 75 from small-pox, 40 from measles, 29 from scarlet fever, 9 from diphtheria, 34 from whooping-cough, 27 from different forms of fever, and 21 from diarrhoea; thus to the seven principal diseases of the zymotic class 235 deaths were referred, against 230 and 237 in the two preceding weeks. During the 52 weeks of last year, 735 deaths from small-pox were registered in London, of which 7, 26, 110, and 592 were respectively returned in



the four quarters. During the 31 years 1840-70, the annual number of deaths from small-pox in London averaged 808, and ranged from 154 in 1857 to 1,804 in 1844 and 2,012 in 1863. The fatal cases in the epidemic year 1871 rose to 7,876, and in 1872 they were 1,781; in 1873-4-5, they declined to 115, 56, and 75 respectively. With respect to the 75 deaths from small-pox in London last week, it is pointed out by the Registrar-General that 31 were certified as unvaccinated, 22 as vaccinated, and in the remaining 22 cases the medical certificates did not furnish any information on this subject. The 75 fatal cases included 36 in the hospitals at Homerton, Stockwell, and Hampstead, 1 in Highgate Hospital, and 1 in the North Street Infirmary, Poplar; the remaining 37, or 49 per cent. of the total cases, occurred in private dwellings. Fourteen of the deceased patients resided in Hackney, 12 in Lambeth, 6 in Camberwell, 5 in Poplar, and 3 in Bow; in all (excluding one case of which the previous residence was unknown), 6 belonged to the West, 22 to the North, 18 to the East, 28 to the South, and not one to the Central groups of districts. The hospital contained 823 patients on Saturday last, against numbers increasing steadily from 185 to 737 in the nine preceding weeks.

#### PROSECUTION OF UNQUALIFIED PRACTITIONERS.

THE *Birmingham Post* says that proceedings are being taken against the principal quack doctors of Birmingham, numbering altogether between twenty and thirty. The cases will come on in the Birmingham County Court, the proceedings having been instituted under the Apothecaries' Act for the recovery of the £20 penalties. It was decided to proceed under this Act owing to the great difficulty there has always been in the town of obtaining a conviction under the Medical Registration Act. It is likely, however, that some of the quacks will also be proceeded against under the latter Act before the magistrates. Voluminous evidence has already been obtained, and many of the leading surgeons of Birmingham will go into the witness-box. Many of the patients will be called to give evidence on subpœna.

#### PHYSICAL CULTURE IN AMERICA.

IN an address to the alumni of Amherst College, Dr. Nathan Allen stated that, in 1859, a gymnasium was erected, in order to promote the health of the students, and a department of physical culture and hygiene established. Since then, more than three thousand students have taken part in these exercises, and so great has been the success of the experiment, that almost any other department of the College could better be dispensed with. The advantages enumerated are the great contrast in the health of students now and twenty years ago, the smaller amount of sickness, and the decrease in the mortality in College now; the average health of students is found to improve each year, so that at graduation, instead of being lean and lank, they appear in glowing health. The success of the gymnastic department at Amherst is said to be due to the high position it takes, being placed in the same rank as classics and mathematics, there being a regular curriculum and the professor being a member of the Faculty. To those who have little faith in enforced attendance upon physical exercises, Dr. Allen points out that, if, for the development of the mental faculties, metaphysical exercises are enforced, so, for the development and strengthening of the bodily organs, enforced physical exercises are necessary, a combination of the two being best calculated for the perfect development of the individual and the preservation of the health. Ball-playing and boating, being now very popular, draw from Dr. Allen a remark upon the comparative merits of these exercises from a physiological standpoint. Gymnastics are superior, as they tend to that harmonious development of the whole body upon which health greatly depends, whilst boating and ball-playing, by the excessive development of muscular tissue in particular parts of the body, may detract from the healthy action of the brain and nervous system, and, by their occasional violence and protraction, cause such a congested state of the vital organs as to result in serious diseases and even to endanger life.

## SCOTLAND.

THE Glasgow authorities, on the advice of their medical officer, are taking precautions against the invasion of small-pox, by giving every facility for the performance of revaccination, and causing inspection to be made of all inmates of public institutions, with a view to vaccinating, or revaccinating, those who have no satisfactory marks. No case of small-pox has yet been noted in the city.

#### THE HEALTH OF GLASGOW.

DR. RUSSELL, Medical Officer of Health for Glasgow, has just issued his returns for the quarter ending September 30th last. The average death-rate of the city in the third quarter of the past ten years was 26.5, while in 1876 it was only 22. Over the whole of Scotland, the average death-rate of the quarter for ten years was 19.9, and for 1876 it was 18.7; so that Glasgow has not merely shared proportionately in a general improvement. Compared with the eight principal towns of Scotland, mortality 20.5, the mortality of Glasgow was exceeded by that of Perth, Paisley, and Greenock. The mortality was the same as that of London, and less than that of fifteen out of the twenty principal towns of England. The mortality of the seventeen principal European cities is stated to be 28.5, and of these only two were lower than Glasgow. In New York in the same period it was 34 per 1,000. The deaths under five years of age amounted to 48 per cent. of the total deaths; those under one year to 28 per cent. of the total mortality, and 15 per cent. of the total births. Of the births, 8 per cent. were illegitimate. Of all the deaths, 84 per cent. were certified, but there were considerable differences at different periods of life; thus, in the class of deaths under one year, 70.5 per cent. had the cause of death certified—of one and under five years 85 per cent., and of the deaths over five years 91 per cent. There was no proof of medical attendance having been obtained for 30 per cent. of those who died under one year, for 15 per cent. of those who died under five years, and for 9 per cent. above five years. The causes of death are ranged in order from the highest downwards—consumption and acute diseases of the lungs, 843; nervous diseases of children, atrophy, premature births, all below five years, 453; diarrhoeal diseases, 264; other zymotic diseases affecting children chiefly, 236; fevers, 56; unclassified, 1,096. There were exactly 400 deaths less than the corresponding quarter of last year; a decrease, of which 295 arises from the unusually low fatality of all kinds of zymotic diseases.

#### THE WATER-SUPPLY OF FORFAR.

DR. STEVENSON MACADAM condemns, in the most sweeping terms, the quality of nine samples of the water in the wells at Forfar sent to him for analysis. Four of the samples, he says, yielded an excessive amount of saline matter, and are grossly contaminated with the decomposition and putrefaction of organic matters of the nature of sewage. The other five samples contained less saline matter in solution, but were still of impure quality. He is clearly of opinion that the waters should not be employed for drinking and cooking purposes, and their hardness is such as to render them unsuitable for washing operations. Dr. Macadam closes his report by saying, that he has seldom met with a set of waters from a single town which were so grossly impure and unwholesome, and he recommends that immediate steps be taken to introduce pure and wholesome water.

#### THE EDINBURGH BLIND ASYLUM.

AT the annual meeting of the Edinburgh Blind Asylum, it was announced that the Queen had consented to become patron of the institution. During the past year, subscriptions had been received to the amount of £1,300. With regard to the Nicholson Street Institution, it was reported that the accounts of the industrial department exhibited a net profit of £277, and that, since the close of the financial year, a contract had been secured from the War Office for the supply of 20,000 brushes. There were in the Craigmillar institution 42 children

and 34 adult females. The removal to the new building has been found very conducive to health. There were in all 222 blind persons connected with the school and asylum, 143 being day-workers, as compared with 206 last year. The institution was greatly in need of funds.

#### ROYAL MEDICAL SOCIETY OF EDINBURGH.

THE following have been elected office-bearers for the ensuing year. *Presidents:* J. Graham Brown, M.B., C.M.; Joshua J. Cox, M.B.; R. Kirk, M.B., C.M.; James Baker, M.B., C.M. *Honorary Secretaries:* J. Milne Chapman; Robert Roxburgh, M.B. *Library Curator:* Lionel Druitt, M.R.C.S.Eng. *Museum Curator:* Chas. W. Cathcart, M.A.

#### THE VIVISECTION ACT.

IN an annual address recently delivered to the members of the Andersonian University Medical Society, Dr. Cameron, M.P. for Glasgow, said of the Vivisection Act:—It was little better than a *placebo*, formulating the rules already recognised by the profession as bearing on the subject. It was, however, objectionable on the same grounds as the Criminal Law Amendment Act was objectionable, in respect that it applied to only one section of the community. It was not directed against the infliction of avoidable suffering upon the lower animals. It was directed simply and solely against the infliction of pain at the hands of persons whose object was scientific and medical investigation. The evidence given before the Royal Commission bore him out in saying that scientific men in this country were, as a rule, most careful to avoid the infliction of unnecessary pain in their experiments, and that not one-millionth part of the avoidable pain annually inflicted upon the brute creation in Great Britain had ever been inflicted at their hands. He would go further and say, without fear of contradiction, that, since the introduction of anaesthetics, the small fraction of avoidable pain suffered by the lower animals at the hands of scientific investigators had been reduced a hundredfold. He did not wish to speak of the avoidable pain inflicted on the brute creation by the huntsman, the sportsman, or the angler—though each of these sections of the community had far more suffering to answer for than the man of science—and suffering unhallowed by any unselfish object. He would not refer to the cruel system of trapping rabbits, for in its case the motive might afford some excuse for the inhumanity. He would not speak of cruelties practised in the slaughter-house, but he would take instances of operations as at present performed, attended with acute suffering, but which might be rendered painless by the use of anaesthetics. One of these operations was performed by rude and unskilled men upon nearly half the total of our domestic animals—upon horses, cattle, and sheep. The Bill did not in any way deal with these operations, and he could not help regretting, however, that, in the interests of humanity, advantage was not taken of this opportunity to restrict the enormous amount of unscientific vivisection without anaesthetics which goes on in our midst. The measure passed did not satisfy the anti-vivisectionists, and they had stated their intention of renewing their crusade against such investigation.

## IRELAND.

HOSPITAL Sunday in Belfast was held on the 31st ult., being the last Sunday in the year; the amount collected will be given to the Belfast Royal Hospital.

#### THE LORD MAYOR OF DUBLIN.

AT the inauguration of Alderman Tarpey as Lord Mayor of Dublin on the 1st instant, we are glad to find that he stated on that occasion, that while every branch of the civic business would have his aid, there were two matters which must command his special care—sanitation and the markets. He would, he declared, by every means in his power, enforce a strict observance of the sanitary laws for the benefit

of the public health; and he would vigilantly examine into the integrity of the markets, punishing with an exemplary severity fraud of every kind, and especially the frauds in articles of food, from which the humbler classes are the chief sufferers.

#### WATER-SUPPLY OF DROGHEDA.

LAST week, a drinking fountain, erected by public subscription in honour of Mr. Benjamin Whitworth, M.P., was opened in Drogheda. The fountain is a handsome one, about thirty feet high, inlaid with red and grey granite. Upon a tablet is an inscription, to the effect that the fountain was erected by the people of Drogheda to mark their appreciation of the many generous acts conferred upon the town by Mr. Whitworth. The memorial has been erected at a cost of nearly £400.

#### FEVER IN LURGAN.

AT the usual monthly meeting of the Lurgan Town Commissioners held last Monday, a letter was read from the Local Government Board, stating that they understood that fever was still greatly on the increase in Lurgan, and requesting that the authorities should see to the matter, as, under the law, the sanitary authorities would be held responsible, ample powers being conferred upon them in remedying the nuisances, and taking such steps as might be necessary for the sanitary condition of the districts affected. We understand that the prevalence of the present epidemic is due to the imperfect sewerage, filthy middens, and insufficient supply of pure water; matters which have been too long neglected, owing to the apathy of the Town Commissioners.

#### SMALL-POX IN DUBLIN.

SMALL-POX is not bad in Dublin, but few cases comparatively having up to the present appeared. Last week there were registered three deaths from the disease: in one case the patient had not been vaccinated; a second was stated to have been vaccinated when one month old, but there was no cicatrix; and, in the remaining one, no mention was made of vaccination in the certificate forwarded to the registrar. As cases appear, they are almost invariably sent to hospital, where the accommodation is ample for present requirements. The authorities of the Mater Misericordiae Hospital have set apart a portion of that institution for the use of small-pox patients; the Hardwicke Hospital can utilise forty beds for the same purpose (including fever cases); the Meath Hospital can give twelve beds; while the City of Dublin Hospital can afford accommodation for sixteen patients suffering from the disease.

#### SCARLATINA IN CLIFDEN UNION.

A VIRULENT type of scarlatina is at present very prevalent in this union. Dr. Byrne reports that a malignant epidemic of this disease has prevailed for some time in the district, especially close to the sea. He considers that the virulence of the epidemic has been much increased by the use of impure water, the residents almost invariably using for all purposes the water running off the roads, which, as a rule, in the lowlands is largely impregnated with animal impurities of every description, flowing as it does into drains from dung-heaps and other receptacles for refuse incidental to human dwellings.

#### THE LATE DR. M'CREA OF BELFAST.

IT has been determined by the friends and admirers of this gentleman, whose untimely death from blood-poisoning we lately recorded, to present a testimonial to his family as an expression of sympathy for the loss they have sustained, and as a mark of esteem for the deceased. A committee has been formed, and about £400 has been already subscribed. We are confident, considering the circumstances of the case, and the estimable character of the deceased, that a sufficient sum will be obtained by the committee who appeal on behalf of Dr. M'Crea's family, Dr. M'Crea having died at the early age of thirty-seven, before he was able to realise a competency for his children.



## GOVERNMENT AND SCIENTIFIC RESEARCH.

THE Government have, during the past year, as we have before mentioned, expressed a desire to place the sum of £5,000 annually at the disposal of a "Committee for Scientific Research". The proposition looked a liberal one: practically, however, it seems to have been carried out by a confiscation of the grants hitherto made by the Privy Council through its medical officer for medical and physiological research, and the addition of that grant to the sum of £1,000 a year which has long been placed at the disposal of the Royal Society. Far from being, therefore, any real addition to the funds available for biological research, this move will probably result in a considerable diminution of the scanty fund hitherto available for that purpose. For the Committee to which the distribution of the fund is entrusted includes practically all the heads of learned societies; and the chemists, mathematicians, geologists, physicists, engineers, mechanical engineers, and archaeologists, who are represented by the presidents of their respective societies, will take care that each science gets a slice, and there will not be much left for medicine.

We said that all the chartered learned societies are represented on the Committee by their presidents; but we were wrong: the only chartered medical societies are left out. The Royal Medical and Chirurgical Society is omitted; and, although the British Association is there, the British Medical Association is not. We do not know who nominated the official list, but whoever did so greatly misunderstands the duties and functions of the medical bodies. The Geological Society, the Society of Mechanical Engineers, and the newly fledged Physical Society, have good claims to representation, but certainly not more than the medical bodies which we mention.

The medical profession is represented by the presidents of the Medical Council and of the London Colleges of Physicians and Surgeons, all eminently fitted possibly personally for the post, but officially not concerned with the promotion of research, and doing nothing to promote it, except the College of Surgeons by an occasional essay prize. The bodies in the medical profession which do concern themselves with the promotion of research are, as it were designedly, left out. The Medical Council especially has more than it can get through in its work of education and registration; and it is purely an intrusive addition to its functions that it should undertake to regulate the distribution of funds to an object which it does nothing to serve, and of which it has no official cognisance. There is so obvious a blunder in the construction of this list, that we hope it will quickly be remedied.

## BRITISH PHYSICIANS IN FRANCE.

A GOOD deal of public interest and much indignation have been aroused in the public mind in this country, by the statement of a correspondent of the *Pall Mall Gazette* that it is the intention or desire of the medical deputies of the French Assembly to promote a law which will have the effect of shutting out British graduates of medicine from practice in France, of which many towns contain a large population of our countrymen, chiefly sent thither by members of our profession. We have not yet seen the text of the proposed *projet de loi*, and therefore abstain from any comment. We are persuaded, however, that the legitimate desire of the French profession to prevent abuses of practice by unqualified persons may be satisfied by much less stringent measures than those mentioned, which would certainly excite a very strong feeling here, and are not in accordance with the fraternal sentiments of mutual respect and goodwill which prevail between the members of the profession in this country and our brethren across the Channel.

## THE NATIONAL SOCIETY'S HOSPITAL AT NISH.

MR. WILLIAM MAC CORMAC of St. Thomas's Hospital, chief Surgeon to the National Aid Society, writes to us:

I beg to send you some interesting notes of the cases in the Nish hospital of the National Aid Society, under the direction of Dr. Armand Leslie, who had, until the armistice was declared, acted at the Turkish headquarters before Alexinatz in a very exposed position, and suffered much personal hardship. Dr. Leslie, with Messrs. Pitts, White, and Barker, of St. Thomas's Hospital, were eight weeks under canvas in the camp. They used the large hospital marquee provided by the Society as a temporary hospital for fifty beds, and occasionally turned out of their own tent to accommodate the wounded. Part of the time the snow lay thick upon the ground, and their food had to be obtained from Nish, twenty miles distant, at much cost and trouble.

Hostilities having terminated, Dr. Leslie established an admirable hospital at Nish for one hundred and fifty patients, where he is now working hard, having been joined by Messrs. Newby, Bothamley, and Maile, of St. Thomas's Hospital. The cleanliness and good ventilation of the hospital furnish a favourable and striking contrast to the Turkish ambulances, where dirt and foul air prevail. The admission of fresh air is only effected under continual protest by the patients and from the Turkish doctors, who, by the way, are nearly all Greeks by nationality.

The great difficulty our English surgeons have to contend against is the want of sufficient and proper food for the patients. Mr. Newby writes: "The poor men have during the day what is called soup, but so thin that you can see through a gallon of it; also a little rice and some black bread." "If the British public wish to succour effectually the Turkish sick and wounded", Dr. Leslie writes, "let them send large numbers of blankets, hospital stretchers and conveyances for the wounded of improved construction, Liebig's extract, condensed milk, Australian meats, air-cushions. The wounded in the Turkish hospitals are starved. I have at present a man who is dying of inanition. He is a typical case. He was brought in too late, and Liebig will not save his life. We give all our bad cases Liebig's extract once a day. We have distributed blankets. Our patients say openly it is food they want, not medicine. The government gives a man suffering from pyæmia a ration of two loaves at a time, and nothing besides." I trust these distressing details may add to the benevolent energy of those providing help for the sick or wounded Turkish soldiers.

The following is Dr. Leslie's statement.

The hospital consists of four wards, containing one hundred and fifty beds. There are five English surgeons. Liebig's extract, brandy, and blankets are distributed to the patients in the ambulance. The ventilation is superior to that of any Turkish military hospital. The patients and Turkish officials object strenuously to the windows being opened, even in the finest weather. A patient called me a *giaour* to my face, when I insisted on a window near him being opened. Sir Arnold Kemball visited the ambulance on December 6th. He was accompanied by Nedjib Pacha, chief of the Turkish état-major. They both dwelt strongly on the ventilation and appearance of Turkish hospitals, when compared to the ventilation and appearance of the Red Cross ambulance. The ambulance was opened on November 18th. The mortality since opening has been two.

The cases at present in hospital include the following amputations: thigh, 2; foot (Syme's), 1; arm, 4; also injuries to the pelvis, including laceration of the scrotum and testicles; sinuses in the abdominal walls (shell wounds); fracture of femur, with infiltration of pus (patients refuse amputation); fracture of the lower jaw (bullet-wound). In one case, half of the lower jaw has been removed by caries of the bone. There are also fractures of the humerus, with infiltration into the shoulder-joint. In one case, the bone was fractured just below the surgical neck, and was completely "crushed" for a length of four inches. The patient refused amputation; there is an attempt at union on the part of nature.

In a case of compound comminuted fracture of the femur in the upper third, the bone has united strongly without any apparatus or extension.

Wounds of the hand and loss of fingers are as common here as they were with the Servians. The fact is to be explained by the nature of the ground and consequent mode of warfare. The Morava Valley is densely wooded, and the hand was usually the only part exposed when the fighting took place behind trees, as it invariably did.

The cause of death after operation here is generally gangrene. Of death from shock, I have not seen a case. Patients who were almost pulseless, and whose extremities were cold, rallied quickly after an amputation of the leg. We have had no deaths from chloroform. With the Turk, a very small quantity of chloroform produces complete anæsthesia. The wounded in the hospital do not show the pluck of which their comrades gave proofs when operated upon at the front. Privations and nostalgia produce, after a little time, a well marked constitutional taint. A Turk thus affected is a very bad subject for operation. He delays it till no hope of reaction setting in after its performance can be entertained.

Some interesting cases have occurred in the wards of the Central Hospital at Nish. In a case of wound of the heart, the man lived fourteen days. The pericardium could be easily felt with the finger, and part of the bullet was extracted during life from the substance of the heart. The cause of death, perhaps a concomitant one, was apparently pneumonia. Necropsies are never allowed.

In a case of wound of the bladder (in the Turkish hospital), of forty-five days' standing, the bullet entered the right iliac fossa and ran

transversely through the pelvis, making its exit in the right groin. Urine dribbled from both apertures.

Wounds of the intestines are common and generally prove fatal. In two such cases, *ascarides lumbricoides* were extracted with the bullet. A patient was wounded in the face. The left upper eyelid was lacerated completely in its long diameter; the eye was completely occluded. The molar bone was fractured, and a piece of it was found imbedded in the upper wounded eyelid. The eye was intact. The patient made an excellent recovery.

On December 10th, we received fifty new cases. (Fifty patients were discharged cured or convalescent during the preceding four days.) In our ward (No. 1), there is an old standing shell-wound of the thigh. Scarpa's triangle is completely dissected, every muscle being well defined. The bone is intact; the artery was visible a few days ago. In a case of fracture of the lower jaw (bullet), a hard substance, about the size of a walnut, was felt against the internal surface of the right ramus. It was fixed very firmly to the bone and extended upwards and backwards in the direction of the mylo-hyoidean ridge. There was an extremely small scar near the right junction of the upper and lower lips, looking like a healed punctured wound. The patient affirmed that the substance felt was a bullet. On cutting down cautiously, we discovered two molar teeth encysted, and then a large piece of bone; underneath the bone was part of the splintered ramus, which lay firmly imbedded in the floor of the mouth, whence it was dissected cautiously. Very little hæmorrhage occurred. Mr. Bothamley was the operator. No chloroform was given.

The number of ankylosed limbs is very great, owing to the fact that, in a Turkish hospital, wounds near a joint are seldom thoroughly examined, but are looked upon as superficial and dressed with charpie and cold water. I may say the same of the treatment of fracture of any bone. When the latter does not protrude and the wound is small, charpie and a bandage are deemed sufficient. Many such cases have I witnessed, and in one (comminuted compound fracture of the upper third of the femur) the man has made a good recovery. The wounded in the Turkish ward frequently suffer from erysipelas. Superficial wounds and half-healed sinuses very often are complicated with a troublesome eruption resembling herpes zoster.

I have to work very hard, in order to get a patient to consent to amputation. He generally, in answer, draws his hand across his throat with a sawing motion, implying that you may as well kill him at once, because you reduce him to beggary by making him a cripple. All the men sent out are working well. Their health is excellent.

#### CHRISTMAS AND NEW YEAR'S DAY IN THE LONDON HOSPITALS.

We have been pleased to observe that the recent Christmastide has been made as pleasurable as possible to the inmates of the different London hospitals. To the men and women, it has brought good cheer; and from all quarters expressions of kindly sympathy with them in their sufferings. To the children, however, it has especially been a period of rejoicing; and the Christmas-trees have been surrounded by throngs of happy faces. This is as it should be; and the best thanks of all those who have the welfare of the patients at heart are due to the ladies and gentlemen who have so largely contributed their time and money to the gratification of their sick brethren. The following are details of the proceedings at some of the principal hospitals.

##### GUY'S HOSPITAL.

As if to make up for the inclement weather out of doors, Guy's put on more than its usual festive dress on Christmas Day. On no former occasion were the wards more gaily decorated; whilst the knowledge that the inmates had done their best to render the interior attractive brought a large number of ladies and gentlemen interested in the hospital to see the patients at dinner, and to wish them the usual compliments, as well as their speedy recovery. Both patients and *employés* were regaled with the substantial fare of roast-beef and plum-pudding, supplemented with a dessert of fruit and light wines, for which they were indebted to the students, who had contributed among them not less than £25 for this and the kindred object of supplying the male patients with pipes and tobacco to enable them to enjoy the much coveted indulgence of smoking, which is for them restricted to one day in the year. There was a great variety of tastes displayed in the numerous decorations. In most cases, the arrangements were superintended by the sisters in their respective wards, who again were more or less assisted by the dressers and students and by the patients them-

selves. Most of the decorations were exceedingly good, and exhibited great forethought and care, as well as artistic excellence. It may be invidious to make distinctions, but it was impossible to overlook the beautiful mottoes and devices, combining both humour and sentiment, which graced the walls of Luke, Astley Cooper, Clinical, and Stephen wards. A cartoon painted by an ex-dresser in Luke ward particularly attracted our attention, and afforded much amusement to the numerous visitors, lay and clerical. This had a local signification, being intended to illustrate a circular amputation on the antiseptic method, which has found so much favour lately in the hospital. The operation is being performed by the clown through the circumference of a smoking hot plum-pudding; while the other *dramatis personæ* of the harlequinade are busily employed in pumping spray on the familiar *pièce de résistance*. Any apprehension of injury from the antiseptic is at once dispelled by the fact that the ordinary carbolic acid bottles have been replaced by others bearing the well-known marks of Moët's Champagne. In another part of the same ward, we noticed, among other mottoes, the characteristic one of "Monere quam imperare", which may be taken as a liberal paraphrase of the well-known hospital adage "Dare quam accipere", and which together may be received as an index of the rule of the establishment. Among other contributions to the success of the occasion, we ought not to omit mention of the ladies of the Flower Mission, whose kindly occupation, though suspended for the present, was still evinced by their sending directed envelopes enclosing a Christmas card and small book to each inmate. All passed off gaily and cheerfully, only marred by the regret of the juvenile patients that Christmas did not come oftener than once-a-year.

##### KING'S COLLEGE HOSPITAL.

On Christmas night at this hospital it is customary to give some little treat to the patients, and this last Christmas was no exception to this rule. Through the liberality of the sisters of St. John's House (by whom this hospital is nursed), a substantial tea was given to the patients in each ward, and in the children's wards numerous toys and other presents were distributed. After tea, in the men's wards, tobacco and whiskey, and in the women's wards, wine, were provided by the resident medical officers. Songs and carols were sung, and various games played. All those patients who were well enough sat up, while the remainder enjoyed themselves as well as they could in their beds. A very pleasant evening was spent; the patients evidently enjoying themselves thoroughly. On New Year's Day the festivities were on a somewhat smaller scale, but much appreciated. On Wednesday, the 10th instant, it is intended to have a Christmas-tree for the sick children of the hospital.

##### THE MIDDLESEX HOSPITAL.

The festivities at this hospital on Christmas Day commenced at four o'clock in the afternoon, when the patients were provided with a good tea in their several wards. All sat up to it who possibly could do so. The great event of the day, however, was the Christmas-tree. This was placed in the Board-Room, and all the patients that could walk, or be carried, were collected there, and the presents from the tree distributed to them. It proved a great success this year. Besides this, a present suitable for the season was made to every patient, including shawls, woollen wrappers, etc.

##### LONDON HOSPITAL.

Christmas was particularly quiet at the London Hospital. The children's and a few of the other wards were decorated, but not very profusely. On Christmas evening, the convalescent patients of most wards amused themselves by singing and other innocent entertainments. On New Year's evening, one of the sisters kindly provided to such patients of her ward as were able to partake of it, a supper, consisting of roast beef, plum-pudding, etc. The annual Christmas-tree entertainment will take place in the children's surgical ward on Monday, the 8th instant.

##### ST. GEORGE'S HOSPITAL.

The Christmas entertainment in this hospital was given on Tuesday evening, December 26th, and consisted of coffee and light cake for such patients as were sufficiently well to enjoy it, and of music and singing and reading in several wards. The wards were tastefully decorated by the nurses and lady visitors, the latter of whom gave their kind presidency at tea in each ward; and also, with several friends which they brought, assisted in the musical part of the programme. The proceedings were under the direction and management of the chaplain.

##### ST. THOMAS'S HOSPITAL.

On Christmas Day, the inmates of the hospital had the old-fashioned dinner. In the evening, carols were sung by the Nightingale nurses in



the different wards, and there were other amusements. On Twelfth Night, a ball, covered with cotton-wool to represent a snow-ball, five feet six inches in diameter, the interior of which will contain a present for each patient, will be rolled from bed to bed by a "Father Christmas".

#### UNIVERSITY COLLEGE HOSPITAL.

On Christmas Day there was nothing special, except the traditional Christmas fare. On the Thursday following, all the adult patients had presents of clothing, etc., given them, together with negus and cake, etc., unless their disease would not admit of it. On Saturday last, there was a large Christmas-tree for the children, to which many of the friends of the hospital were invited. To each child, a suit of clothes was given, with a great many presents, as there were almost more than could be disposed of. This was followed by a tea, with special accompaniments suited to the occasion; and the feats of a conjurer wound up the evening. The whole affair lasting from 4.30 to about 7.30.

#### THE SEAMEN'S HOSPITAL, GREENWICH.

On Christmas Day, there were in the hospital sailor-representatives of twenty-seven different nationalities; and, for weeks past, all the convalescents have been busily engaged in preparing paintings, models, devices of all kinds and in all languages, paper-flowers, straw, cotton, wool, and tin letters, flags, etc. Much skill was shown by several of the patients. Notable amongst many devices of interest were a model of the inn at Bethany by an Italian, some admirably painted flowers and fruits by a Russian, and models of ships, grottos, etc., in virgin cork by other patients. Everywhere throughout the hospital, the utmost interest was shown in the preparations for Christmas, and the wards, as a whole, were really beautifully decorated. No one will dispute the appropriateness of a motto which was surrounded by the flags of all nations in colours, and surmounted by the imperial crown of the Empress of India. It ran thus: "He shall gather his people from all nations." Over the entrance to the Northumberland—the chief surgical—Ward were the words: "Enter the haven of rest"; and the patriotism of an Irish seaman found expression in a model of a harp with the words, "Success to Ireland", all in the greenest colours. The sailors are at times given to poetry, and in more than one of the wards there were verses of doubtful metre, but of quaint expression and in excellent taste. So good, indeed, were the decorations as a whole, that we understand that two of the illustrated newspapers are going to give full-page illustrations of them in their issue of January 6th, 1877.

#### BELGRAVE HOSPITAL FOR CHILDREN.

On Christmas Day, the little patients of the Belgrave Hospital exchanged their "ordinary diet" for the time-honoured meal of roast beef, turkey, and pudding. Happily, most of them were so far on their way towards recovery, that very few exceptions had to be made. None, however, were made when the feast was over, and the still more enjoyable part of the entertainment, the distribution of presents by the visitors, began. The presents included books, toys, and dolls, and beads enough to clothe a red Indian. Then chattering and laughing were succeeded by singing and music, and so the day came to an end—for most of them too soon.

#### THE EVELINA HOSPITAL FOR SICK CHILDREN.

The little inmates of the Evelina Hospital looked very happy and contented in their clean comfortable little cots, amusing themselves with the pretty toys served out to them with no sparing hand, and which the sliding table upon each bed enabled them to enjoy without trouble or exertion. The bright clean wards, the Christmas decorations, the additional toys, and better fare, all contributed to make the suffering seem less hard to bear than at ordinary times. Cakes and fruit were also, within the limits of prudence, provided, and these are by no means matters of indifference to childish minds. In fact, no effort was spared by those whose privilege and pleasure it was to attend them to make the little ones feel that they were cared for—not forgotten—and that they, too, had a share in the general rejoicing.

#### NORTH-EASTERN HOSPITAL FOR CHILDREN.

On Christmas Day, through the kindness of friends, each of the little patients in the North-Eastern Hospital for Children, Hackney Road, received presents, toys, and warm flannel garments; they also greatly enjoyed the extra good fare provided, which included sponge-cakes, oranges, and a small piece of plum-pudding each, for dinner. On the afternoon of Tuesday last, January 2nd, the usual New Year's treat was held. A hundred and fifty of the children who had been relieved in the hospital during the past year were invited to spend the

afternoon. One hundred and twenty accepted the invitation; and these, together with all the inmates of the Croydon Convalescent branch, joined as many of the present in-patients as were well enough to participate in the pleasurable excitement of a Christmas-tree laden with gifts, and a magic lantern entertainment. Singing, conversation with visitors, who kindly took great interest in the children's welfare, and other innocent recreations, filled up the intervals till it was time to disperse the company, and put the little invalids quietly to bed. Each of the children was dismissed with the gift of a new sixpence and an orange, besides their hands full of toys, etc., from the tree.

#### VICTORIA HOSPITAL FOR CHILDREN, CHELSEA.

The festivities at this hospital have been somewhat on a limited scale at present. On January 10th, the Christmas-tree will be produced.

## ASSOCIATION INTELLIGENCE.

### COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Office of the Association, 36, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 10th day of January next, at Two o'clock in the afternoon.

FRANCIS FOWKE,  
*General Secretary.*

36, Great Queen Street, London, W.C., December 23rd, 1876.

### MIDLAND BRANCH.

THE third monthly meeting of this Branch will be held at the house of the President, Joseph White, Esq., Oxford Street, Nottingham, on Friday, January 19th, 1877.

Coffee at 7.30 P.M.

Paper on Practical Disinfection by Dr. Seaton, Medical Officer of Health for Nottingham, at 8 P.M.

L. W. MARSHALL, M.D., *Hon. Local Secretary.*  
Nottingham, December 17th, 1876.

### BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE next meeting will be held in the Examination Hall of the Queen's College, on Thursday, January 11th, 1877. The Chair will be taken at three o'clock P.M.

*Business.*—To receive Dr. Foster's resignation of the office of Honorary Secretary, and to elect his successor.

Mr. Furneaux Jordan will propose: That an operation-fee, in a certain proportion to that given to the operator, should be received by the practitioner at the same time, on the same principle as confinement-fees are paid. As a matter of delicacy, this suggestion should come from the consultant, either at the moment of receiving his own fee, or earlier, should the opportunity have presented itself.

Mr. Oakes will propose: That the Branch adopt steps for the promotion of "Medical Defence".

The following papers are promised:—Mr. Lloyd Owen: Cysts of the Orbit. Dr. Savage: Incision of the Cervix in Uterine Hæmorrhage.

BALTHAZAR FOSTER, M.D. } *Honorary Secretaries.*  
JAMES SAWYER, M.D. }

Birmingham, January 4th, 1877.

### BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

THE third ordinary meeting of the session was held in the Queen's College, Birmingham, on December 14th, 1876. Present:—Dr. G. F. BODINGTON, President, in the Chair, and thirty-two members and visitors.

*New Members.*—Messrs. Day (Walsall), Moxon, Sparrow, and Spofforth, were elected members of the Branch.

*Communications.*—1. Mr. JOLLY brought forward a patient on whom he had performed Wood's operation for the Radical Cure of Inguinal Hernia.

2. Mr. LAWSON TAIT showed an improved Trocar for Paracentesis Abdominis, and a device for preventing Septic Poisoning from Uterine Tents.

3. Dr. RICKARDS exhibited a man suffering from Right Hemiplegia and Aphasia.

4. Dr. HAYNES read a paper on the Sequelæ of Enteric Fever.
5. Mr. VOSE SOLOMON read a series of papers, entitled—1. The Treatment of Staphylococci by Ligaturing the Conjunctiva: a reclamation. 2. The Treatment of Orbital Tumours by the Actual Caustery.
3. Ophthalmic Oversights.

## REPORTS OF SOCIETIES.

### **PATHOLOGICAL SOCIETY OF LONDON.**

TUESDAY, JANUARY 2ND, 1877.

G. D. POLLOCK, F.R.C.S., President, in the Chair.

*Annual Report of Council.*—The SECRETARY read the annual report. The total number of members of the Society amounted to five hundred and eighty-two, of whom forty-four had joined during 1876, which was a large number, considering the great increase of the previous year. The Society had to regret the loss of Campbell, Campbell De Morgan, Gascoyen, Johnson, F. Sibson, and others. Five members had retired. It had been decided that the post of President should still be held for two years. The laws had been revised, and the alterations and additions were read out to the Society for its approval.

*Xanthelasma.*—Dr. PYE-SMITH read, for Dr. FRANK-SMITH, notes of a case of this disease. It commenced seven years ago, and had tended at one time towards partial spontaneous recovery. It occurred in a female, who was always ailing. She became jaundiced after a severe *post partum* hæmorrhage. The light marks on the eyelids were distinct on the jaundiced surface. There was some albumen in the urine at this time. The eruption appeared on the upper eyelids as white lines. She then had an attack of facial erysipelas. Then it showed itself on the hands in the form of nodules. Afterwards, the elbow became affected, the flexor side first, and then the outer side, where the disease assumed a tubercular form. The eruption next appeared on the feet in a nodular form. Lastly, it took the form of thin lines running parallel with the clavicles. A section of a tubercle showed a vascular fibro-cellular growth; the surface bled freely. The cuticle and the cutis vera were both extensively hypertrophied; there was also a quantity of yellow matter soluble in ether. In the centre of the tubercle was a sweat-gland, but its opening was not discoverable. The disease was not an affection of the sebaceous follicles. It was not accompanied by any general systemic disturbance. The tubercles were tender to pressure, and consequently it was painful to hold hard substances in the hands; the nodules in the patella rendered kneeling a painful position. There was also icteric prurigo. The patient died of extreme exhaustion, with hæmorrhage from the nose, stomach, and bowels, accompanied by purpura. On *post mortem* examination, the liver was found enlarged, weighing eighty-eight ounces, and of a reddish brown colour. It was tough, and, on section, showed numerous oval bodies, which were found, under the microscope, to consist of small cells, which were not stained by iodine; there were no liver-cells remaining. There were also crystals of tyrosine. The urine was of a port-wine colour. It was not clear that xanthelasma was connected with or the result of any form of liver-disease; it sprang from continued jaundice, however produced.—Mr. SPENCER WATSON said that the form of xanthelasma just described might be different from the form ordinarily seen on the eyelids. If so, no more was to be said. He had seen the ordinary forms without any jaundice. In one case, it was accompanied by dyspeptic symptoms. Might it not be some form of nervous disease? In one case, an affection of the sight was present.—Dr. HILTON FAGGE said the only form found without jaundice was that which was confined to the eyelids. When it was general, it was found along with jaundice. As to its possible nervous associations, the bilious headaches were not unimportant. There might be a factor of modified nutrition like that of pigmentation in neuralgia described by Anstie. Much pain had been complained of in his case, in parts exposed to pressure.—Mr. MACLEAN said a child had been under the care of Dr. Tilbury Fox in University College Hospital, where there was general xanthelasma without jaundice.—Dr. BARLOW said that that case had been exhibited as xanthelasmoidea. It was unlike xanthelasma. He had met with a similar case, where the child was especially susceptible to flea-bites.—Dr. PYE-SMITH said the case mentioned by Mr. Maclean was not one of xanthelasma.

*Mitral Stenosis.*—Dr. GOWERS showed a heart with mitral disease, and dilatation and hypertrophy of both ventricles, from a case in which, during life, there existed very high arterial tension. The mitral orifice was dilated to five inches and three-quarters. The posterior segment was very small, only a quarter of an inch in depth; the anterior flap was nearly double the normal size, one inch and three-

quarters deep by two inches and a-quarter wide. The circumference of this segment, six inches, was greater than that of the orifice. The flap may have at times prevented much regurgitation; an apex murmur heard during life was very variable. The enlargement of the flap was an illustration of compensatory enlargement under the increased mechanical strain to which it was exposed. The patient, aged 44, had had several attacks of rheumatic fever. The atrophy of the posterior segment was probably the result of old rheumatic endocarditis. The wall of the dilated left ventricle was softer than normal in spite of the existence of an excess of fibroid tissue within it. The muscular fibres were degenerated; the new tissue in some parts consisted of delicate wavy fibres, in others amorphous and granular. Thus a slight diffused fibroid change might coexist with diminished consistence. The high arterial tension which was marked during life, existed in many cases of mitral disease during the later stages, as Friedreich had remarked. The pulse was bounding and incompressible. (The kidneys were healthy.) The mechanism by which this arterial tension was produced was probably three-fold. Overdistension of the venous system usually entailed underfilling of the arterial system; this, however, implied that the volume of the blood remained the same as in health. But the total capacity of the vascular system in many of these cases must be enlarged, and when in addition to the dilatation of the heart, of the vessels of the lungs, and of the venous system of the body, general and visceral, there were found distension of the arteries, and a full incompressible pulse, it was difficult to resist the idea that the volume of the blood was increased; especially since, in these cases, the kidneys were found habitually to underact, and other water-eliminating organs did not, apparently, overact. Secondly, the dilatation of the right side of the heart, secondary to the mitral disease, might act as an independent source of obstruction, and affect through the venous the arterial system. There was in this case, as in others Dr. Gowers had seen in which the arterial tension was high, no anasarca; and only on the last day a trace of albumen was found in the urine, although there were extreme distension of the superficial veins and cyanosis. This seemed to indicate an ability on the part of the walls of the capillaries to resist the increased pressure to which they were exposed. But such resistance must facilitate the transfer of that increased pressure from the venous to the arterial system. Lastly, this increased tension was probably sometimes the result of a diminution in the amount of regurgitation, such as might be noticed in some cases of mitral constriction—the narrowing of the orifice diminishing the amount of regurgitation permitted by damaged valves. In other cases, enlargement of one segment of the valve, as in the heart shown, might lessen the incompetence. The effect would be, that an enlarged ventricle would throw a greater proportion of its blood into the aorta, and, if an obstruction (from dilatation) on the right side of the heart had been previously developed, the effect would be a considerable increase in the arterial fullness and tension. No sphygmographic tracings were taken.—Dr. MAHOMED asked if there was any disease of the kidney.—Dr. GOWERS said that there was only some simple congestion, and a little albumen on the last day of life.—Dr. MAHOMED said that in a like case in St. Mary's Hospital, where the pulse was hard during diastole, tracings were taken, and it was found that the tidal wave was not prolonged. On *post mortem* examination, large white kidneys were found. The high tension was due to kidney-disease. Both the veins and the arteries were full in these cases.

*Votes of Thanks.*—Dr. WILSON FOX proposed a vote of thanks to the retiring President, which was seconded by Sir JOSEPH FAYRER. The PRESIDENT replied. Dr. HILTON FAGGE proposed a vote of thanks to Dr. Murchison the outgoing Treasurer, and Dr. Greene, the outgoing Secretary, which was seconded by Dr. PAYNE. Dr. DUFFIN proposed a similar vote of thanks to the retiring Vice-Presidents and members of Council. This was seconded by Mr. SPENCER WATSON. The meeting then adjourned.

### **EPIDEMIOLOGICAL SOCIETY.**

WEDNESDAY, DECEMBER 13TH, 1876.

J. N. RADCLIFFE, M.R.C.S.Eng., President, in the Chair.

*Dengue.*—A paper was read by the ex-President, Dr. SMART, R.N., on dengue, or denguis according to the latest nomenclature authorised by the Royal College of Physicians. It is there defined as occurring in the West Indies, but it has occurred in great epidemics consecutively over the tropics in both hemispheres, and in subtropical regions, as in Senegal, Spain, and Egypt, and at other times as regional epidemics within those areas. The pandemic periods have been from 1780 to 1784, from 1824 to 1828, and, lastly, from 1870 to 1874. Between these, there has been an approximate lapse of forty years. In the first



two, they were equally severe in the both hemispheres; but the last was very extensive in the eastern, and less so in the western. The earliest notice taken of it was in 1780, by Dr. Rush of Philadelphia, who described it as bilious-remitting or break-bone fever; and it has been recently discovered that, about the same period, it was epidemic over the shores of the Indian Ocean, where it has since been seen in the two great periods of its diffusion; and, likewise, that it was present within the same period in Egypt and in Spain. The second pandemic commenced at Calcutta in 1824, and spread up the Ganges, and to other parts of India in that and following year. In 1826, it is reported to have shown itself in the United States at Savannah; but it was not reported there until after its outburst, in 1827, at St. Thomas, the emporium of the Antilles, from which it was carried south to the Spanish main, and appeared epidemically later in the Southern United States; it was there attributed to diffusion from the West Indies. According to Dr. Christie of Zanzibar, the older people there were of opinion that the epidemic of 1870 was similar to a disease that had prevailed on the East Coast of Africa about forty years earlier, which leaves it probable that that coast was infected in the second tropical pandemic from 1824 to 1828. Allusion was made to remarkable coincidences of time or place displayed in the appearances of this disease in relation to epidemics of yellow fever in the West Indies, in the States bordering the Gulf of Mexico, in Bermuda, in Brazil, and in Peru; also in Spain, which is the only European region visited by both of these diseases epidemically, although there is no traceable pathological affinity between them. In the intervals of the greater epidemics, many regional epidemics have been observed (of which the dates were given) in the States bordering the Gulf of Mexico, the Antilles, Bermuda, Brazil, and Peru. On the eastern shore of the Atlantic in Senegal, in the Canaries, and in Spain, there have been epidemics of it, generally having some relation of time, but not always immediately so, with epidemics of the Western Atlantic. In Egypt and in Arabia, there have been regional epidemics, which probably have held similar relations with those of the East Indies, where local epidemics of it have been repeatedly noticed; and, according to Dr. Charles of Calcutta, isolated cases are present every hot season, without giving rise to epidemic diffusions. Vauvray states the same thing concerning it at Port Said in Egypt, where, he states, it is seen at almost every season of the date-harvest, and, therefore, bears the name of "date-fever"; but, if it be so, and really dependent on it, it might be looked for at the same season wherever the date-palm is cultivated. The statement, however, is an interesting one, as this is not the only locality in which the disease has been attributed to vegetable emanations. In the east, as in the west, it is as commonly known in insular as it is in continental positions. It has been recorded under various names in Zanzibar, Bourbon, Java, Tahiti, and the Sandwich Islands; and, as Peru has been visited, it may be said to have encircled the globe in its tropical region. The last grand epidemic began in Zanzibar in the summer of 1870, and at Aden in that of 1871, having been conveyed to it from Zanzibar, after which it extended to Arabia and Egypt. From Aden, it was conveyed to India, possibly into various ports, but there is no positive evidence of any such introduction, except to Bombay by the steam-trooper *Dalhousie*, early in December 1871. But, according to Da Cunha, isolated cases of it had been present amidst the native population so early as August, although it did not become epidemic among the troops until after the arrival of the *Dalhousie* with an infected Lascar crew on board. Previous to that, it had been reported prevalent in September at Muttrah in the Persian Gulf, to which it may have been taken from Zanzibar direct, as it had been to Aden. The same vessel which had carried it to Bombay was also the medium of its introduction to Cannanore, far south of it, early in January. Further south, at Cochin, it was epidemic in April, and spread from it to several stations at the point of the Peninsula. From Bombay, it took an inward south-west direction through Poonah by railroad to Madras. There the first case was seen early in February 1872; but it was not severely epidemic till June, lasting until the middle of October. From Madras, it was sent among the troops to Trichinopoly; there it was epidemic from the middle of August to the middle of October. It spread generally through the presidency, and existed in it up to the end of 1873. From Bombay, it travelled along the railroads to Allahabad, Benares, Dinapore, and Calcutta; in which cases were reported in the Hastings Barracks late in November; whether any of these troops had proceeded from Bombay is not stated; but it did not become epidemic there until February. From Calcutta, it spread up the Hooghly to Barrackpore and into the Delta, being epidemic at Dacca in May. With equal rapidity, it passed by steamers from Calcutta to Rangoon, where it was epidemic from the middle of April to that of July; and was conveyed from it into all our military posts in Burmah. Returning to India, we may trace it stage by stage to Allahabad, to

Cawnpore, to Agra, to Delhi, to Umballah in the far north-west in the last quarter of the year; and from Benares to Faizabad, to Lucknow, into Oude, and to the foot of the Himalayas, in 32 deg. N. latitude in the preceding quarter of 1872. In the great cities in the central railroad between Bombay and Calcutta, viz., Allahabad, Benares, and Dinapore, it was epidemic at the same time as in Calcutta itself, in March, taking up six months or nine months in reaching the Himalayas at different points. In a more westward direction, it travelled from Bombay by railroad route to Ahmedabad and Deesa in June, and to Hyderabad and Kurachee in November in 1872; everywhere proving its route of progress to be in relation to that of the ordinary intercourse of the district, and in very many instances in connection with that of infected troops from station to station, whether by ship or by road. Army statistics form the most reliable authorities concerning its diffusions, as they are exact where everything else is diffuse and uncertain; for, in a disease so free from fatal results, the first isolated cases are forgotten before epidemic force and diffusion are attained, which is not without its shorter or longer periods of incubation. Although we may be able to fix the date of an outburst, yet we may be unable to fix its starting-point in the first case introduced from an infected region or locality. The epidemic commenced at Bombay subsequently to the arrival of the *Dalhousie* with the disease prevailing on board her; but it is scarcely probable to have avoided its introduction from Aden in some more insidious and less patent form at any time during the previous six months of its epidemic existence at Aden, with which Bombay holds so much intercourse both officially and commercially. The statement of Da Cunha, of its isolated appearances in Bombay so early as August, seems to be quite consistent with the facts on both sides, viz., of its existence in Aden epidemically in June, and its presence in Calcutta in the Jews' quarter and in the Hastings Barracks in November 1871, or even at an earlier date. Beyond India, it has been shown to have been taken to Rangoon, from which it spread through Burmah, and, as it is believed, from it to Siam and Cochin China. At Singapore, the emporium of the Straits and Archipelago (dates unknown), and it may have been taken thither either from India or direct from the Red Sea, if we regard its great western commerce; but, being once there, its diffusion would, in all probability, be both rapid and wide, accounting for its appearance in Batavia in November 1871, and at Amoy in the summer of 1872, to diffuse in South China, where it existed at Hong Kong so late as November 1874. In concluding his paper on the history of the diffusions of dengue, Dr. Smart regretted that time did not permit his entering on the pathological relations of a disease which is, in some of its features, *sui generis* and somewhat enigmatical, the close study of which under well directed observation might, he believed, elucidate many still obscure laws of the epidemic growth and diffusion of infectious diseases.

#### MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS OF IRELAND.

WEDNESDAY, DECEMBER 6TH, 1876.

THOMAS FITZPATRICK, M.D., in the Chair.

*Salicylic Acid in Acute Rheumatism.*—Dr. J. W. MOORE communicated the results which had been obtained in six cases of acute articular rheumatism treated by salicylic acid in the Meath Hospital. The acid was generally given in emulsion, with glycerine and water, in five-grain doses every hour until relief was obtained. On some occasions, the formula proposed by Dr. G. F. Duffey (see BRITISH MEDICAL JOURNAL, November 4th, 1876, page 587) was employed. Brief notes of ten cases treated by other methods were quoted for the sake of comparison. These ten patients spent an average period of 26.6 days under treatment in hospital. The six cases treated by the acid remained in hospital for an average period of 14.8 days; and even this period would have been much curtailed were it not that the patients were purposely kept under observation for many days after the symptoms had disappeared. Again, an examination of the clinical charts in the cases showed that under the ordinary methods of treatment the average number of "days of pyrexia", or days on which the axillary temperature reached or exceeded 99 deg. Fahr. was 19.3. Under salicylic acid, on the contrary, it was 5.5 days. Thus the symptom of feverishness was but one-fourth as persistent in the second series of cases as it had been in the first. If it were fair to base any definite opinion on so few observations, the author's experience of salicylic acid led him to these conclusions. 1. Salicylic acid appears to be a valuable and almost specific remedy in the treatment of acute rheumatism. 2. After the administration of a few moderate doses, of five grains each, given at hourly intervals, a marked amelioration of the symptoms usually occurs. Thus, the temperature and pulse begin to fall, the swelling and pain of the affected joints subside, and the patient sleeps. 3. The above doses—i.e., of



five grains each—are quite sufficient to produce an impression on the disease, while the patients make but little complaint either of the frequency of the dose or of the taste of the medicine. 4. When pushed far, it sometimes causes singing in the ears and diaphoresis. Under these circumstances, its administration should be temporarily suspended. 5. To prevent relapse, it should be given for some days, but at gradually lengthening intervals. 6. Finally, as to its probable action as a preventive of the dangerous cardiac lesions of acute rheumatism, the author could only endorse the words of Mr. Coates of Belfast in a recent paper: "I think it can hardly be denied that medicines which cut short the disease, as I believe there can be no doubt it does, must render the liability to these complications less."—The CHAIRMAN sketched the history of the treatment of acute rheumatism from the year 1830.—Dr. McVEAGH had recently treated a case by salicin in thirty-grain doses four times a-day. The patient made a quick and satisfactory recovery.—Dr. GRIMSHAW, who had had considerable experience in the use of salicylic acid in acute rheumatism, stated that his experience quite agreed with that of Dr. Moore. He believed that, up to the present, salicylic acid and salicin had proved to be the most useful agents in the treatment of acute rheumatism.—Dr. HENRY KENNEDY was sceptical as to the specific properties of the new remedy, and alluded to the toxic effects produced in some cases.—Dr. DUFFEY observed that these toxic effects had been traced to the use of an impure acid—one containing carbolic acid.—Dr. W. G. SMITH said the only connection between salicin and salicylic acid was an extremely remote one. The truth of the assertion made by some German writers, that salicin was converted into salicylic acid, was very doubtful.—Dr. J. W. MOORE briefly replied.

*Chorea treated by Strychnia and Ether-Spray.*—Dr. J. MAGEE FINNY reported four cases of chorea treated by these means. Case I was one of severe chorea in a boy aged 13, without any history of rheumatism or of cardiac disease. The treatment by sulphate of strychnia, administered as recommended by Hammond (*Diseases of the Nervous System*, sixth edition, page 720), and by ether-spray along the back, was commenced a fortnight after the illness began. Immediate benefit was followed by recovery in fifteen days. The total duration of illness was, therefore, four weeks and one day. Case II was one of severe primary bilateral chorea in a girl aged 11, without history of rheumatism or of cardiac disease. Improvement set in after four days' treatment; cure was complete in twenty-five days. The total duration of illness was six weeks and three days. Case III was one of severe primary bilateral chorea in a boy aged 9; no rheumatism or cardiac complication. Improvement took place, but he left hospital before he was cured. Case IV was one of chronic chorea, with relapses, in a young lady aged 15. The treatment led to considerable improvement in a week. The treatment of chorea ought to fulfil two indications: to shorten its duration, and to temper and moderate the more distressing symptoms; and, should it fulfil these, it deserves to be valued as useful. Reviewing the foregoing cases, the author would say of strychnia, that, in the two cases in which its administration was fully and regularly carried out, it fulfilled the first indication by shortening the disease, and in those cases it rapidly alleviated the symptoms and quieted the movements. As far, therefore, as these cases go, strychnia proved to be well suited and the proper treatment. To come to any definite general conclusion on such a subject, without much and extended observation, would be in the highest degree reprehensible, but it is also the more the duty of each clinical observer to record the results of his experience.—Dr. MACSWINEY referred to recent theories as to the pathology of chorea. Dr. Dickinson found in twenty-two fatal cases that there was universally present a dilated condition of the blood-vessels of the brain and spinal cord, and in many cases effusion of blood into the brain and spinal cord. The relationship between chorea and rheumatism was very remarkable. If the dilatation theory were correct, the efficacy of the cold of ether-spray and the peculiar therapeutic effect of strychnine could be understood. It had been recently stated that there were grounds for believing that hypermetropia occurred in all cases of chorea, and that the cure of the chorea could be effected by using glasses to correct the hypermetropia.—Dr. DUFFEY remarked that the theory Dr. Stevens had advanced in the New York Academy of Medicine, as to the causation of chorea—viz., that it arose from irritation dependent upon anomalous refraction of the eye; and in a very large proportion of cases to hypermetropia, had not, apparently, received much confirmation. Cases of chorea had been reported since the publication of Dr. Stevens's paper, in which the eyes were examined ophthalmoscopically, and no error of refraction was detected in them (*vide New York Medical Record*, August 12th and October 14th, 1876).—Dr. FINNY, in reply, said he had expressly excluded from his paper the consideration of the causes and the pathology of the disease.

## SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

DECEMBER 14TH, 1876.

*Infantile Convulsions.*—Dr. ILOTT read a case of infantile convulsions. The symptoms were vomiting with convulsive movements of the left side, which ceased half an hour before death; the cause was ascertained after death to be eating the leaves, etc., of the petty spurge, one of the Euphorbiaceae.

*Pyæmia in Hospitals.*—Mr. TIMOTHY HOLMES read a paper on pyæmia as seen in hospitals. He affirmed that, in a large hospital, well-managed, there was no greater prevalence of hospital disease than in other places; further, that a large London hospital was better suited for grave operations than small cottage hospitals or private houses. Erysipelas was very prone to break out in small hospitals, where the ventilation was more difficult and the service of nursing not so good. The antiseptic precautions were chiefly valuable as insuring drainage of wounds, personal attendance, perfect cleanliness, and quiet. In thirty-three recent cases of severe operations at St. George's, he had met with only one of pyæmia. The total mortality was five, viz., two from shock, two from secondary hæmorrhage, and one from pyæmia. In St. George's, from 1865 to 1873, the total cases of pyæmia were one hundred and forty-five; deaths one hundred and twenty-six. The percentage of pyæmia was much smaller since 1870, about which date Mr. Lister's experiments brought in antiseptic precautions. He believed that much of the erysipelas occurred before admission to hospital; and that there was little evidence of its spreading in hospital. In midwifery practice, the comparative rarity of puerperal pyæmia in private depended upon the same nurses, dressers, etc., attending to all the patients in lying-in hospitals; before the latter were declared dangerous, he would have the cases in them attended by different persons, and separated in nursing as in private cases. The indications were, to relieve the surfaces from the contact of putrescible matter and prevent contagion from other cases.—Dr. COLES asked whether infection was conveyed by clothes as well as by person.—Mr. STILWELL thought Mr. Holmes's paper proved the reverse of his conclusion; had seen no case of pyæmia in seventeen amputations in private practice.—Dr. ILOTT stated that there had been no pyæmia since 1869 in Bromley Cottage Hospital. He referred to the good result of antiseptic treatment in Mr. Callender's practice; the good effects being considered due to cleanliness.—Mr. ROPER alluded to the success of the lying-in wards in the Croydon Infirmary, which he attributed to care in keeping the nurses to these cases only, and to cleanliness.—Dr. STRONG thought the salubrity of the larger hospitals due to their being built for the purpose, while the others were adapted. He believed that the same precautions used non-antiseptically would have equally good results; and mentioned a case in a private house of operation for piles, which died of pyæmia.—Dr. FUSSELL thought that the accidents were more severe in the London hospitals; the personal attendance of the surgeon and house-surgeon, and care in preventing dressers from attending necropsies or dissecting, were important. At Brighton, they found it necessary to have separate wards for fever-patients; and erysipelas, if moved at once, generally stopped in the hospital. In the midwifery department, there was scarcely ever a death, as the cases were attended by one qualified nurse, who was not allowed to go into the general Infirmary.—Dr. JEAFFRESON mentioned three well-marked cases of pyæmia in his own private practice. While himself suffering from poisoned wound with abscesses, he had three surgical cases, in all of which erysipelas occurred.—Mr. HOLMES was certain that pyæmia could not be conveyed in clothes. To compare with the statistics quoted in his paper, the cottage hospitals had no records, no *post mortem* examinations, and would require a century of work. He did not think that there was much risk in admitting scattered cases of fever into general hospitals. In reply to Dr. Lanchester, he stated that he did not think erysipelas contagious without personal contact; he had looked for its spreading so long without finding it that he disbelieved it. He did not recommend separation wards.

*Apex-Murmurs.*—Dr. FREDERICK TAYLOR read a paper on the diagnostic value of apex-murmurs. Dr. Taylor commenced his paper by referring to the great differences which existed in cases of cardiac disease between the murmurs, which varied in pitch, loudness, duration, rhythm, conductivity in different directions, and kind of combination. He then enumerated the various kinds of murmurs audible at the apex of the heart, specifying—1. The ordinary systolic blowing murmur, audible behind; 2. A short localised murmur, inaudible behind; 3. Presystolic; 4. Pure diastolic; 5. A combination of presystolic and systolic; 6. A combination of systolic and true diastolic; 7. A combination of systolic reduplicated second sound and diastolic murmur following on the second element of the second sound. In thirty-five cases, the first murmur was observed thirteen times; the second, seven; the third, four; and



the other four much less frequently. The author then went on to treat of the significance of the localised systolic murmur in relation to mitral regurgitation. From a consideration of the manner in which murmurs were generated, it was clear that other sources of sound than mitral regurgitation might cause the above murmur, and regurgitation could only be fairly inferred when the murmur was audible behind. Clinically, the murmur was associated with acute endocarditis, chorea, Bright's disease, and with ordinary cardiac disease in early or advanced stages. Of such cardiac cases, many presented a narrowed condition of the mitral orifice; and, while it was not proved that in such cases regurgitation did not take place, an examination of necropsies showed an important difference between results in different cases; while both kinds of murmur were observed in cases where the orifice was more or less narrowed, only one (the systolic audible behind) was present when the orifice was decidedly widened. Dr. Taylor next discussed the nature of the reduplicated second sound, which had been ascribed to want of synchronous action of the two sides of the heart, and also to intermittence of the auricular contraction. He attached considerable importance to it as a sign of mitral contraction. The occurrence of pure diastolic apex murmurs was then referred to; and finally attention was called to the last murmur (No. 7), which he had come to look upon as almost as certainly diagnostic of mitral constriction as the presystolic. In this, the first sound is covered or almost immediately followed by a short whiffing murmur; next to this, is heard a distinct second sound; and, after a very short interval, there begins quite sharply and independently a blowing murmur of varying length, sometimes occupying the whole, sometimes only a portion of the remaining period of the heart's revolution; sometimes, therefore, terminating before, sometimes running up to, the first sound of the next beat. The murmur is distinctly localised, and mostly in other parts of the præcordia, one can hear a reduplicated second sound. In at least three cases, he had known this combination alternate with a presystolic, the patients suffering the usual symptoms of mitral contraction. In conclusion, the following murmurs seemed to him suggestive of mitral narrowing, placed in order of trustworthiness: presystolic, the compound murmur just mentioned, diastolic, simple systolic, and double second sound.

*Paralysis treated by Cupping.*—Mr. STILWELL read four cases of paralysis of the left side treated by cupping, with three cases successful.

*Foreign Body in Trachea.*—Dr. LANCHESTER read a case of foreign body in the trachea. The object was a tamarind stone, which was found after death below the vocal cords, having been previously lodged in the left bronchus. The patient died four months and a half after tracheotomy. Chronic pneumonia, with a state of interstitial fibroid overgrowth in the lungs, was found; specimens of which were exhibited under the microscope.

*Hæmophilia.*—Dr. STRONG read a case of fatal hæmophilia in a girl aged 13. Epistaxis and menorrhagia occurred from January to May. Death took place in July, apparently from embolism. A brother died of epistaxis.

#### SOUTH OF IRELAND BRANCH.

NOVEMBER 18TH, 1876.

H. MACNAUGHTON JONES, M.D., President, in the Chair.

*Cancer of the Liver.*—Dr. C. A. HARVEY exhibited a specimen of secondary cancer of the liver from a woman who had died in the South Infirmary. A month previously to her death, she had a breast removed antiseptically for scirrhus; during the healing process, however, she sank visibly, was found to be affected with ascites, and examination revealed an enlarged liver, with circumscribed nodular growths, and finally jaundice appeared. *Post mortem* examination showed the liver to be enormously enlarged, and studded with circumscribed nodules, of a pale yellowish colour, with depressed centres; these growths extended deep into the hepatic tissue, and, on section, presented a marbled appearance. Under the microscope, Dr. Atkins found them to consist of circular and oval "colonies" of small cells, bounded in some parts by a fine fibrous reticulum; there was no well-marked line of demarcation between the surrounding liver-tissue and the growths, the two blending in a meshwork, formed apparently by disordered hepatic cells; outside this, the vessels were plugged with masses of small cells.

*Removal of the Eye.*—The PRESIDENT exhibited five eyeballs, three of which he had lately enucleated for injury; the direct cause of operation being in all the occurrence of sympathetic irritation in the fellow eye. On section of these globes, which had been kept in chloral solution, the choroid was found generally atrophied; there was no appearance of any intravitreous hæmorrhage. Of the other two exhibited,

one was completely disorganised from suppurative ophthalmia; the other was the subject of an injury differing from those previously alluded to. Dr. Jones made some remarks in connection with those specimens on the necessity of enucleation whenever symptoms of sympathetic irritation arise in the fellow eye.

*Disease of the Ear and Brain.*—Dr. W. J. CUMMINS brought forward a series of cases illustrating the causal connection between supuration in the ear of old standing and meningeal and cerebral symptoms causing death. The first was that of a young gentleman aged 17, who had ear-affection, the result of scarlatina, since childhood, which finally led to meningitis, terminating fatally in four days. The second was that of a little girl, who had also a chronic discharge from the ear, which caused cerebral symptoms, less acute than in the former case, but which in the end terminated in convulsions and death. The third was a middle-aged gentleman, who had long-standing ear-disease, which, in like manner, ended fatally in cerebral disease; and the fourth case was that of a young lady, in whom the ear-mischief produced pyæmia and death. Dr. Cummins made some remarks on those cases, pointing out the great danger of this "latent spark of death," and the necessity of paying attention to a discharge from the ear.—The PRESIDENT strongly advocated the timely use of local means for the cure of the ear-discharge. He quoted from the works of Toynbee, Turnbull, and others; and showed two preparations illustrating the anatomy of the bony parts concerned.—Dr. ATKINS also made some comments; and a discussion ensued on the locality and the pathology of the formation of cerebral and cerebellar abscesses as the result of otorrhœa.

## CORRESPONDENCE.

### THE WORCESTER DISPENSARY AND ITS MEDICAL OFFICERS.

SIR,—After two years of office as one of the medical officers of the Worcester Dispensary, I and Mr. Buck, another of the six officers, have been dismissed (without any reason whatever being assigned) and two others (new comers into the city) have been substituted. We are both among the first three as to number of patients attended, and I suppose have each of us upwards of fifty patients now on our lists, many of them serious cases, to be transferred, without any consultation, to other hands. Will you kindly express (as briefly as you desire) your opinion on the adoption of such a course? I am preparing a circular to send to the Governors, but am anxious not to lose time in giving you early information, or I would have enclosed one; they give a few more particulars, and show some *past animus* with the committee.—I am, etc.

WILLIAM WOODWARD, M.D.

Worcester, December 28th, 1876.  
\* \* Both sides ought to be heard before we express a positive opinion. But, in the meantime, we may say that the dismissal of a medical officer from a public institution without assigning any reason is *prima facie* an act of great injustice.

### ENGLISH SURGEONS IN EGYPT.

SIR,—During a too brief sojourn this winter in Egypt, it has chanced to me to gather information which may prove interesting to some over-worked surgeon needing a holiday in this incomparable climate, or to a younger man who would like to combine practice, probably remunerative, with a trip up the Nile.

My friend Dr. Lowe, for some years now the colleague of Dr. Grant of Cairo, has just returned from an expedition sent by the Egyptian government to Darfour, and I trust he will give you some details of his experience during ten months' journeying through a country absolutely destitute of efficient medical help. My object now is simply to point out that any skilful surgeon, bent on a holiday, or on health-seeking, competent to treat eye-diseases and to cut for the stone, may find, in the course of a winter's journey from, say, Thebes or the first cataract to Dongola Old and New, abundant scope for surgical and medical practice, especially surgical, and may pretty surely pay his expenses, if these be not too lavish, and perhaps carry home a substantial solatium, to say nothing of the satisfaction of cutting away some of the miseries of the wretched fellaheen, who have nothing but thanks to give. The most beneficent missionary for Egypt in the towns, far away from Alexandria and Cairo, is a migratory surgeon, well equipped with tools and experience.

Let me give a brief abstract from his diary of some of Dr. Lowe's experience at one town. When the boat stopped at the river's bank,



it soon got noised abroad that a hakim (doctor) was aboard, and the halt and the blind literally flocked for help, the very poor coming empty-handed, those better off bringing sheep, meat, bread, fruit, vegetables, trinkets, whilst the well-to-do brought money, gold finger-rings, and nose-rings, all of the unalloyed metal, for these are the gold coin of the Soudan. One woman, a widow-farmer, owning many slaves—though it is commonly supposed that slavery is non-existent in Egypt—applied (just in time for amputation) with a fractured forearm, the bones protruding, and gangrene creeping beyond the elbow. Two men with stone were promptly lithotomised, and Dr. Lowe performed three operations for cataract. He found excellent assistants in two engineers of the expedition, one of whom chloroformed the patients, and the other, having lived in a doctorless district in India, where he conducted an extensive amateur practice, held the staff in the lithotomy operations, and otherwise rendered efficient assistance. Dr. Lowe was constrained to depart the day after these operations, leaving them to chance, though confident they would do well, owing to the surprising power of recovery from surgical injury manifested by the Arab constitution. Three months afterwards he learnt that, excepting one case of cataract with rotten cornea, all these patients made good recoveries.

As the expedition could only stay a few hours at each town, Dr. Lowe found it impossible to attend to half the cases, and he was obliged reluctantly to deny assistance to a large number of miserable sufferers. It was piteous to be forced to turn a deaf ear to their supplications. Some pursued Dr. Lowe in boats, others chased him on camels along the river-side for two days; and one poor old man was carried for three days on camel-back, in the vain hope of obtaining surgical help.

For the sake of patients sent to Egypt, who, when seized with illness, fare but badly under native nursing at eastern hotels, it may be serviceable to direct attention to Dr. Grant's sanatorium, situated in the healthiest and pleasantest part of Cairo. It is intended for the winter charge of invalids, and for the reception of travellers seized with illness. I brought down to Cairo, from the first cataract, an American gentleman, well-nigh moribund from sunstroke and dysentery, and, after some days' unsatisfactory experience of native nursing, and being obliged to leave for England, I had the satisfaction of transferring him to Dr. Grant's establishment, where excellent English nursing and domestic comforts soon improved my patient's plight.

Should any surgeon feel moved to undertake the enterprise I have suggested, Dr. Lowe or Dr. Grant would, I venture to state, give information regarding it.

Welbeck Street, January 7th, 1877.

GEORGE BIRD, M.D.

#### THE BEATTY MEMORIAL.

SIR,—May I request the favour of your kindly transferring to your columns the accompanying letter, and thus communicate to the members of the profession the grateful feelings of the family of the late Dr. Thomas Edward Beatty. I am, sir, your obedient servant,

JOLIFFE TUFNELL, Hon. Secretary, Beatty Memorial.

58, Lower Mount Street, Dublin, January 1st, 1877.

"10, Bayhill Terrace, Cheltenham, Dec. 28th, 1876.

"Dear Mr. Tufnell,—On behalf of the members of the family of the late Dr. Thomas Edward Beatty, I write to express our deepest thanks for the compliment paid to his memory by the erection of the tablet which has recently been unveiled in St. Patrick's Cathedral by the Right Honourable the Lord Mayor of Dublin; and we would ask you (as Honorary Secretary) to be pleased to communicate in whatever way you deem most appropriate, this our expression of gratitude to the members of his profession, and their kind remembrance of him.

"Believe me, dear Mr. Tufnell, faithfully yours,

"WILLIAM C. BEATTY, M.D.

"To Joliffe Tufnell, Esq., M.D., Honorary Secretary, Beatty Memorial Committee."

## PUBLIC HEALTH

AND

### POOR-LAW MEDICAL SERVICES.

#### THE SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FROM the Report for 1875-76, of the Society of Medical Officers of Health, we learn that eight ordinary and six Council meetings were held during the year, and that the days of meeting have been altered to Fridays to suit the country members. The Society has scarcely increased in numbers during the year, as only six new members have been elected, against losses by death or resignation; which

is to be regretted, as, if it were more numerous, the Society might exercise a more powerful influence than it has done on the progress of sanitary science. The Report contains a brief *résumé* of the President's address and of the various papers read during the session. As regards the presidential address on some Directions of Scientific Work by Medical Officers of Health, we have already referred to it, as well as to Dr. Dudfield's paper on the proposed Regulations for Slaughter-houses and Cowsheds, and therefore need do no more than mention them. The paper on Sanitary Administration in India, by Mr. Cornish, shows that a very great deal must be done in India before we can obtain even moderately reliable returns of births and deaths, and that, in practice, sanitary matters are at so low an ebb that we cannot expect the inhabitants to derive much benefit for some time to come from sanitary work. The chief feature of importance in Mr. Netten Radcliffe's paper on the Future Reappearance of the Plague in England is the opinion that, if it should ever be imported here, its spread could be as easily prevented as that of typhus. The paper by Dr. Wilson, since published separately, pointed out the enormous amount of work which will have to be done in rural districts to render houses fairly habitable and the water-supply moderately drinkable. Dr. Tidy's Story of Parish Dusting and Slopping, and Dr. Baylis's on the Best Method of Arresting Scarlet Fever, conclude the list for the year. A Subcommittee, consisting of Drs. Stevenson, Dudfield, and Tripe, was appointed to investigate the effects of food on the milk of cows; but they have not presented any report on this important subject. Dr. Tidy was also requested to continue the monthly water analyses for the Society, in the place of the late Dr. Letheby, but with some additions. A goodly list of papers is announced for next year, which, we trust, will be more successful than the last.

LEEDS.—There were 845 births and 487 deaths registered in Leeds during the month of September. Of these, 159 occurred amongst infants under one year, and 76 of children between one and five years. There were 31 deaths from fever, 49 from diarrhoea, 25 from scarlatina, 6 from measles, and 2 from whooping-cough, and 11 deaths not certified. The excessive death-rate of children under one year, which was 18.8 per 100 births, was caused chiefly by diarrhoea. Mr. Goldie complains of the difficulty of disposing of the so-called dry rubbish, a large proportion of which consists of decaying vegetable matters; and he suggests that all these should be separated and burnt. He believes that several cases of typhoid fever were induced by these deposits.

#### PUBLIC HEALTH MEDICAL APPOINTMENTS.

ROBERTS, J. Lloyd, M.B., appointed Medical Officer of Health to the Ratham Urban Sanitary Authority.

SUTTON, Frederick, M.R.C.S.Eng., elected Medical Officer of Health by the Rural Sanitary Authority, Gainsborough Union.

#### POOR-LAW MEDICAL APPOINTMENTS.

MONTGOMERY, Edwin C., L.R.C.S.I., appointed Medical Officer to the Cookham District of the Cookham Union, Berks; Medical Officer to the Workhouse, Cookham Union; and Public Vaccinator to the Borough of Maidenhead, after S. A. Plombe, M.D., deceased.

## MILITARY AND NAVAL MEDICAL SERVICES.

ACCORDING to a general order just issued from the Horse Guards, medical officers will not in future be called upon to contribute or subscribe to regimental messes and bands. This order is to take effect from January 1st, 1877, and any contributions or subscriptions which may have been paid in advance beyond December 31st, 1876, are to be refunded.

#### ARMY MEDICAL DEPARTMENT.

SIR,—In reading the preface to Guthrie's *Treatise on Injuries of the Chest*, written in 1848, it struck me that his remarks on the Army Medical Service are peculiarly appropriate to the condition of the Department at the present time, and if wisdom may be gained from experience of the past, the attention of the authorities might be drawn to them with advantage. As a recognised authority on military surgery, he says:—"The precepts I have endeavoured to enforce cannot, however, be carried into execution on any of the great occasions in which they are most wanted. They require greater attention, a greater degree of labour, on the part of the medical men than the number usually allowed can give. They generally have been totally unequal, from their scarcity, and oftentimes from their age, to the duties required of them. The sick and wounded, when in great numbers, have been neglected;



all receive some attention, few enough on those essential points necessary for their safety." Speaking of the Peninsular War, in which he served, he says:—"Nothing need be more inefficient than the Medical Department of the Army during the first two-thirds of the war. It was only when it had attained the summit of the Pyrenees that its medical department approached perfection . . . and when the army moved from Toulouse, the medical officers accompanying it were equal to the charge of the wounded of another battle, if one had taken place. The hospitals of Toulouse were left in the highest order. The French and English surgeons visited each other; every case of interest was thoroughly investigated, and the surgery of the British Army and of the Empire dates much of its improvement from the facts elicited or confirmed on these occasions. And why was this so? Simply because the necessary means of every kind were at hand, the medical men were numerous, young, and efficient." . . . This army was broken up, the medical department reduced, and after Waterloo "the medical officers were overwhelmed with work, were half dead, and could do no more. The greatest efforts were made to obviate this state of things. Flemish surgeons were hired, amateurs flocked from London, and some of the ablest and most efficient officers of the staff were brought from all quarters. They rectified these evils as far as they could, but nothing could recall the past nor the irretrievable mischief the insufficient medical care had occasioned during the first few days." . . . "The same result followed the four great battles lately fought in India, the same loss of life, the same succession of human sufferings, the same loss to science, and solely because the surgeons of the Royal and Indian armies were in a similar measure overwhelmed by the extent of their labours. It was utterly impossible for them to give due attention to even half the wounded depending on them for the alleviation of their miseries. It does not signify by whom an army is commanded, the same evils will always follow if the same system is pursued. Marlborough, Wellington, Moore, Hardinge, their armies have all suffered alike on this point, and their successors will also suffer, if the civil authorities of the country will not allow themselves to be guided in matters which they do not practically understand, and a knowledge of which they have not acquired in a manner to render it thoroughly efficient."

How the Crimean War, six years afterwards, verified his prognostications! And what else can we expect in a future (almost impending) war, in the present state of the Medical Department, unsettled, dissatisfied, diminished by one-fourth of its number during the last eight years, and unable to fill up the vacancies even of this reduced establishment? No amount of "Red Cross" assistance can make up for the want of numbers, proper preparation, and efficient organisation. How to obtain all this, Mr. Hardy has been repeatedly told, but, so far, without effect. However, as he must reconsider the subject, I hope it is not too late to return to the regimental system (with or without regimental hospitals) and liberal treatment with regard to exchanges, leave of absence, and retirement. Then, I have no doubt, we would have a contented medical service, equal to any emergency—numerous, young, and efficient.—Yours, etc.

A. M. O.

November 30th, 1876.

### MILITIA SURGEONS.

SIR,—The "Non-Militia Surgeon" will be sorry to hear that no fresh appointments are to be made to the Militia Medical Service, so that his benevolent suggestion cannot be adopted.

I think he has as little reason for the first part of his letter as for the last.—I am, sir, yours obediently,  
Canterbury, Jan. 2nd, 1877. J. W. CURTIS, East Kent Militia.

## MEDICAL NEWS.

**APOTHECARIES' HALL.**—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 28th, 1876.

Bentham, Alfred, Trafalgar Square, Twickenham  
Jenkins, Percy Septimus, Osnaburgh Street, Regent's Park  
Jones, Arthur Henry, Hanover Street, Peckham  
Lang, Henry Charles, 41, Berners Street, W.  
Mason, Alfred, Thornhill, Dewsbury  
Merton, Richard John, Aylsham, Norfolk  
Scriven, John Swaine, Goldney Road, W.

The following gentlemen also on the same day passed their primary professional examination.

Aldrich, Arthur W., Westminster Hospital  
Lloyd, George J., Queen's Hospital, Birmingham  
Warliker, Damodar P., University College Hospital

### MEDICAL VACANCIES.

THE following vacancies are announced:—  
**ADDENBROOKE'S HOSPITAL,** Cambridge.—House-Physician and Dispenser. Salary of the House-Physician, £65 per annum, with board and lodging. The salary of the Dispenser will be £100 per annum, with dinner. Applications to be made on or before the 17th instant.  
**BOSMERE and CLAYDON UNION.**—Medical Officer for the Claydon District.  
**CANCER HOSPITAL,** Brompton.—Resident House-Surgeon and Registrar. Salary, 100 guineas per annum, with board and residence. Applications to be made on or before January 13th, 1877.  
**CHELSEA UNION.**—Assistant Medical Officer and Dispenser. Salary, £100 per annum, with furnished apartment, board, etc. Applications to be made on or before the 16th instant.  
**DENTAL HOSPITAL OF LONDON.**—Two Assistant-Surgeons. Applications to be made on or before the 8th instant.  
**DEPWADE UNION.**—Medical Officer for the Fourth District.  
**DULWICH and LOWER NORWOD DISPENSARY.**—Resident Medical Officer. Salary, £100 per annum and rooms.  
**EAST RETFORD UNION.**—Medical Officer for the Leverton District.  
**FISHERTON HOUSE ASYLUM.**—Assistant Medical Officer. Salary, £100 per annum, with board and lodging.  
**GLANFORD BRIGG UNION.**—Medical Officer and Public Vaccinator. Salary, £28 per annum, and fees. Applications on or before January 10th, 1877.  
**GREAT NORTHERN HOSPITAL,** Caledonian Road.—House-Surgeon. Salary, 60 guineas per annum, with board and lodging. Applications on or before the 22nd instant.  
**HENLEY UNION.**—Medical Officer for the Caversham District. Salary, £75 per annum, and fees. Applications to be made on or before January 9th.  
**HOSPITAL FOR WOMEN and CHILDREN and LYING-IN INSTITUTION,** Brighton.—Honorary Surgeon. Applications to be made on or before the 17th instant.  
**KINGSCLERE UNION.**—Medical Officer for the Workhouse and Kingsclere District.  
**LINCOLN UNION.**—Medical Officer for the Eighth District.  
**MANCHESTER PROVIDENT DISPENSARIES' ASSOCIATION.**—Resident Medical Officer. Salary, £120 per annum, and private practice allowed.  
**MIDDLESEX THIRD COUNTY LUNATIC ASYLUM.**—Senior Assistant Medical Officer; Second Assistant Medical Officer; Junior Assistant Medical Officer. Salary of the Senior Assistant to commence at £200, that of the Second Assistant at £150, and that of the Junior Assistant at £120 per annum, and furnished apartments, board, washing, and attendance to each. Applications on or before January 16th.  
**NATIONAL DENTAL HOSPITAL.**—Assistant Dental Surgeon. Applications to the Treasurer, 149, Great Portland Street.  
**NATIONAL HOSPITAL FOR THE PARALYSED and EPILEPTIC.**—Resident Medical Officer and Registrar. Salary, £100 per annum, with board and lodging.  
**NORTH-EASTERN HOSPITAL FOR CHILDREN,** Hackney.—Assistant-Physician.  
**ROTHBURY UNION.**—Medical Officer for the Rothbury Eastern District.  
**TUNBRIDGE WELLS DISPENSARY and INFIRMARY.**—Resident House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 17th instant.  
**WIMBORNE and CRANBORNE UNION.**—Medical Officer.

### MEDICAL APPOINTMENTS.

*Names marked with an asterisk are those of Members of the Association.*  
\***BATTERBURY, R. L., M.B.,** elected Medical Officer to the Haverstock Hill and Malden Road Provident Dispensary, *vice* M. L. Heelas, M.R.C.S., deceased.  
**BROWN, John, M.R.C.S.,** appointed House-Surgeon to the Western Ophthalmic Hospital, *vice* W. W. Edwards, M.B., resigned.  
\***COOPER, Frank W., L.R.C.S. Ed.,** of Leytonstone, appointed a Divisional Surgeon to the N Division of the Metropolitan Police.  
**HEELAS, James, M.B.,** elected Medical Officer to the Haverstock Hill and Malden Road Provident Dispensary, *vice* M. L. Heelas, M.R.C.S., deceased.  
\***MEDWIN, A. George, M.D.,** late Assistant Surgeon, appointed Surgeon to the Dental Hospital of London, *vice* Thomas F. K. Underwood, M.R.C.S. Eng., resigned.  
**TAYLOR, H. E., M.R.C.S. Eng.,** appointed an Assistant Resident Medical Officer to the Leeds Public Dispensary.

### BIRTHS, MARRIAGES, AND DEATHS.

*The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.*

#### BIRTH.

**WHITMARSH.**—On January 3rd, at 1, Clapton Square, Lower Clapton, the wife of J. LL Whitmarsh, L.R.C.P. Ed., of a son.

#### MARRIAGE.

**PARSONS—DOLMAN.**—On January 2nd, at the Parish Church, Dawlish, by the Rev. O. Manley, Vicar, assisted by the Rev. E. Fowleraker, Master of the Cathedral School, Exeter, Susan Charlotte, eldest daughter of Frederick Dolman, Esq., The Bartons, to Arthur Daniell Parsons, Esq., L.R.C.P., The Lawn, Dawlish.

#### DEATH.

**GEORGE.**—On December 30th, 1876, Alice, wife of Henry George, M.R.C.S., at North Thoresby, Louth, Lincolnshire, aged 47. No cards.

**TESTIMONIAL TO MR. ARNOLD ROGERS.**—A testimonial (in the form of a large handsome embossed silver bowl, mounted on an ebony stand) has been lately presented to Mr. Thomas Arnold Rogers, by the past and present students of the Dental Hospital of London, in appreciation of his untiring energy on their behalf during the period of his deanship at the London School of Dental Surgery.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 10 A.M.—St. Mark's, 10 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 P.M.
TUESDAY.....	Guy's, 10 A.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 10 A.M.—St. Mary's, 10 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 11 A.M.—Royal Westminster Ophthalmic, 1 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.
FRIDAY.....	Royal Westminster Ophthalmic, 1 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1 P.M.
SATURDAY....	St. Bartholomew's, 1 P.M.—King's College, 1 P.M.—Charing Cross, 2 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1 P.M.—St. Thomas's, 9 A.M. and 1 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. E. L. Hussey, "Case of Large Pendulous Tumour from the Cheek removed by Operation"; Mr. Gaskoin, "Case of Sclerema Adultorum"; Dr. John Harley, "Case of Sclerema Adultorum".
EDNESDAY.—Epidemiological Society, 8.30 P.M. Dr. Squire, "On the recent Epidemic of Measles in Fiji".
FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Brodhurst, "Cases of Subcutaneous Section of the Neck of the Thigh-bone"; Dr. Hermann Weber, "Cases illustrating the Treatment of Rheumatic Fever and other Febrile Diseases by Salicylic Acid and its Congeners"; Dr. Cavafy, "Case of Acute Rheumatism treated by Salicylate of Soda, Intercurrent Scarlatina, and peculiar Skin-eruption".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## COTTAGE HOSPITALS.

SIR,—Will you favour me with your opinion on the following case? A. held the position of honorary surgeon to a cottage hospital, and performed the major operations for a number of years. B. was house-surgeon for almost five years, and, on his resignation of the office, was appointed by the committee honorary surgeon, their opinion being that it would be an advantage to have the services of two honorary surgeons connected with the institution. A. still claims the treatment of all surgical cases admitted, assigning only to B. the duty of assisting A. at operations, and of operating in A.'s absence. B. claims the treatment of the surgical cases admitted every alternate week or month, and to perform the operations necessary on all patients admitted on alternate weeks or months. What is hospital custom?—Yours truly,

RECTUS.

\*♦ The duties of the medical officers are determined by the committee. Each surgical or medical officer, with beds, is usually entrusted with the whole charge of the patients admitted under his care.

ROYAL NAVY.—The late Sir J. B. Gifford, Director-General, was admitted a member of the Royal College of Surgeons of England in 1826.

## ABUSE OF TEA.

SIR,—Whilst your correspondent Mr. W. C. is studying the abuse of tea, I should recommend him to try and report on the "Jeddo root," which is now used, as in China, with the decoction as usually taken. It improves the quality of the tea, and destroys the ill effects produced from drinking this invigorating domestic beverage. He can obtain by post, of Messrs. Laurie, Watts, and Co., 7, Lovell's Court, Paternoster Row, for 2s. 6d., a supply to answer his purpose. I am, etc.,  
January 1877.

CAPPA.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the *BRITISH MEDICAL JOURNAL*, should arrive at the Office not later than 10 A.M. on Thursday.

## PUBLIC VACCINATORS.

SIR,—For eight years I have been a Public Vaccinator, and have frequently applied to for lymph by medical men, near and far. These applications were a positive nuisance to me—occupying valuable time, imposing expense in the way of stamps on transit, or in the purchase of tubes and nibs; and not only so, but they involved me in responsibilities connected with the vaccinating arena of other practitioners that were at times annoying. The majority who apply to a public vaccinator for lymph can never hope to professionally reciprocate; and I consider it should be at once conceded that, for his services, outlay, and the responsibilities he cannot evade shouldering, a fee of 2s. 6d. at the least should be strictly professional, and for this a supply of two or three tubes or a dozen nibs would be fairly remunerative to all parties.—I am, etc.,  
December 1876.

E. HOLLAND, M.D., M.R.C.P., etc.

SIR,—In your *JOURNAL* of this week, a Public Vaccinator says that he is frequently requested to supply lymph to medical men, and asks if it would be considered unprofessional to charge a fee of 2s. 6d. for three tubes in such cases. I beg to say that I conceive it would be very unprofessional; for I think we should do all we can to assist each other without any remuneration. I have myself been frequently requested to supply my medical brethren with vaccine lymph, and I may state that I have always done so with pleasure whenever I have been able.—I am, sir, yours truly,  
ANOTHER PUBLIC VACCINATOR.

December 23rd, 1876.

SIR,—Seeing in to-day's *MEDICAL JOURNAL* the memorandum on the Supply of Lymph for Revaccination, I write to say I shall be glad to supply, as far as I am able, any member of the Association or other registered practitioner with lymph if he will be good enough to send a stamped envelope, enclosing notes to be charged.—I am, sir, yours faithfully,  
A PUBLIC VACCINATOR.

Upper Park House, Lindley, near Huddersfield, Dec. 23rd, 1876.

A MEMBER (Yeovil).—Cases of insanity associated with masturbation are treated in all lunatic asylums, and we know of none in which they are "especially treated". Our correspondent, therefore, has only to select one which is respectably conducted, and of which the terms accord with his patient's position and means.

## INCUBATION OF SMALL-POX AND VACCINATION.

SIR,—In confirmation of Mr. Haynes's memorandum in last week's *JOURNAL*, I beg to forward the following. In the evening of November 7th, I was called to see a child six years old, vaccinated in infancy, suffering from very slight small-pox. There were only a few pustules over the body. I at once revaccinated the father, mother, and three other children, aged from eight to four years; but partly from want of vaccine matter and partly because I hardly thought it absolutely necessary, I did not vaccinate the youngest child, aged two years. The vaccinations all took in due course; but on the morning of the 20th I was again called, to find all the children (except the one who had it first) in bed with slight small-pox, the baby being the worst. All of them had slight bronchitis afterwards, but none of them were ever seriously ill. It seemed evident that the small-pox poison had lain dormant for the twelve days and a half which elapsed between the 7th and 20th; but that the revaccination, while it did not prevent the small-pox poison from acting, evidently protected the three eldest children to a certain extent, as the youngest child, which had been vaccinated within two years, and was probably better protected by that primary vaccination than those older, in whom a larger time had elapsed, was worse (not having been, as I have said, revaccinated) than even her eldest sister, who was. Such an instance may also point to the necessity, if not actually for the protection of life, yet for the suppression of the disease, of vaccinating every one, irrespective of age, in a house which small-pox has invaded. I may mention, that the father appeared to have brought the disease from Brixton, whither his business took him daily. Neither of the parents was attacked.

In conclusion, I would only say that, had the Prussian laws, making revaccination compulsory, been copied here five years ago, we would not now have to look forward to a series of epidemics, any one of which may, as in 1871, carry off its eight thousand victims in London alone, besides maiming and ultimately destroying many more.—I am, yours faithfully,  
Battersea Park Road, December 1876.

W. MUNRO.

E. T.—Maraschino (marry Skey-no!) is a parody on the epigram of Luttrell on the illness of the Regent, afterwards George IV, viz.:

"The Regent, sir, is taken ill,  
And all depends on Halford's skill.  
'Pray what,' inquired the sage physician,  
Has brought him to this sad condition?  
When Bloomfield ventured to pronounce,  
'A little too much cherry bounce'.  
The Regent, hearing what was said,  
Raised from the couch his aching head,  
And cried, 'No, Halford, 'tis not so!  
Cure us, O Doctor—Curaçao'."

## VOLUNTEER SURGEONS.

SIR,—Will you kindly raise the question in the *JOURNAL* as to the position of a volunteer regimental surgeon? I have served as medical officer since shortly after the commencement of the volunteer movement, first as assistant surgeon, and afterwards appointed surgeon to the regiment in 1861. Since 1861, I have worn the uniform of a major, fully believing that I ranked as such. I have, however, informed by the adjutant that a volunteer medical officer can never reach higher rank than that of a captain. I shall be glad to know from you, or from some of the volunteer surgeons who are members of our Association, what rank should be taken as surgeon of a volunteer corps.—I am, sir, faithfully yours,  
ROBERT MANNING, M.D., Surgeon, 1st Volunteer Battalion, Manchester.

Manchester, Dec. 23rd, 1876.

Rifle Volunteers.

## CLINICAL THERMOMETERS.

SIR,—I see a letter in our *JOURNAL* complaining of the difficulty of using thermometers. I think there is an error there, and that the difficulty is not in the thermometers, but in the way of using them. My eyes are so weak that I cannot read, but I find it frequently very difficult to read the marking of the mercury. Could not the column be made thicker, without impairing the usefulness of the thermometers?—Yours faithfully,  
December 30th, 1876.

A. S. C.



**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

#### XANTHIUM SPINOSUM.

**MESSRS. WYLEYS and Co.,** Coventry, and Upper Thames Street, London, write to us:—Having recently received a small consignment of xanthium spinosum from Germany, and believing it is one of the first parcels imported, we have taken the liberty of forwarding a specimen for your inspection. We also send herewith a report, which has been written at our request by our pharmacist, Mr. F. G. Barrett, on the general appearance, etc., of the drug, as possibly some short account may prove of interest to your readers.

"The specimen under examination appears to consist of the stem and branches of a shrub, apparently from two to three feet high, bearing spines, leaves, flowers, and fruits. The stem is hard and woody, about four or five lines thick at the base, round, with longitudinal ridges, externally of a yellowish brown colour, branches alternate, fifteen to the cycle, and thrown off near the base; the centre is hollow, or consists of discoid pith, surrounded by white horny wood. The spines are apparently stipular and trilete, of a bright straw colour; two generally occurring at the base of each leaf. The leaves are tripartite; the two lower lobes being toothed, of a dull olive colour on the upper surface, with conspicuous midrib and lateral veins, being of a light green; of a light grey colour on the lower surface. The colour being due to the hairs or down with which the under surface is covered. The flowers are monœcious. The female flowers are without corolla, and are enclosed in a scaly involucre, which gives them the appearance of a capsular fruit, something resembling a minute thorn-apple, and are covered with barbed bristles. The active properties of the plant would doubtless reside in the leaves, tops, and flowers; the hard woody stem being entirely without taste. The taste of the leaves when chewed is peculiar, somewhat resembling, at first, the taste of a raw mushroom, but afterwards becoming slightly acrid and bitter. The young tops and flowers appear to possess the bitter principle to a greater extent than the leaves.

"From the published accounts of this new remedy which have appeared in the pharmaceutical press, it appears that it is lauded as a remedy for hydrophobia, and it is said to possess sudorific, sialagogue, and diuretic properties. Dr. Grzymala, of Krivoe Ozoroe, Podolia, has, it is said, used it in over one hundred cases of bites from hydrophobic animals, and in only one case unsuccessfully. The general dose is nine grains of the powdered leaves taken three times a day, and continued during three weeks.

"The plant belongs to the natural order compositæ. It grows commonly enough in Germany, France, and Italy; specimens have rarely been collected in some parts of Hertfordshire and Worcestershire. Its appearance in England is due to adventitious circumstances. Recent experiments made by M. Guichard on an alcoholic extract of the leaves point to the presence of an alkaloid possessing the active properties of the plant. He also found a watery extract to be valueless. M. Yvon, however, considers that its active properties are due to a resin occurring in the proportion of about 2 per cent. The powdered leaves, etc., are recommended; and obviously the most suitable menstruum for converting it into a liquid form for internal administration would be strong alcohol."

**P. B. S.**—There is a portrait of Dr. Thomas Fuller in his *Pharmacopœia Domestica*. He died in 1734, and was considered a great wit. He wrote the following lines on a left-handed writing-master.

"Though Nature thee of thy right hand bereft,  
Right well thou writest with the hand that's left."

#### PAYMENT OF LUNACY CERTIFICATES GRANTED IN THE CASE OF PAUPERS IN SCOTLAND.

**SIR.**—For the information of "Parish Medical Officer" and others in the same position, I beg to state that, as far back as 1868, I put the question to the Board of Supervision, whether my salary as parish medical officer included work done under the Lunacy Act such as the granting of certificates in lunacy in the case of paupers, or whether I was entitled to separate remuneration for such. I submit the reply I received.

"Board of Supervision, Edinburgh, December 14th, 1868.

"Sir,—I have to acknowledge the receipt of your letter dated the 12th instant, and I have to state, in reply, that the Board do not consider the granting of certificates required by the Lunacy Act to be part of the services which the medical officer is required to perform under the Poor-law in consideration of his salary and without extra charge.

"It follows, therefore, that for visits and certificates not required by the Poor-law Act and this Board's rules, the medical officer is entitled to receive, and the parish of settlement is bound to pay, separate remuneration.

"I am, sir, your obedient servant signed, JOHN SKELTON, Secretary."

There is reason to believe that a large number of parish medical officers in Scotland are not aware of this opinion of the Board of Supervision, and by your giving it a place in the JOURNAL you will confer a favour.—Yours, etc., Leuchars, Fife, N.B., January 1st, 1877.

JOHN CONSTABLE, M.D.

**THE SHEFFIELD INFIRMARY.**—In the paragraph headed "The Sheffield Infirmary", which appeared last week (p. 861), Mr. Barber should have been referred to as late Assistant House-Surgeon to the Infirmary, not to the Dispensary, and as at present Demonstrator of Anatomy in the Medical School.

#### INQUESTS.

**SIR.**—I should feel greatly obliged if you would give me your advice upon the following subject. I have been in practice here since June last, during which time two cases of death by drowning in the sea have occurred. On each occasion, I was summoned, and did my best to restore animation, persevering for a considerable time, but without avail. A coroner's inquest was held, but I received no intimation of the time or place of the inquiry.

Last week, again, I was summoned to inspect the body of a man who presumably had committed suicide. I gave my opinion, but at the coroner's inquest I was not called upon to give evidence. I am informed that, with a view to save fees, a doctor is not called upon inquests at this place. Can you advise me as to the legality of this course?—I am, sir, your obedient servant, F. A. A. S. Walton-on-Naze, Essex, December 21st, 1876.

[This is a matter primarily in the discretion of the coroner. But we agree with our correspondent that the action of the coroner to whom he alludes is very reprehensible. A letter of complaint to the Home Secretary would be the best plan, and we recommend resort to that remedy.]

**CORRESPONDENTS** are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

#### LANDLORD AND TENANT.

**SIR.**—A house and premises is pronounced by the medical officer of health to be in a state likely to be injurious to health. The landlord promises to put place in order, but fails to do so. Is the tenant at liberty to determine his tenancy if he pays rent up to day he leaves, or must he give usual notice? It seems hard a tenant should be compelled to pay rent for such a house, or to give usual notice. Has any case of a like nature been tried? or where, in the Public Health Acts, is there any information on the point, legal or otherwise?—Yours truly, C. J. D.

December 25th, 1876.

[It is quite impossible for us to give a reliable answer to a question put in this bald manner. How does the tenant hold? by lease or agreement? term? covenants? In all probability, it will turn out that the tenant is not able to determine his tenancy in the rough and ready way suggested by our correspondent.]

**THE INDEX** to the second volume for 1876 will be published with next week's JOURNAL.

**HOME FOR DIPLOMATISTS.**—A letter for "M.B.," who recently asked a question on this subject, has been received at the JOURNAL Office. Will "M.B." kindly send his address, which cannot be found?

**LARGE CALCULUS.**—A Spanish practitioner, Dr. Moresco, is reported to have removed from a patient aged 48 an urinary calculus weighing 240 grammes (nearly nine ounces); the operation being followed by recovery.

**ERRATUM.**—In Mr. Lennox Browne's paper in the JOURNAL of December 30th, 1876, at page 832, thirteenth line from bottom of second column, for "constant floodings" read "constant flushings".

**WE** are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Sheffield Daily Telegraph; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Glasgow Herald; The Metropolitan; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post;

\* \* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

**COMMUNICATIONS, LETTERS, etc.,** have been received from:—

Dr. W. O. Priestley, London; Dr. J. G. S. Coghill, Ventnor; Dr. H. Charlton Bastian, London; Mr. W. A. Shoolbred, Wolverhampton; Mr. Lloyd Owen, Birmingham; Dr. Drapes, Enniscorthy; Dr. Ringrose Atkins, Cork; Mr. J. Dobbie, Glasgow; Mr. Sampson Gamgee, Birmingham; Dr. Woodward, Worcester; Dr. Fairlie Clarke, Southborough; Dr. J. Milner Fothergill, London; Dr. J. Matthews Duncan, Edinburgh; Mr. Lennox Browne, London; Dr. J. B. Bradbury, Cambridge; Dr. Joseph Coats, Glasgow; Dr. S. Wilks, London; Mr. Joseph Bell, Edinburgh; Our Paris Correspondent; Dr. J. W. Moore, Dublin; The Registrar-General of England; Dr. Finlayson, Glasgow; Mr. G. Eastes, London; Dr. Fredk. J. Brown, Rochester; The Registrar-General of Ireland; Dr. Tripe, Hackney; The Secretary of Apothecaries' Hall; Dr. Edis, London; Dr. J. W. Langmore, London; Dr. J. Crichton Browne, London; An Associate; The Secretary of the Pathological Society; Dr. Mackey, London; Dr. George Johnson, London; Dr. John Constable, Leuchars; Mr. Joliffe Tufnell, Dublin; M.R.C.S. Eng.; Mr. Gardner, Box; Dr. Alfred S. Taylor, London; Dr. Sawyer, Birmingham; M.D.; Mr. E. Garraway, Faversham; Dr. Drysdale, London; Mr. J. G. Douglas, Bournemouth; Mr. Henry Greenway, Plymouth; Mr. Casson, London; Dr. G. de Gorrequer Griffith, London; Dr. Grimshaw, Dublin; Dr. Grant, Cairo; Dr. Lauder Brunton, London; Dr. Shewen, London; Dr. Eyton Jones, Wrexham; Mr. Richard Davy, London; Dr. Clement Godson, London; Mr. Thurston, Ashford; Dr. Munro, Battersea; W. W. B.; Mr. Holmes, London; The Secretary of the Clinical Society; Dr. Thinn, London; Our Edinburgh Correspondent; A. M. O.; Mr. Edmund Owen, London; Mr. John Ewens, Bristol; Mr. William MacCormac, London; A Registered Surgeon; Mr. S. C. Hirst, Bradford; Mr. John Brown, London; Dr. Cayley, London; Mr. J. W. Curtis, Canterbury; Dr. Ashburton Thompson, London; Dr. Smart, Haslar; Our Dublin Correspondent; Dr. Charles Alkekotte, Wiesbaden; Our Paris Correspondent; Dr. W. Squire, London; Dr. Byrom Bramwell, Newcastle-upon-Tyne; Dr. C. H. Evans, London; Dr. Ord, London; Dr. Joseph Rogers, London; M.B.; The Secretary of the Royal Medical and Chirurgical Society; Mr. T. M. Stone, London; A Member of the Charity Organisation Society; Dr. Finlayson, Glasgow; The Secretary of the Epidemiological Society; Dr. T. S. Dowse, Highbury; Dr. R. P. Cotton, London; Dr. Medwin, Blackheath; A Member; M. B. P.; Mr. Mason, London; Dr. Priestley, London; Mr. Alfred, London; Rectus; Dr. Buzzard, London; Mr. E. C. Montgomery, Maidenhead; Mr. T. G. P. Hutton, Carlton; Mr. R. L. Batterbury, London; Dr. Foster, Birmingham; Mr. J. H. Hemming, London; Dr. Meymott Tidy, London; Dr. Peacock, London; Dr. Hughlings Jackson, London; Mr. Lammiman, Tunbridge Wells; etc.



## TWO HARVEIAN LECTURES

ON

## BRIGHT'S DISEASE AND ITS TREATMENT:

CONSIDERED MAINLY IN RELATION WITH ARTERIAL  
TENSION FROM BLOOD-CONTAMINATION.*Delivered before the Harveian Society of London, November 1875.*

BY

THE LATE FRANCIS SIBSON, M.D., D.C.L., F.R.C.P., F.R.S.,

Consulting Physician to St. Mary's Hospital; Vice-President  
of the British Medical Association; etc.LECTURE I.—*Concluded.*

*Arterial Tension.*—It may be accepted as a clinical fact, that there is tension or continuous fullness of the arteries in every case of Bright's disease, whatever the form and stage of the affection, unless, owing to this very tension, the aortic valve have yielded, so as to allow the blood, when it cannot advance forwards, to make its way backwards, and so to relieve the distension of the arteries; or the mitral valve has given way, owing to the increasing size of the left ventricle, with the effect of obstructing the stream of blood from the lungs and lessening the supply to the system, and so transferring the tension from the arteries of the body to the arteries of the lungs; or when a like effect is induced by bronchitis.

When the arteries are tense, and the amount of blood they contain has not been lessened by the weeping away of albumen, the loss of red corpuscles, and wasting diseases, the whole arterial tree is lengthened and every arterial tube is widened. The root of the aorta consequently descends deeper into the chest, displacing the heart somewhat downwards, and the ascending aorta leans to the right; the arteries become slightly tortuous, but do not present a visible pulsation; the radial artery stands out, and, in extreme cases, seems to leave its bed; the amount of blood leaving the artery between the beats of the heart is so small that the tube scarcely relaxes, and so remains full and tense during that interval; the left ventricle, owing to the difficulty with which it sends its blood into the aorta, takes a longer time than usual to empty itself. On the other hand, the return stroke or reflux of the wave of blood backwards, when the contraction of the ventricles has ceased, begins more quickly, completes itself more rapidly, and is made with much greater force, than in health; so that it sends back the blood upon the root of the aorta and the arch with greater and more sudden force than in health. The left ventricle becomes enlarged, and its walls become thickened, owing to the increased force that it necessarily employs to send its blood into the arteries already filled, and to distend those arteries still more; and to the imperfect emptying of the cavity. The left auricle also, and the pulmonary veins, become unduly full. The arteries of the lungs partake of the general tension; but, owing to the difficult transit of the blood through the smaller vessels of the body, the supply to the vessels of the lungs is lessened; and, as the pulmonary arterial tree is much smaller than the systemic arterial tree, the right ventricle tends to complete its work more quickly than the left ventricle. During the early stages of acute Bright's disease, when the whole arterial system is suddenly called upon to do a disproportionate amount of work, and when, therefore, that system has not adapted itself to its additional labour, and is taken, so to speak, by surprise, the reflux of the blood in the pulmonary arteries, after the right ventricle ceases to contract, begins and ends sooner than the reflux of the blood in the aorta, so that the return wave of blood in the pulmonary artery falls back sooner upon the root of that vessel than the return wave of blood in the aorta falls back upon the root of that vessel.

At a later period, when the acute disease becomes chronic, the kidney being enlarged, the systemic and pulmonary arteries adapt themselves more nearly to each other. The systemic arteries give back their return-wave more rapidly, when, perhaps, the pulmonary arteries give theirs back less rapidly, so that the wave of each beats simultaneously upon the root of its respective artery; and this, although the ventricle may find a greater and greater obstacle to the emptying of its contents, and may, in consequence, continue to work for a greater length of time after the right ventricle has ceased its stroke. This state of things exists throughout in cases of granular kidney; for that disease, instead of making a sudden start in the acute form, begins slowly, and the vessels of the system educate themselves gradually and

imperceptibly to the new order of things. They are given, indeed, to a much greater degree of distension than are the arteries in fatty kidney; for, while in that disease there are a constant weeping of albumen and general waste and lessening of the volume of the blood, and especially of its solid particles, in cases with granular kidney the solid ingredients of the blood are retained, and the watery part of it passes rapidly off through the kidneys, which let the water through more easily, at the same time that the lightness of the action and the high pressure send out the water more rapidly. The same arterial tension that expels the water of the blood out of the vessels through the kidneys in cases of granular kidney, expels the water out of the smallest vessels into the surrounding tissues in cases of fatty kidney, and so establishes general dropsy. If from any cause, such as an acute attack, the water be expelled scantily through the kidneys in cases of granular kidney, the same effect necessarily results, and the high pressure drives the water out of the small vessels into the tissues, with the effect of inducing general dropsy, just as in cases of fatty kidney.

Arterial tension by no means implies in all cases arterial distension. It does so, as I have just said, in the typical cases of granular kidney, but does not do so in the typical cases of fatty kidney. In them, the weeping of the albumen lessens the volume of the blood; and the lowering of the vital forces of the tissues due to the loss of the solid ingredients of the blood and ulceration of the tissues, with general dropsy, lead to the establishment of wasting diseases, phthisis, diarrhoea, sickness, and so forth, that still further lessen the volume of the blood. The result is that, instead of having in those cases a radial artery cord-like and starting from its bed, we have a much contracted radial artery, the beat of which is often difficult to feel. But, although these arteries contain little blood, they are never empty. The blood finds the same difficulty in getting on through the smaller vessels; the muscular walls of the arteries contract down with all their force upon the blood, and with thickened walls and impaired power, owing to their narrowed calibre. The arteries, however small and contracted, are still characteristically tense.

I need not point out to you, for it is self-evident, the great, the vital importance of being able to recognise arterial tension and the absence of it; for, by ascertaining it, we often can at once fathom the nature of such a case. This is usually less important in cases of acute Bright's disease and of fatty kidney; for the general dropsy, the aspect, the pallor, stamp such a case at once. But it is far otherwise with cases of granular kidney; for they often remain in the apparent possession of full health even when the disease has made a deadly advance. A man in full work drops down in the street unconscious and in abiding coma, and enters the wards, perhaps never to regain consciousness. In these cases, the poison circulates through the blood; but the disease begins and continues so stealthily and slowly, that the system becomes accustomed to and consumes its narcotic poison, just as De Quincey and Coleridge did to their large doses of opium. In such cases, it is important to have an additional means of diagnosis, and, what is of equal, perhaps greater importance, an additional test of the depth of the disease; and this test we have with precision, if we can truly read the presence of arterial tension.

The signs of arterial tension are to be observed over the arteries themselves that are the actual seat of the tension, and over the heart the action and rhythm of which are modified to meet the great strain of additional work thrown upon the left ventricle during its endeavor to overcome the tension. The arteries themselves which are the immediate seat of the tension present naturally the most important and immediate signs of this condition. The radial artery in extreme cases, owing to the distension and lengthening of the vessel, stands out and even seems to leave its natural bed, so as to be quite visible. It may even become tortuous; but when it is so, and especially when its pulsations are visible, there is reason to anticipate that arterial degeneration is joined on to arterial tension. The artery in typical cases feels hard, like a cord or tendon; it, indeed, sometimes feels exactly like the adjoining flexor tendon. It is not the pulse that is altered, but the feel, but the artery. This is a very important distinction. You do not press the fingers into the artery, so as to compress it, but you glide them backwards and forwards from side to side of the artery; and you endeavour, if the case be one of extreme arterial tension, and especially if it be joined to arterial degeneration, to gently poise it up and lift it from its bed. You thus feel whether the artery is soft between the beats and hard during the beats, or whether it is continuously hard—whether the vessel is pulsating or not. You notice whether you can feel and count the pulse by simply placing the fingers lightly upon it, with a gentle firmness, without the least compression, over the artery. If the vessel soften between the strokes of the heart, and harden during or just after them, you know that the case is not one of pure arterial tension. I find myself naturally taking this by the pulse.



and feeling my own artery and pulse in this manner after and between thus feeling the patient's artery and pulse. As I have just said, in the first or highest degree of tension, the artery feels like a cord or tendon; in the second degree, it is like an India-rubber tube distended with fluid; in the third degree, it resembles a rather firm empty India-rubber tube. In the majority of cases, the arteries do not present the typical self-asserting character of which I have just spoken. Indeed, when an artery does so assert itself, it is well to consider whether arterial degeneration is not joined to arterial tension, and even whether that partly local condition is not the only one. An atheromatous artery stands out, just as an India-rubber tube does, by its own intrinsic firmness. It can be moved backwards and forwards and lifted out of its bed, and it does not present to the gently applied fingers a very definite pulsation. Such pulsation is, however, to be perceived by a little attention, and such pulsation is always definitely visible even when there is no aortic regurgitation, for the artery even then can be seen crossing and meandering under the influence of the beat of the heart. The pulsation is not absolutely invisible in cases of extreme arterial tension, for the addition of blood during the transmission of the wave of fluid infinitely increases the size of the artery; but this increase is by no means so marked in extreme cases of arterial tension as in cases of simple arterial atheroma. When that condition of the artery is marked, it may be at once perceived by laying the tips of the fingers upon the artery, and moving them not across the vessel, but upwards and downward along and upon the line of the artery. A feeling like a row of rough irregular small shot is conveyed to the finger in extreme cases; but between this, and the comparatively slight case of which I have just spoken, there is every gradation of mammillary roughness.

The pulse, when felt by compressing the radial artery, is distinctly gradual and soft, and contrasts remarkably with a hard tube-like character of the uncompressed artery. The collapsing radial artery and pulse, and artery of aortic regurgitation, audible when the arm is raised, is the exact opposite to the pulse of arterial tension.

The presence of a sharp second beat over the enlarged ascending aorta to the right of the upper portion of the sternum, and mainly in the second space, is perceived in a few rare cases of acute Bright's disease on the one hand, and of granular kidney in its advanced stage on the other. This sign was well seen in a case of acute Bright's disease in University College Hospital under the care of Dr. Wilson Fox, who kindly invited me to see the case, which I examined with his clinical assistant Mr. Gould. There was distinct sharp second beat over the aorta that coincided with the second sound in the first and second right space close to the sternum, and extending outwards for fully an inch. I have observed the presence of this second beat in several cases of advanced granular disease of the kidney, but have not noticed it in cases of fatty kidney. The sharp second beat of the aorta to the right of the upper sternum is best felt, not by applying the tips of the fingers, but by steadily pressing over that region with that part of the palm of the hand that is close to the fingers.

The presence of a loud metallic sound, intensified, and a muffled or feeble first sound over the ascending aorta, with a feeble muffled and even absent first sound to the right of the upper portion of the sternum, is one of the most constant signs of arterial tension. It is audible in every form of Bright's disease—the acute form, the fatty kidney and granular, the lardaceous kidney, and those cases in which that again may be infected with a calculus, or the seat of suppurative disease from affection of the bladder or urethra. This intensified second sound has been observed in several cases by Traube and Rosenstein, and Dr. Grainger Stewart. Each gave a case in which this sign was predominant. Sometimes this intensified second sound is, however, extending only about two inches beyond the sternum, but sometimes it is audible over the whole upper part of the right side of the chest, as in a case observed the other day by Mr. Rossiter in St. Thomas's Hospital, who kindly called my attention to the case.

If the second sound over the aorta in the second right space be compared with the second sound over the pulmonary artery in the second left space, in each about an inch from the sternum, the sound is much less loud and more flat over the pulmonary artery, wanting in a metallic note, unless the metallic character of the aortic second sound drowns the natural character of the pulmonic second sound, and is heard over both places, though much louder over the aorta.

The muffling, or indeed sometimes silence, of the first sound over the aorta, gives increased emphasis to the loud metallic second sound. The cause of this muffling of the first sound is evident. The arteries are already full when the ventricle forces its blood into them, and the fluid already in the aorta prevents the ventricle from giving a sudden distension and shock to the walls of the arch. In cases of aortic regurgitation and of anæmia, when the arch is flaccid, a loud shock is often heard with the first sound owing to the hammer-like action of

suddenly expanding waves of fluid which strike against the walls of the artery. In cases, indeed, of aortic regurgitation, when the arm is raised and the vessels are thereby crippled, a shock may be heard with each beat of the pulse over the radial, which ceases to be audible when the arm is brought below the level of the heart, and the artery is thereby occupied with blood.

The region directly over the enlarged aorta, to the right of the upper half of the sternum, is not the only region where the intensified metallic second sound is audible in these cases. It is also heard over the region of the conus arteriosus at the left third and fourth spaces, below the region of the pulmonary artery, and above that of the tricuspid valve, which extends naturally from the third over the fourth and fifth spaces, but is somewhat lower in cases of Bright's disease with enlargement of the aortic arch, owing to the root of the aorta being lower than usual in the chest because of the lengthening of the arch. In some cases, the metallic aortic second sound is as loud over the conus arteriosus as over the aorta in the second right space; in some it is even louder, and in others it is less loud. The reason for the aortic second sound being audible in these cases over the conus arteriosus, instead of the second sound of the adjoining pulmonary artery, is obvious. The root of the aorta is situated immediately behind the conus arteriosus, where it fills up the space between the root of the pulmonary artery and the tricuspid orifice. The conus arteriosus presents but a small flat space, containing the blood of the right ventricle between the third space and fourth space and the root of the aorta, the second sound of which vessel is consequently heard in these cases over that region with great intensity. I need only remind you that the diastolic murmur of aortic incompetence is for the same reason heard as a rule with greater intensity less over the conus than over the ascending aorta to the right of the upper sternum, unless that artery is so enlarged as to pulsate against the surface in that region; and I need not say that it is louder there than over the left ventricle at the apex, since there the diastolic aortic murmur is rarely audible, although the stream of regurgitation pours down into the left ventricle, the reason being that the stream of blood entering the ventricle from the left auricle through the mitral orifice, is interposed over the outer part of the left ventricle at the apex between the ear and the regurgitative stream of blood pouring down from the aorta into the inner part of the left ventricle.

The presence of the second beat of the aorta, and of this intensified metallic second sound to the right of the upper sternum, and the muffling of the first sound, show the very great extent to which the arterial tube is stretched by its contained blood. The ascending aorta in health is limited within the right edge of the sternum, being entirely covered by that bone, and by a couch of lung of some thickness that interposes itself between the artery and the sternum. In Dr. Fox's case, the ascending aorta completely left its natural bed, moving outwards for at least an inch beyond the edge of the sternum—for to that extent Mr. Gould and myself felt it—and advancing forwards for fully an inch from it, came to the front of the chest, displacing the lungs, and hitting our hands when applied over it with a short sharp tap. Is this great enlargement of the arch of the aorta due to the great distension of the arteries from the blood tending to leave the vessels more slowly at its distant extremities, than it enters it from the ventricle at its root? or is it from the constant back hammer of the reflux blood which produces the second sound and second shock felt by the hand to the right of the upper sternum? Both of these agents or factors are at work. The repeated injection of the blood from the ventricle into the arterial lines readily expands the arteries and enlarges the whole tree. This is a great powerful distending agency of the Bramah press order. It works silently, without blow, and slowly. It detains its force, gently diffusing it noiselessly over the whole of the arterial tree, from its root to its finest branches.

The other force of which I have spoken is the reflux blow of the blood, driven backwards like the water-hammer, upon the walls of the root and arch of the aorta, including the aortic valve and the sinuses of Valsalva, with the whole stored up force of the lesser arteries increased by the last injection of blood from the left ventricle. I have again and again felt the force with which this reflux blow of return blood from the arteries, contracting after the systole, tells upon the walls of an aneurysm of the ascending aorta. This blow is delivered unceasingly. After the end of the beat of the heart, telling to expand the whole arterial tree by its great quiet injection of blood, we have the sudden blow of the arterial beat telling upon the root of the artery. Both these forces, the gradual and the sudden, the still and the noisy, tell to produce the common effect. But that the sudden return blow must have a second expanding effect, and a power of giving an injurious blow to the surface against which it beats, is most probable.

The following narrative of the effect of an analogous backstroke in



again and again bursting a pipe, has been kindly sent to me by Sir William Armstrong, who discovered the nature of the disease, and supplied the case. I give you the history in his words.

"A curious case of a water-pipe bursting without pressure occurred at the railway-station in Newcastle-upon-Tyne. The pipe was of considerable length, and was employed to carry off the water discharged from a hydraulic press used for revolving a large turntable. This pipe repeatedly burst, although it was a mere open-ended conduit. Upon investigation, it was found that the water ejected from the press attained sufficient velocity in the discharge-pipe to cause the column to run forward after the outlet valve of the press was closed. A momentary vacuum was thus occasioned at the back end of the pipe next to the press, and the column of water, recoiling by the external pressure of the atmosphere, delivered a blow which burst the pipe. The effect was counteracted by allowing a little air to be sucked into the pipe at a point near to the press, so as to prevent the formation of vacuum and cushion the return-stroke. With an elastic pipe, no such provision would have been necessary."

We have seen that in acute Bright's disease, and in cases of fatty kidney, atheroma sometimes affects the aorta and the aortic valves; and that concretions form on those valves evidently from inflammation. It appears to me, that in this reiterated reflux blow of the diastolic beat which is coincident with the second sound, we have an adequate cause for the excitement of inflammation, and of atheroma of the aortic valves, and aorta, and in conjunction with the systolic injection of blood, for the widening of the aortic arch. I would here remark, that the second sound is not caused by the closure of the aortic and pulmonic valves, which must close the tenth of a revolution of the heart's action before the period of the second sound, or the blood would then regurgitate from the arteries into the ventricles; but that this second sound is due to the reflux beat of the blood driven backwards after the systole by the contraction of the arterial walls, in the manner in which Dr. Burdon Sanderson has explained the second wave of the dicrotous pulse. This wave of the reflux blood is not indeed limited to the arch of the aorta, but is diffused over the whole arterial circulation short of its finest branches.

A remarkable sign appears, in the majority of cases of acute Bright's disease, in the form of doubling of the second sound over the region of the conus arteriosus, and less vividly over that of the pulmonary artery, and less still over that of the ascending aorta. I examined this point carefully with Dr. Donkin, Dr. Coupland, and others, fully two years ago, and we made up our minds that the second second sound was the louder and more metallic of the two second sounds; thus evidencing that the reflux blow of the aorta, with its second sound, was delivered after that of the pulmonary artery. This is the reverse of what takes place when there is doubling of the second sound over the pulmonary artery, owing to an obstacle to the flow of blood through the lungs. Then the second second sound over the pulmonary artery is the louder sound. I have traced doubling of the second sound lately in some cases of granular kidney with mitral murmur, and in these cases the order of the two sounds was the reverse of what it was in the cases of Bright's disease not so affected, the second second sound being evidently, at least in one case, that of the pulmonary artery. I examined this case at Guy's Hospital, through the kindness of Mr. Jones, the physician-assistant there. In these cases, the great arterial tension has been transformed by the mitral incompetence from the systemic to the pulmonic circulation.

The signs of arterial tension audible over the heart are less constant, and therefore less valuable, than the signs heard and felt over the ascending aorta and those felt over the pulse. These signs are, however, of considerable interest, and sometimes are of great importance and value, for they demonstrate sometimes the existence of the disease when it might be otherwise doubtful, and speak to the serious condition of the arterial tension that gave rise to these signs.

The heart's impulse occasionally, but not often, presents features of value. In Dr. Wilson Fox's important case of acute Bright's disease, of which I have already spoken, the apex-beat, at the time of the intensity of the disease, was fully an inch beyond the mammary line, or five inches by measure from the centre of the sternum, thus manifesting the immediate influence of the Bright's disease with its poisoned blood, its resisted capillary circulation, its arterial tension, and the increased force of the contraction of the left ventricle, to cause the great enlargement of that cavity and the thickening of its walls. At a later period in this case, the apex-beat had struck inwards, so that it was well within the mammary line.

Sometimes, as in this case of Sir William Jenner with fatty kidney observed by me with Mr. Gould at University College Hospital, the impulse is absent from the spaces and appears in the epigastric space, to the left of the ensiform cartilage. It is natural that this should be

the position of the impulse, when we consider that, in these cases, as in those of very great tubular dilatation and lengthening of the ascending aorta, the heart is pushed downwards into a lower position in the chest, owing to the lengthening of the ascending aorta and the lowering of its root.

In the cases of fatty kidney, and generally, perhaps, in acute Bright's disease also, the position of the impulse gives but little information as to the amount of the arterial tension and its effects upon the size of the left ventricle, and the general lowering of the heart. In cases of fatty kidney, as we have seen, the exhausting character of the disease and its secondary affections, tend to keep down the size of the heart and to diminish the volume of the blood, so that the ascending aorta is not lengthened downwards, and does not, therefore, displace the heart downwards also. We have seen, in one case of acute Bright's disease, that the seat of the impulse may give important information in the direction I am speaking of; but, practically, I have not found this sign to be of much avail in those cases. In patients affected with granular kidney, the position of the impulse is often of great moment; thus, in one case of the kind that I saw some time ago, the apex-beat could be felt low down in the sixth space, nearly or quite three inches to the left of the mammary line, and fully three inches below the level of the nipple. In that case, there was marked doubling of the first sound over the septum, the sign of which it still remains to me to speak; and the patient alternately breathed rapidly, deeply, and with great apparent distress for about forty or fifty seconds, and ceased to breathe, falling asleep the while, for about fifteen or twenty seconds. The cycles of alternately hurried and arrested respiration were tolerably, but not quite, regular. I may say that, in my second and concluding lecture, I shall bring before you, Mr. President, some important cases of this class, and especially one, a patient in St. Mary's Hospital, from whom I obtained respiratory tracings on Foucault's register somewhat on the method ingeniously contrived by Dr. Burdon Sanderson.

There are two influences outside the heart, one above and the other below that organ, that tend materially to modify the position of the impulse. I allude to the lungs in the higher region, which tend, by their increased expansion, owing to distress in breathing, often to coerce the heart in front, and perhaps to displace that organ downwards; the other, a very serious force directly and too strongly contending with the natural downward direction of the heart and lungs to displace them upwards; I allude to flatulent distension of the stomach and bowels, perhaps added to by ascites. This incident frequently occurs in the worst cases of kidney-disease, whether fatty or granular, and is of most serious import and requiring efficient help to counteract it from the physician. I shall briefly address myself to this question in my next lecture.

The last sign of arterial tension of which I have to speak is doubling of the first sound. The most extensive diffusion that I have yet met with of this sign was in Dr. Wilson Fox's important case, already alluded to, of acute Bright's disease. I heard, as Dr. Wilson Fox had already found, that there was marked and very neatly accentuated doubling of the first sound. There were three distinct sounds with each revolution of the heart's action, the space being longer before and after the second sound than between the two first sounds. Mr. Gould and I examined this case carefully together, and we found that the doubling of the first sound was audible over the whole of both ventricles, over the aorta and pulmonary artery as high as the first cartilage, at the root of the neck, over the innominate or right carotid artery, and, downwards, below the heart as low as the eighth cartilage. I have not heard in any other case anything like so extensive an area of doubling of the first sound as we heard in this. We found that, over and to the right of the right ventricle, the first of two first sounds was the louder, but it was the reverse over the left ventricle at and to the left of the septum; for there the second of the two first sounds was the louder sound.

As a rule, the doubling of the first sound is more or less limited to the region of the septum, or a little within the mammary line, and from one to two inches below the level of the nipple. Sometimes, under these circumstances, it is easy to find; but the sign, when present, and even audible to all the listeners, often requires a little time for its discovery and acknowledgment. When the doubling is markedly accentuated and extensive, it is usually, as in Sir William Jenner's case just quoted, audible over the whole right ventricle, where it may be especially emphasised over the epigastric space, that being the space at which the heart is most uncovered and is nearest to the surface; and it is lost over the left ventricle and its apex, being usually inaudible to the left of the nipple-line. This, under the circumstances, is natural; for the left ventricle is large and extensive, while the right ventricle is relatively small, so that the sounds from the former are readily trans-



mitted through the latter. I heard, however, a remarkable exception to this rule, through the kindness of Dr. Dickinson, who pointed out the case to me as an interesting one. I examined it carefully with Mr. Collins, who has on this and on other occasions kindly joined me in examining cases at St. George's Hospital, and we found that the doubling was markedly audible at and as far to the left of the septum as the sounds of the heart could be heard; that is, out to the apex; but that the double sound was soon lost when we travelled to the right of the septum over the right ventricle. Here, the first sound of the right ventricle was readily transmitted through the left ventricle, the sound of which was, however, speedily damped by its fellow. I could not explain the occurrence of this exceptional sign; for the left ventricle was large, its apex being felt an inch to the left of the nipple-line; and there was no other sign than this that the right ventricle was large. It may, however, have been so.

When the doubling of the first sound is diffused over the right ventricle, the first of the two first sounds is the louder over and to the left of the region of the sternum and ensiform cartilage, and the second of the two sounds is the louder over and just to the left of the septum, thus demonstrating that the second of the two first sounds is that made by the ending of the systole of the left ventricle.

In those cases in which the doubling of the first sound is well marked over the septum, and is almost limited to that region, if one end of the differential double stethoscope be applied over the lower end of the sternum, while its other end is applied over the apex, at both which points the first sound is originally single, the doubling of the first sound is perfectly audible. It is lost if one end be removed; it is regained if the end be replaced. I have noted this again and again, in concert with some of the best observers in London, including Dr. Donkin, Dr. Greenfield, Dr. Coupland, Mr. Gould, Dr. Humphrey, and we all heard the sign, and we all agreed in every instance that the first of the two sounds was that heard by us at the lower end of the sternum over the right ventricle, and the second of them was that heard at the apex or over the left ventricle.

Doubling of the first sound is audible in all the forms of Bright's disease, whether acute or chronic, with fatty or granular kidney, and it may be, and often is, absent in all the forms of the disease. It is more frequently, I think, present than absent, but it is more often difficult than easy to discover, and it for this reason fails to decipher for us easily and at first sight many cases that it would be easy to read if this sign were readily available.

As a rule, the second sound is single, and the first sound is double, in all cases of chronic or established Bright's disease; but, in acute Bright's disease, we may, and often do, have a double second sound over the arteries, and especially the conus arteriosus, and a double first sound over the septum of the ventricles. In one or two cases, there was a restricted meeting-point over the upper part of the septum, close to the conus arteriosus, at which the two signs meet each other at the borders of their respective areas, and then we had both a double first and a double second sound heard simultaneously. Dr. Donkin was the first to hear this conjunction of those signs.

**A SOLVENT FOR QUININE.**—The spiritus ætheris dulcis as a solvent for quinine is recommended by Dr. Isaac Smith in the *New York Medical Journal*. He says that one ounce of the solvent will dissolve two drachms of quinine, giving a transparent solution.

**USE OF GELSEMINUM IN DILATATION OF THE CERVIX UTERI.**—Dr. J. A. Agnew reports to the *Virginia Medical Monthly* three cases in which he employed gelseminum as an adjuvant to mechanical means for dilatation of the cervix uteri. The first patient had retroflexion of the uterus. The cervix was small and conical; the os was at the apex of the cone, and was so nearly closed that he could not introduce the smallest laminaria tent. He had two conical bougies made, the little end of the smaller bougie being not larger than a knitting-needle; even this could not be introduced. The influence of gelseminum over sphincteric action occurred to him, and he determined at once to try it. He gave ten drops of the fluid extract of gelseminum every ten minutes until thirty drops had been taken. Immediately after the last dose, without the slightest difficulty, he passed successively the bougies and a No. 1 sponge-tent up to the point of flexion. On the fourth day thereafter, he failed in every effort to introduce a No. 2 sponge-tent until the fluid extract of gelseminum had been given as before. After this was given, the tent was readily passed up to the point of flexion; and, to his great satisfaction, after a little manipulation, it passed this point, and there was no further trouble in the operation of dilatation. He has tried gelseminum in two other cases, with equal success (*Boston Medical and Surgical Journal*).

## REMARKS

ON

### THE PATHOLOGY OF CHOREA.

BY H. CHARLTON BASTIAN, M.A., M.D., F.R.S.,

Professor of Pathological Anatomy in University College, London; Physician to University College Hospital, and to the National Hospital for the Paralysed and Epileptic; etc.

THE JOURNAL of December 23rd contains an interesting communication by Dr. Hughlings Jackson, entitled "Note on the Embolic Theory of Chorea"; in which, towards the close, after discussing some of the evidence adverse to this theory recently adduced by Dr. Dickinson, he adds, "It may be, I would admit here, that the hypothesis of embolism will be displaced by Bastian's hypothesis of thrombosis as an explanation of many cases of chorea". As the problems involved in the etiology of chorea are of considerable importance, and as I have only made a few casual remarks in my work *On Paralysis from Brain-Disease* (p. 29), on the part played by thrombosis in the production of chorea,\* it may not perhaps be out of place for me to state more fully the grounds of my opinion, and refer to some other points in the pathology of chorea, principally in reference to the very interesting and important communication already referred to by Dr. Dickinson, in the last volume of the *Medico-Chirurgical Transactions*. I am the more desirous of doing this because, in a communication to the *Transactions to the Pathological Society for 1869*, on the plugging of minute vessels of the brain by aggregations of white corpuscles, I made a remark which has since led others to regard me as a supporter of the embolic theory. I said (p. 16), "I hope shortly to publish the details of a fatal case of chorea in which such embolisms led to ruptures and obliterations of small vessels throughout the corpus striata, and in the course of the middle cerebral arteries generally, this being a case of bilateral chorea in which delirium was also present". The details of this case have not yet been published, partly because my examination, shortly afterwards, of the brain in two other fatal cases of chorea, in which vascular occlusions were also present, though to a less extent, caused me to reject the notion that they had been occasioned by embolism, and to favour that of their production by thrombosis; and partly, because further reflection convinced me of the need of obtaining some knowledge of the microscopical characteristics of the blood in patients suffering from chorea, as well as other kinds of evidence, before any coherent account could be given of the pathology of this affection.

This additional information was in part acquired when other work absorbed my attention, and the question of the pathology of chorea has not again been made by me the subject of special investigation, though I have always felt a keen interest in the problem. Meanwhile, on the strength of the passage above quoted, I have been quite legitimately cited in one of the text-books on Medicine at least, as an upholder of the "embolic theory" as applied to chorea, though as a matter of fact this is a view which I have long since rejected.

In the following remarks, I propose to make no formal communication, and to refer to some of the many points involved in recent discussions concerning chorea, with as much brevity as may be compatible with a clear exposition of the views which I myself hold as to the pathology of this disease; and therefore shall allude to the many important communications on this subject only so far as may be absolutely needful. I am fully impressed with the value of many communications, though a discussion of their doctrines here and now would be impossible.

#### *Region of Nervous System affected in Chorea.*

In common with Dr. Russell Reynolds, Dr. Jackson, Dr. Broadbent, and others, I regard chorea as a cerebral rather than as a spinal affection; and, believe also, that the corpora striata, either alone or with the thalami, are the principal seats of the lesions of disordered actions related to the well known motor phenomena of this disease. In certain cases, however, other nervous complications may arise, and then the area of pathological change may be correspondingly widened, as in the case referred to by me in the *Transactions of the Pathological Society*, in which delirium supervened upon the chorea, and in which, after death, occlusions of minute vessels were also found in the grey matter of the convolutions, and also in a somewhat similar case which has been recorded at length by Dr. Tuckwell. Other occasional complications of the disease need not now be specially referred to.

\* Though I have more than once conversed on the subject with my colleague, Dr. Jackson.



My case above alluded to was, I think, the first in which definite multiple lesions were discovered in the corpora striata, after Dr. Reynolds had indicated these bodies as the probable seats of disordered action. And owing to the fact subsequently pointed out by Dr. Jackson, and reinforced by Dr. Broadbent and Dr. Russell, that the distribution of the spasms accords almost exactly with that of paralysis in cases of hemiplegia due to lesions in the corpus striatum or some other part of the territory of one of the middle cerebral arteries, it has of late been very commonly regarded as almost settled, that the seat of the principal disordered actions or lesions in chorea must be in this same arterial territory, either on one or on both sides of the brain.

The truth of this conclusion may seem to some to have been rendered somewhat doubtful, at least since the recently published researches of Dr. Dickinson, owing to his having found lesions widely distributed, not only within the brain, though principally in the sites above mentioned, but also in various parts of the spinal cord. I have, therefore, within the last few days, again carefully studied Dr. Dickinson's recorded cases, in order to see what amount of evidence they seem to furnish against this conclusion, or in favour of a conjoint spinal seat of lesion.

It seems scarcely necessary to say, that the publication of Dr. Dickinson's pathological observations cannot affect the validity of the reasons originally adduced by others for regarding the symptoms of chorea as essentially a cerebral rather than a spinal malady; such reasons being especially strong in relation to hemichorea. This latter evidence, indeed, seems to me quite incapable of being shaken; and, looking to the close relations existing between hemichorea and ordinary bilateral chorea, we could not suppose that the essential seat of the lesions or disordered actions was in the one case cerebral, and in the other to any large extent spinal. Dr. Dickinson's seven recorded cases are instances of ordinary bilateral chorea, and, as in all of them he found more or less distinct pathological changes in the spinal cord, it remains to ascertain in what light these lesions are to be regarded in reference to the sum total of symptoms presented in such cases of chorea. Unfortunately, the clinical details of Dr. Dickinson's cases are recorded so very briefly as not to throw so much light as they might have done upon this part of the problem.

In Case I, chorea had only lasted two days. Death occurred apparently from the effects of some intercurrent pathological accident. There was congestion of almost the whole of the brain and spinal cord, but a similar condition existed in "the liver, spleen, and kidneys". The remarkable size of the central canal of the cord must have been independent of the disease, and can only be regarded as a developmental peculiarity.

In Case II, the only spinal lesion which could by any possibility be regarded as distinctive or pertaining to chorea, would be the perivascular changes "found in the lumbar region, where dilated arteries traversed the grey horns separated from their substance by a wide interval filled with the globular translucent matter which so often marks the contact of nervous tissue with dilated vessels". In the brain, the congestions seem to have been more marked, since actual though small hæmorrhages had taken place in and beneath the pia mater in some places. But the parts of the brain especially referred to as being notable for the impletion of its vessels, and the pathological consequences of this, are the *corpora striata*.

In Case III, the patient died on the twenty-fourth day, with signs of prostration. "She had had but little sleep, and the movements had been violent and general." The brain was remarkable for the wide-spread extent of its congestion, which was associated even with capillary injection in some parts. "The capillary injection was most marked, though by no means confined to the *optic thalami*." Dr. Dickinson adds, "the cord was congested, but to a less degree"; in addition, however, there were actual structural changes in the grey matter, both in the dorsal and in the lumbar regions, which appeared to have been occasioned by antecedent extravasations of blood in these sites.

In Case IV, there were "violent chronic movements of the neck, trunk, arm, and legs.....the face was little affected, but swallowing was difficult, and speech hesitating". The patient subsequently became prostrate, and "lapsed into the condition to which the term typhoid is applied". The necropsy was made under difficulties, so that only "portions of the brain" were examined, together with the spinal cord, and no mention is made as to the state of other organs. The only part of the brain referred to as having been examined are the *corpora striata*, and these are said to have been notably hyperæmic, though no other structural changes were detected. A similarly general hyperæmic condition existed in the medulla and throughout the cord. That is, each part of the body specially alluded to as having been examined was found to be almost equally hyperæmic—an important fact to bear in mind when we consider that the patient died in

a "typhoid condition"—a state which is generally characterised *post mortem* by wide-spread congestions of organs. There was in addition, in this case, an extravasation of blood into the grey matter of the left posterior horn in the cervical region.

In regard to Case V, Dr. Dickinson's summary is thus given (p. 14): "Sixty-four days. Venous injection of the brain, especially of the *corpora striata*, wherein were also periarthral exudations. Arteries in the convolutions near Sylvian fissure surrounded by blood-crystals and *débris*. Injection and scattered erosions of the cord. 'Sclerosis' of the grey matter in both the dorsal and cervical regions, placed with bilateral symmetry." In this case, the chorea followed upon an attack of acute rheumatism which had existed for the previous three weeks. The choreic movements had ceased for about two weeks before the death of this patient from heart-disease; and it is worthy of note that the "brain and cord were natural to the naked eye"; that is, the hyperæmic conditions usually associated with chorea during its course and at its close had had time to disappear, leaving their microscopical effects only. The *corpora striata* are noted as being "more minutely injected than the rest of the brain".

In Case VI, there had been two previous attacks of chorea. The changes found "were of two kinds—recent injection and its consequences belonging to the last attack, and ancient changes due probably to congestive processes associated with one of the earlier". The recent changes were most marked in "the bodies at the floor of the lateral ventricles and in the cord", whilst the older changes were confined to the brain in the territory of the middle cerebral arteries. These are described as consisting of "periarthral degenerations and scattered spots of 'sclerosis' in the *substantia perforata* and convolution at the beginning of the left Sylvian fissure". The changes in the cord, beyond fulness of its vessels, only consisted of erosion about the bottom of the anterior fissure, which is common as a result of congestion in many conditions, according to Dr. Dickinson.

Case VII was a chronic and severe case, thus summarised: "Four years. Spots of 'sclerosis' numerous set in the *substantia perforata* and grey matter of *corpora striata*, symmetrically placed with regard to the two sides. In cord, large exudations into grey matter, and fissures chiefly in cervical region."

Cases I and IV can scarcely be said to throw much light upon the question as to the seat of lesion; whilst, of the remaining five cases, the only point common to all is, that the maximum amount of pathological changes, so far as the brain was concerned, was found in the corpus striatum or some other part of the territory of the middle cerebral artery. The change in the spinal cord presented, however, no such constancy as to its seat of maximum intensity. In some, it consisted of mere general congestion; in others, there were, in addition, local accidents which may have resulted from this state, situated now in one region and now in another of the cord. It seems to me more likely that these lesions were consequences of mechanical congestion, induced, perhaps, by the more severe of the choreic phenomena themselves; or else, as in Case VII, that they were due to irritation (followed by determination or congestion) brought about secondarily from the prolonged over-activity of some portion of the cord in response to the constantly recurring stimuli emanating from the cerebral seats of disorder during a prolonged period.

We must certainly strive to distinguish the secondary from the primary morbid states of the nerve-centres in such affections as chorea; and, in order to enable us to do this with more certainty, we much need certain data (which, I have good reason to believe are now being sought for by a very competent observer) as to the effects which may be produced upon the cord by congestion or general bodily states in cases in which no appreciable symptoms referable to the spinal cord have existed during life. It seems to me, however, that the opinion of those who believe that the seat of disordered action or lesion productive of the phenomena of chorea is situated in the *corpora striata* and *thalami*, or, at all events, in some part of the territory of the middle cerebral artery, need not be appreciably shaken by the facts recently recorded by Dr. Dickinson in the able communication to which I have been referring.

My own experience as to the local lesions of chorea is imperfect and fragmentary, but, so far as it goes, it tends in the same direction, and in some respects supplements that of Dr. Dickinson. The case referred to in the *Pathological Transactions* was that of a girl who died in University College Hospital, under the care of Dr. Wilson Fox; and in the following year, 1869, I also received through the late Alexander Bruce parts of the brain from a fatal case of chorea which had been under the care of Dr. Basham in Westminster Hospital; and shortly afterwards I examined the brain in another case of chorea which had been under the care of Sir William Jenner at University College Hospital. I do not propose now to enter into any details, but



merely to say that in each of these cases I found the ganglia at the base of the brain, and more especially the corpora striata, notably hyperæmic; and, proceeding by a method different from that of Dr. Dickinson, I also found occlusions, though not to the same extent in each of them, in the small vessels of these parts; the occlusions being partly fibrinous plugs, and partly composed of rounded concretions, apparently of an albuminoid nature, such as are figured in the right-hand part of the illustration on page 11 of the *Transactions of the Pathological Society* for 1869. In Dr. Wilson Fox's case, where delirium supervened, there was also a minute capillary injection of many parts of the surface of the brain; and in these regions I also found numerous occlusions of minute vessels.

My observations were made in the latter case by separating the convolutions whilst the brain was in the fresh state, cutting with a sharp-pointed scissors through and all round a portion of the pia mater adhering to one side, and removing this, with as little traction or disturbance as possible, to a microscope-slip, where it was immersed in a quarter per cent. solution of bichromate of potash. The portion of pia mater was put into this thin fluid for preliminary examination, in order to prevent shrivelling; and afterwards, if it were to be preserved, glycerine was allowed to run in and replace the bichromate solution without disturbing the specimen. In examining the corpora striata and other internal parts of the brain, after section of the part, a distended vessel was dissected out by means of a needle, whilst its surrounding branches were cut across with a sharp-pointed scissors whilst they were still imbedded in the brain-substance. The vessel and its branches were then removed as before, with as little disturbance as possible, to a weak bichromate solution. In this way, the contents of the vessels and their branches could be fully examined, and I was able to detect the vascular occlusions which I believe to be the principal cause of the minute injections of the parts, but which Dr. Dickinson seems not to have found in his examination of sections of the hardened organs. In future observations, the two methods should be combined; that is, with different parts of the same brain. The examination of the vessels by removing them from the recent brain is good as a preliminary measure best calculated to reveal the fact of the existence and the nature of occlusions; but, in order to study the effects produced by them, we must proceed, as Dr. Dickinson has done, to harden the nervous organs and subsequently examine sections.

[To be continued.]

## THE EMBOLIC THEORY OF CHOREA.

By THOMAS STRETCH DOWSE, M.D., F.R.C.P.E.,

Physician-Superintendent of the Central London Sick Asylum, Highgate, etc.

MY experience in that acute angle of the plane of nervous diseases called chorea has not been so extensive as in the remaining superficialities. Yet I think I have seen sufficient of the etiology, clinical features, and pathology of this disease and its kindred congeners to venture a few remarks on this very important question.

I admit, on commencing, that, of the four cases where I have had an opportunity to examine the cerebral vessels, no embola were detected, but thrombi of the vessels of the grey matter of the convolutions of the postparietal and occipital lobes were abundant, as well as perivascular spaces and degenerated nerve-cells. Of this I am sure, that, so long as we constantly write and talk of embolism of cerebral vessels to the exclusion of thrombosis, so long shall we be in error and fall short of a most important and unvarying phenomenon.

It is to the vascular system and the stability and integrity of the fluids in circulation through the body, that we have to look for the induction of primary changes in the nerves and nervous centres. It is the circulation of the blood-governing, as compared with the due formation of the blood-governed, which we have to take into consideration; and, moreover, it is to the due correlation of these that we have to look for a healthy standard. I ask the questions: Is an atheromatous vessel due to blood-change, or to defect in the governing power which regulates its nutrition? Is a cerebral glioma or fibroma of the dura mater due to blood-change or to defect in the governing power which regulates the due nutrition of those parts? Is an ovarian growth or uterine cancer due to primary blood-change or to defect in the governing power which regulates nutrition?

The probable answer will be, that it is sometimes the one and sometimes the other. I cannot meet the question without committing myself to mere conjecture, which I should be very sorry to do. Still, it would be a not uncommon error, in these metaphysical days of advanced pathological research, did I venture to state that, in the habit of body or constitution known as the choreic, we have a family history, a dia-

thesis, a blood-condition, a nervous state; in fact, a type where the governing power, the blood, is easily aborted and becomes, in great measure, governed by nervous agency rather than being itself the governing agent, and it is thus that disease commences.

It might be chorea, pericarditis, valvular or atheromatous changes, acute rheumatism, epilepsy, mental derangement, the various forms of skin-disease, mere albuminuria, or desquamative nephritis, age and circumstances modifying results as influenced by hereditary tendency.

I do not think it would be an easy task to say whether the blood or the nervous system was the factor of thrombosis in the following cases which I find in my note-book.

A woman, aged 50, was sitting at tea in her usual health during a hot sultry summer afternoon; she was suddenly startled by a loud peal of thunder, and immediately she was seized with intense pain at the uppermost part of the thigh. When she came under my care, the limb was of immense size, and a plugging of the iliac and femoral veins was diagnosed and verified by *post mortem* examination.

A woman, aged 36, was standing on shore and saw her son drowned in a gale at sea. She suffered from temporary mental aberration, which was succeeded by general incoördinate muscular movements of the face and extremities, with opispleurosthotonos. Here, we had multiple thrombosis of the grey matter of the brain and spinal cord. She recovered with some ataxy of the lower limbs.

A man had been suffering from repeated attacks of erysipelas, but had recovered. There was ankylosis of the joint of the index-finger, which was amputated. In less than three hours, his temperature rose to 104 deg., the respirations to 60, and he died from what is called shock within twenty-four hours of the removal of the finger. At the *post mortem* examination, the heart was found to be empty, but the vessels of the brain and spinal cord were plugged with thrombi.

I have cited these cases, as I could many others, to show (but not to prove) that, in certain conditions of the blood and nervous system, thrombosis is not so uncommon. We hear a great deal of vascular spasm in the various forms of epilepsy, true enough; but I believe ramuscular venous thrombosis has been overlooked. I maintain that no one can give a rational explanation as to the pathology of chorea who does not first make himself acquainted with the causation of the many forms of involuntary incoördinate movements which are to be found in well known organic changes of the nervous system. Let it be granted that, in chorea, we have something unique: movements, in fact, which can scarcely be called tonic or clonic, whose diverse action partakes of flexion and extension of parts supplied by the same nerves at the same moment of time without rhythm, uniformity, or regularity, with or without loss of sensation, but, unless very profound, are certainly, in some measure, under mental influence.

In Dr. Hughlings Jackson's able defence of the embolic theory of chorea, he states: "All movements must depend on nervous discharge. Disintegrated nerve-tissue cannot discharge; for really the disintegrated matter has ceased to be nerve-tissue. I suppose the excessive movements occurring either in chorea, or epilepsy, or epileptiform seizures, are produced by discharge of grey matter, which, except for great instability from overnutrition (not better nutrition) is healthy."

One can but be in accord with Dr. Jackson, that disintegrated nerve-matter ceases either to generate or conduct nerve-force, yet there are periods of disintegration which cannot be overlooked. The first of these, of the utmost importance, is molecular derangement. It might arise from mere inhibitory action of reflective centres, or from the least possible transudation of serum from overgorged vessels. Nerve-force is essentially vital force, and, as in the inorganic world we have latent force, so much the more have we latent force in the organic. This, I presume, no physiologist is willing to deny. It is in molecular derangement, inducing molecular hyperæsthesia (irritability), that this latent nerve-energy is generated, not from overnutrition.

There is no such thing as overnutrition beyond what is compatible with perfect health. After this nutrition is perverted and degeneration begins, and so surely commences what Dr. Hughlings Jackson calls the positive condition of the motor organs in chorea, the negative follows when disintegration is complete. The questions which arise in reference to the cause, course, and termination of chorea (independent of *post mortem* microscopic evidence) do not to my mind favour the embolic theory. But one is bound to admit, and many cases have occurred in my own practice where extensive valvular disease has given rise to embola of the left Sylvian artery and its branches, which has been productive of defective speech, right facial palsy, jactatory involuntary movements of the arm and paresis of the leg, without spasm.

One case I remember of extreme interest, and would at first sight support the embolic theory; but the movements were unlike those of chorea, and the area of distribution of nerve-change gave evidence of a more limited destruction than is found in hemichorea.



The association of chorea with valvular disease of the heart does not support the embolic theory, or, to say the least, does not maintain it; for the latter, as a rule, does not precede the former, but originates in direct ratio with the persistency of the choreic movements, inasmuch as chorea, acute rheumatism, and valvular disease of the heart are directly associated in the same habit of body and nervous temperament. So far in this respect might it be inferred that embola were productive of chorea, but one cannot push this point of the argument farther. I ask the question, Is it possible that the initiative nerve-change or irritability over any given cerebral area, can be maintained after the absolute causative agent has been removed? or, on the other hand, is it possible that the lesion which gave rise to the abnormally active impulse has so impressed the nerve-matter as to induce in it a property of hebetude which acts in correlation with subjective, attendant, and perverted mental processes? We know that a choreic patient will, when occupied, perform many movements quite co-ordinately which it is impossible for her to do whilst under observation.

The automatic balance of nerve-function is here superseded by emotional hypergenetic agency. Such a condition as this is the outcome not infrequently of what is often termed nervous mimicry, and there can be no doubt that such is frequently the case without what is usually understood as gross pathological change. If pathology do not serve us (and as yet this is perfectly true that it does not) in clearing up by demonstrative proof many vexed questions in reference to the cause of nervous disease. There are, on the other hand, many objective factors at work evidenced in the shape of clinical features, or signs, or symptoms, which, if carefully considered, weighed, and compared, will lead us to a correct and truthful issue.

In the cases of well marked embolic plugging which have come under my observation, the results have been, as before remarked, so unlike chorea, that I am inclined to think the theory untenable; and, judging from my own pathological data, such condition is absolutely negative; and the fact that the middle cerebral artery was found plugged by Dr. Moxon in a case of hemichorea followed by hemiplegia does not by any means invalidate this conclusion; in fact, it rather goes to prove that chorea was followed (by association) with valvular disease of the heart, which gave rise to the embolon that plugged the Sylvian vessel, and that this plugging gave rise to the hemiplegia.

## ON THE DRESSING OF WOUNDS.

By EDMUND OWEN, F.R.C.S.,

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MR. RICHARD DAVY's clinical remarks on the dressing of wounds, which appeared in the *JOURNAL* of December 30th, 1876, are as bold as they are well timed. Mr. Davy comes forward as a champion of simplicity and aesthetics in surgical dressing; and, at the present day, when surgeons of the so-called antiseptic school are prone to attribute their success to some special virtue in carbolic acid, or in the way in which they employ it, Mr. Davy's trenchant remarks are of the greatest value.

By their side, I would like to place a few extracts taken from the lectures of a surgeon and teacher of vast and ripe experience. Thus we read in Spence's *Lectures on Surgery* (vol. i, p. 140, 2nd edition):—"Some of the statements advanced in favour of the antiseptic system so ignore the success obtained by simple dressing and treatment of wounds, or assert such an amount of infallibility as to the curative powers of the special method, as to require notice." Such statements, the author considers, arise from want of experience in, or misrepresentation of, the simple method of treating wounds. Further on, he says: "Novelty is not always progress, and unfortunately many novelties in surgery at the present day seem to consist in departure from simplicity of treatment."

The so-called antiseptic method of treatment is held by some of its practitioners to be all but infallible. Indeed, if such an one hear of a case treated "antiseptically" where the issue was unhappy, he is apt to say that there must have been a flaw somewhere in the intricate process. On the other hand, the patient recovers; there the treatment was carried out in its entirety.

Mr. Davy gives us thirty-two cases of important operations without a death, and without any special antiseptic treatment having been adopted. No disciple of any school, however modern, can show better results.

I will now venture to point out how it is that Mr. Davy has been so successful in his hospital practice. Like practitioners of the so-called antiseptic method, Mr. Davy pays the most careful attention to his patients after operations; he does not leave them (as is often the case in hospital practice) too much to the care of house-surgeons, dressers,

and nurses. I speak now with all respect for house-surgeons, but it cannot be denied that they are not always competent to take entire charge of a patient during the critical phases which present themselves in the first few days after an operation. In my experience, there is something for the surgeon to suggest, or to see carried out, each time he sees his patient in the first week, no matter how often he comes. Now, this is just where the antiseptic surgeon, in my opinion, effects so much. He is continually seeing his patient. Nothing is left to an untrained assistant or to chance. His dresser is a picked man and is specially instructed. Nothing is neglected; for everything is done in order and under the surgeon's personal and watchful supervision. The time and labour which he gives to his patient meet their due reward.

Ambroise Paré, whom Mr. Davy quotes with much effect, used to say of his patient in simple faith: "I dressed him; God cured him." But I apprehend that Paré's watchful care did more for his patients than did his "balsame of boyled whelpes and wormes".

Without presuming to adduce statistics from the work of five or six short years of hospital practice, I would, nevertheless, venture to make a few remarks upon the dressing of wounds. I dislike poultices; sometimes they are applied so hot as to distress the patient considerably. At other times, they are little more than warm. They are always disagreeable and unwholesome. Often the wound is allowed to become chilled whilst a fresh poultice is to be applied. Moist warmth can, when necessary, be obtained in many better ways.

Sores, however foul, may be cleansed and kept absolutely sweet by the liberal use of sulphurous acid lotion, which is of far more value than the fashionable carbolic acid lotion. For the treatment of fresh wounds, nothing is better than dry lint: I have left it on a wound after a herniotomy for three weeks, and, at the end of that time, have found the wound represented by a healthy cicatrix.

As Mr. Davy reminds us, the wound is but a single element in the case, and I apprehend that, if a patient be carefully watched and subjected to well considered hygienic influences, Nature will repair it, unless the interference on the part of the surgeon be too officious.

## THE USE OF SPONGE-PADS IN EXCISION OF TUMOURS.

By W. WATSON CAMPBELL, M.D., F.R.C.P.E., Dunse.

IN THE *BRITISH MEDICAL JOURNAL* of October 21st, 1876, I observe a note on a case of amputation of the breast, in which it is stated that the wound was healed in seventy-two hours after operation. There is a suspicious reference to continued high pulse and a drop or two of pus, which makes me wish I heard more of this case; for it occurs to me that these are sufficient to give rise to a fear that the result may not have proved what Mr. Maunder expected. Mr. Maunder speaks of pads, and I have sometimes wondered that what are usually employed as such, viz., lint, tow, towels, etc., have not long ere this been superseded by something better—sponges. Short as the time of healing in this case is reported to be, it does not strike me as extraordinary, but merely what might be obtained in a great majority of cases were sponges used as pads. I have been for years in the habit of using sponge-pads in the excision of tumours, and the rule has been union by first intention. There may be one or two points in the method I adopt that are worthy of attention; and, even if these be not original, I hope I shall be excused for bringing them before the profession.

After excising a tumour, I pare the edges, if necessary, and do not hesitate to remove anything—such as fat—which might interfere with accurate apposition of the flaps and the margins of the wound. Before closing the wound, I wait until every drop of blood has ceased to flow; for I believe that even slight capillary oozing is sufficient to prevent primary healing, by keeping the internal and opposing surfaces separate. Having carefully applied the sutures, I press a sponge firmly over the place from which the tumour has been removed, so as to force out between the stitches any blood which may have escaped into the cavity during the sewing. I then lay a bit of dry soft linen or bleached cotton-cloth over the place, and over this apply a dry clean sponge of sufficient size to produce, when bound down, such an amount of pressure as will serve to keep the internal surfaces close together and prevent capillary hæmorrhage. The advantage of linen or cotton over lint is, that neither has fibres like those of lint, which cause it to stick into the edges of the wound, and give rise to trouble to the surgeon and uneasiness to the patient when it is removed. The sponge is light, soft, and elastic, and readily adapts itself to such irregularities as there may be in the cavity from which the tumour has been removed. A



bandage is put over all, wide enough and tight enough to effect all that is required. The time for removing the sponge and under-covering of linen or cotton may vary from twenty-four to forty-eight hours (never longer), and the removal must be effected so carefully as not to cause any dragging on the flaps. If the linen or cotton be found to adhere to any point of the wound, I prefer leaving it where it is, quite dry, to bathing or tearing it off, and a snip with the scissors is all that is needed for this. The linen is replaced by a clean bit, if all be found favourable, and the sponge is washed, wrung dry, and put on again, and left for two or three days, or even more, in order to make sure that the union is quite firm. The patient is kept in bed, and not allowed to move freely until the wound is healed. For three or four days, very meagre diet is allowed, and no stimulants in ordinary cases.

Ligatures, even of waxed silk, do not generally produce irritation, as will be shown in the following case, which I give in support of what I have said.

Three weeks ago, assisted by Dr. McWatt, I amputated the left breast for cancer. The patient was very stout and the gland large and embedded in fat, a considerable amount of which was removed after the tumour, because of infiltration and in order to admit of adjustment of the flaps. Seven waxed silk ligatures were applied, the edges were brought together with carbolised gut, and the wound was dressed in the way described above. On the second morning, while removing the dressing for the first time, and just as I was finishing, the patient suddenly started aside, and thus caused the forcible separation of the linen from the axillary angle of the wound to which it was adhering. About a teaspoonful of blood followed, and I feared that mischief might be the result of this irritation. Next day, when I called, I found she had had a rigor after I left, and, on removing the dressing, I observed a faint blush over the inner half of the wound. I reapplied the dressing, and, in anticipation of erysipelas, prescribed twenty grains of sulpho-carbolate of soda every six hours. Although there was a faint blush over part of the wound, Dr. McWatt, who was present when I removed the dressing, thought it looked like healing by first intention; and everything about the case, at this stage, certainly afforded more reason for saying that it *had* done so than was found in that reported by Mr. Maunders at the same period after operation. Two days later, the linen cloth next the wound was damp, and, on removing the dressing and carefully examining the cicatrix, I found it healed and firm, save for about the third of an inch. To prevent reopening, I supported the flaps on each side of this unclosed spot with strips of adhesive plaster. A little thin pus continued to pass for a few days, but gave no trouble. Five ligatures have come away through the firmly closed edges without a drop of pus accompanying or following any of these, and the remaining two are clean and dry, though gentle traction is applied to each daily. The patient's pulse never rose above 90, and she has never had the slightest pain, except when she gave the start when I was removing the first dressing.

This is not a selected case, but I give it simply because it is the last I have had. I may further remark that, in minor amputations, I invariably place a bit of sponge right over the stump, and have hitherto found it of much service.

### CURE OF AN "ULCERATED LEG" OF FULLY THIRTEEN YEARS' STANDING.

By JOHN COCHRANE, L.R.C.P. Ed., and L.R.C.S. Ed.,  
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THE following case, the details of which I now present, is a somewhat interesting one. When I commenced practice here (Colmonell), in April last, I was called to see a male pauper who had suffered for a long time from an ulcerated leg. On proceeding to the patient's house, I discovered the following state of matters. The leg affected was the right one; and about four inches above the ankle, on the outside of the limb, there was an ulcer, measuring five inches in length and three inches in breadth. The smell from it was something most horrible, and, on examining it more closely, I found the wound gangrenous. The limb, from the knee down to the ankle, was very much swollen and the skin dark-coloured in appearance. The foot also was much swollen and the ankle cedematous. The ulcer also discharged continually much watery fluid. Its edges were exceedingly hard and the surface of a slaty-blue colour. Its depth was fully an inch, and conjoined with these signs was much pain in the affected limb. The pain at times was so severe as to prevent the man from getting sleep at night. The history of the case, obtained from the man and his wife, was as follows. Fully thirteen years ago, the limb was attacked with an inflammatory form of

disease; the symptoms, as described to me, warranting the supposition that it was erysipelas, the result of an injury to the leg. Since then, numerous little ulcers had appeared at different parts of the limb, and had disappeared under treatment, such as it was. Then a large ulcer formed on the anterior aspect of the limb, and, healing at one spot, spread over the limb till it settled in the part which was now affected. At the same time, the leg began to swell and become dropsical. For some years, the man continued to work at his employment, which was a laborious one; and then, when he found the leg becoming worse, he applied for relief from the parochial board. When I saw him for the first time, his leg was as hard as a stone from the knee to the ankle. He said that this hardness had been present for a considerable period, and the limb now was almost three times the circumference of the neighbouring leg and much heavier. There were a few varicose dilatations of the veins near the knee; but what struck me most was this same *hardness* of the tissues and the blackened appearance of the skin. The skin also, from the knee downwards, was affected with psoriasis. This later, no doubt, was due to the continual irritation from the nasty discharges coming from the ulcerated surface, and from the venous obstruction, which also undoubtedly was the cause of the oedema of the ankle and foot. Possibly, also, the condition of the blood was at fault, owing to the neglect which had been shown to the treatment of the ulcer.

The man had never been put under suitable treatment, and all sorts of absurd applications had been made to the ulcer on the recommendation of friends. At one time continual poulticing was used, which, he said, however, never failed to remove the pain for a time. Then my predecessor here, the late Mr. Wilson, who acted on the homœopathic system, prescribed some drops, which, of course, did no good either to relieve pain or help the curing of the sore leg. At one time, also, the man was sent to Glasgow Infirmary at the expense of the parish, on the suggestion of a member of the board and with the concurrence of the parish doctor. There he was told by one of the surgeons that it was a hopeless case; and, seeing that there was little prospect of a cure, he left the infirmary and returned here again, to be informed by the parish doctor "that there was no chance of effecting a cure", and that, even if it were possible, it would be dangerous to attempt it. Such is the history of the above case, and I believe the man's statements to be true; inasmuch as he enjoys the character of being a truthful and honest workman, and most of the inhabitants of the district know well how he has suffered so long.

I diagnosed the case to be one of what is called "diffuse hypertrophy of the skin and subcutaneous connective tissue", or "pachydermia". The ulcer was merely a concomitant.

The Treatment I adopted, and it has been so far successful as to reduce the size of the leg, cure the ulcer, remove the dropsical swelling of the foot and ankle, and improve the condition of the skin, lasted over a considerable length of time, nearly five months. First of all, I determined to attack the ulcer and bring it into a healthy condition. I used at the commencement, as a dressing, a diluted solution of permanganate of potash applied on lint, which at first was changed twice in the day. After a few trials of this, I resolved to apply a solution of carbolic acid, in the proportion of about two drachms of the acid to eight ounces of water, along with a little glycerine. This soon told on the sore, as it soon commenced to granulate and new skin to form gradually. Very hot weather setting it, I discontinued the watery solution of carbolic acid, and used instead an oily solution of the acid mixed with glycerine, and this did remarkably well. Occasionally, slight venous oozing appeared at the surface of the ulcer and around its edges; but this was counteracted by the application of a solution of zinc sulphate. Soon the wound began to fill up, the hard edges to disappear, and, after a protracted period of over several months' duration, the ulcer entirely healed over. But from the very commencement, I adopted the measure of bandaging the limb from the foot up to the knee, and this was done daily, and often twice in the day, with few exceptions. The man was also kept as much as possible in the recumbent position, with the foot slightly elevated and the limb laid on a pillow. I also gave him internally iodide of potassium in five-grain doses, combined with bichloride of mercury, one-twelfth of a grain, in compound decoction of sarsaparilla, and the compound tinctures of cinchona and of cardamoms. This he continued to take from the first, and occasionally mild symptoms of iodism were produced, but the dose was easily stopped. This dose of the above drugs he took thrice daily, and at the same time occasional doses of saline purgatives were given to keep the bowels regular. When the ulcer healed, I used, for the psoriasis, the inunction over the affected skin of, first, carbolic acid in solution with oil and glycerine. Then I afterwards tried benzoated oxide of zinc ointment, the nitrate of mercury ointment diluted with lard, etc., and latterly used nothing, but simply bandaged the leg. The leg is now almost as well as its neigh-

hour as regards thickness, colour of skin, etc.; but there is still present some psoriasis, which, I hope, will soon disappear.

The above case is interesting, as showing how rest, conjoined with other auxiliaries, may cure what at first sight might appear to be an incurable disease.

## CLINICAL MEMORANDA.

### THE CONDITION OF THE COSTAL CARTILAGES IN PHTHISIS.

IN the very able review of the fifth volume of Ziemssen's *Cyclopadia of the Practice of Medicine*, written evidently by an accurate observer, attention is directed to the statement of Freund with reference to the ossification of the cartilages of the first ribs, which is mentioned and, to a great extent, adopted by Rühle in his article on Pulmonary Consumption.

On referring to the article by Hertz in the same volume, I find that Hertz states (I quote from page 359) that he has not been able to convince himself of the actual occurrence of the primary changes in the cartilage as specified by Freund in cases of emphysema; and I should be glad to learn what is the experience of other pathologists in this country as to the condition of the cartilages in phthisis.

In statements of this kind, it is desirable to know whether a large number of observations will support what may seem to some to be a very plausible and pretty theory; but pretty theories are generally to be viewed with more than ordinary suspicion, as their very prettiness is apt to produce a strong bias in the observation of facts. My experience as pathologist to the Hospital for Consumption at Brompton is that, in phthisis, the cartilages are invariably extremely soft, and, during the past year, I can state that there has not been a single occasion in which the saw has been used in opening the thorax; indeed, the greatest caution has to be observed in the use of the knife, in order to avoid wounding the lung beneath, the cartilages being very easily severed. My attention was very soon directed to this point, and that before I was aware of Freund's observations, because this experience was in strong contrast with that which I derived in a large metropolitan hospital to which I was attached for many years, where the saw was frequently called into requisition by the condition of the cartilages. In that, as in other general hospitals, cases of phthisis are generally rejected, although, of course, not completely excluded.

If this appear to be a rough way of answering the question, I can only say that it appears to me to be a convincing answer; but I should be glad to know whether other pathologists are of my opinion in the matter.

REGINALD E. THOMPSON, M.D., Senior Assistant-Physician to the Hospital for Consumption, Brompton.

## SURGICAL MEMORANDA.

### AURAL THERAPEUTICS.

IN connection with the report of Dr. Purves's aural *clinique* at Guy's, and with Dr. A. Morison's memorandum in the *JOURNAL* for December 23rd, I wish to add one or two notes from my experience.

Dr. Purves, alluding to attempts at overcoming adhesions of the membrana tympani to the ossicles or promontory, says "he uses Siegle's exhausting speculum, which, though originally intended as a means of diagnosis, answers very well for forcing the membrane to and fro when used with forcible suction". I have used Siegle's speculum for a long time almost entirely as a means of treatment; as a mode of diagnosis, it is far less efficient. In order to obtain the advantage of both these purposes, I had the largest sized speculum usually supplied with Brunton's auriscope closed at the broad end with a piece of plain glass fixed at the same angle as the reflector, and at the side of the speculum a hole was made and a piece of tubing with a mouth-piece attached.

A Siegle's speculum was thus provided, which could be adapted to the body of Brunton's auriscope, and, by making the patient perform Valsalva's method at the same time that suction was used, considerable outward movement of the membrana tympani was produced and distinctly visible.

This adaptation of Siegle's speculum differs from Dr. Morison's in not requiring a separate Brunton's apparatus, and, being made of vulcanite, is very light and handy.

Dr. Purves alludes to an improvement in the aural speculum by cut-

ting out a piece at the side. I do not know whether Dr. Purves regards this as a novelty; but, in the *JOURNAL* for July 4th, 1874, there is a paper and woodcut of a speculum I suggested, with an aperture at the side for the use of instruments to the membrana tympani, etc., and adapted to Brunton's auriscope. At that time, I used a speculum cut away at the side, like an anal speculum; but, as I found the tragus or soft parts of the ear projected into the aperture and obstructed the view, I preferred the form depicted in the *JOURNAL* for the purpose of local applications, etc., to the ear. Both forms I now find useful; the one with the aperture is best for caustic applications, and that with the piece cut out for the use of instruments, probe, etc.

I showed Messrs. Weiss and Sons, Strand, a pattern of these specula some time ago, and they said they had not seen anything like them; but, on a recent visit to their premises, I saw that they had made several in vulcanite from my pattern.

Messrs. Wood and Co., Manchester, have made the originals for me. F. M. PIERCE, M.D., L.R.C.P.L., Manchester Ear Institution.

## REPORTS

OF

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### HOSPITAL NOTES.

LONDON HOSPITAL: DR. HUGHLINGS JACKSON'S CLINIQUE.

*Syphilitic Brain-Disease.*—In a man, aged 29, this diagnosis was made on account of a "random succession" of nervous symptoms, though no history of syphilis could be obtained. The importance of such a "random succession" or "random association" of nervous symptoms, in forming such diagnosis, was strongly insisted upon. The patient had, first, numbness of the left arm and left hemiplegia; then impaired mental condition (delusions and partial imbecility); afterwards, paralysis of the left third nerve; and, finally, right hemiplegia and aphasia. Although aphasic, he could utter "Yes" and "No"; these are the most automatic words, and are often retained. Indeed "Yes" and "No" are, Dr. Jackson remarked, in effect, propositions, whatever their philological origin may be. Since the patient's admission, he has become able to utter a proposition but little above these in automatic character, viz., "Thank you". It is well known that oaths (deeply automatic with some people) may be uttered by aphasic patients under excitement when they cannot be spoken. This patient, however, could not only utter the phrase "Thank you", but said it when told. He has no optic neuritis; and, if this generally occur in such cases, it is not that a syphilitic growth as such produces it, but only as a glioma or as any other "foreign body" would. It is important to examine frequently for the onset of neuritis, which may occur at any time in such a case. The outcome of the diagnosis was treatment by mercury, and the patient has been taking one grain of hydrargyrum cum creta thrice daily; he is very much better in his general condition, is less imbecile; his speech is a trifle better; but he has still complete ptosis, and is still in danger. Since this note was made, the patient has not improved: he is now having mercurial inunction. Dr. Hughlings Jackson remarked that he had known paralysis of an ocular motor nerve to completely disappear in a patient who had, as the necropsy showed, cancer of the base of the skull—a recovery he could scarcely have believed possible under the circumstances.

*Hemiplegia: Thrombosis.*—A man, aged 69, when driving his omnibus eighteen months ago, suddenly went giddy, did drove on for some distance. He was assisted to his home, did not lose consciousness, but got right hemiplegia. Some months afterwards, he had necrosis of the great toes of both feet. From the deliberate onset of the hemiplegia, from the age, and atheromatous state of the vessels, Dr. Jackson presumed a thrombosis in a small branch of the middle cerebral artery, and thought a similar local plugging of arteries in the feet to be probable. There was no albumen in the urine. The man recovered from the paralysis, except for some slight weakness of the right arm. We are not warranted in inferring that the recovery is dependent upon restoration of cerebral circulation by anastomoses of other vessels—(1) because vessels in the corpus striatum have scarcely any anastomoses; (2) because, in some cases of patients who have recovered and afterwards died, Dr. Hughlings Jackson has found local lesion persisting. Recovery is, he thinks, brought about by other parts of the centre becoming sufficient for limb-movements. Certainly, recovery goes so far



in some of these cases that the patient considers himself well, and appears to move his limbs properly; but it is probable that the limbs are really weakened so far that they will not bear long continued exertion. If *hemorrhage* had occurred in the case before us, there would most likely have been loss of consciousness at the onset of the hemiplegia. Yet plugging by embolism, if sudden and if occurring in a large vessel, is not easily to be distinguished from hemorrhage in its symptoms. If hemiplegia came on suddenly with deep loss of consciousness, even in a young person having valvular disease, the cerebral lesion might be sudden plugging of the middle cerebral artery, or it might be hemorrhage from an aneurism of that artery. On the other hand, the hemiplegia might come on "deliberately", as it did in thrombosis, and still be due to embolism; and occur, without obscuration of consciousness, in a young person with valvular disease. In such a case, the embolism, probably, did not at first plug the vessel completely, but only after clotting of blood upon it; in other words, there was probably a mixed thrombotic and embolic process.

*Delirium*.—Dr. Hughlings Jackson thinks that far too much importance is attached to the occurrence of delirium as a sign of acute primary brain-disease; that it is, for example, really of very little value towards the diagnosis of cerebral or cerebellar abscess, or of meningitis, in patients who have ear-disease. Far better signs are non-mental symptoms, such as severe headache and alterations of pulse. If it were possible to consider delirium alone, it would, he thought, point more strongly to pyæmia occurring with the ear-disease; he believed that some cases of recovery from an acute illness with ear-disease, thought to be cerebral disease on account of delirium, were really cases of slight pyæmia.

*Optic Neuritis following Aphasia*.—A man, aged 39, who had had aphasia and right hemiplegia, but who had for some months recovered, was readmitted with double optic neuritis and severe headache; subsequently, he had two epileptiform seizures. It was remarked that optic neuritis rarely accompanies complete aphasia, and rarely follows it; the reason being partly that aphasia is generally due to local softening or to local hemorrhage, conditions which very seldom give rise to optic neuritis. Dr. Hughlings Jackson had never seen double optic neuritis with local softening; but Dr. Broadbent had reported one such case. Dr. Jackson had, however, seen optic neuritis where there was no local change discovered in the brain of any kind, and no renal disease. Optic neuritis very rarely indeed followed clot, but Dr. Jackson had seen it in some cases. Having regard to the "random succession" of symptoms in the case before us, Dr. Hughlings Jackson considered there was syphilitic disease of the brain.

*Unilateral Neuritis*.—Dr. Hughlings Jackson drew attention to some remarks of his on optic neuritis, in the *BRITISH MEDICAL JOURNAL* Hospital Reports for March 28th, 1868. Instead of saying, as he then did, that optic neuritis from tumour or other kind of "coarse" disease of the brain was *double*, he would now say that it was *almost always* double. He has reported two cases in which tumour of one cerebral hemisphere has been attended by optic neuritis of but one eye, on the side opposite to the diseased half of the brain.

*On Some Warnings of Epileptic Seizures*.—An epileptic patient is now attending whose fits begin by objects appearing to her as if becoming larger. Allied to this, is the warning sensation of some epileptics that objects "come nearer"; or that the walls of the room seem to come closer to them. More rarely, things seem to go further off. It is important to note such warnings for practical purposes, as in slight cases of epilepsy the diagnosis from hysteria is not always easy. Hysterical women rarely have such precise warnings of their paroxysms. To say that the illusion is owing to an abnormal mental state, is no explanation, or not one of medical value. The warnings depend, Dr. Jackson thinks, on the occurrence of the paroxysmal discharge in such a place that it first of all alters accommodation, for patients with permanent paresis of the ciliary muscle see objects smaller; one patient said that, in reading, the letters "dwindled". People see things smaller after the instillation of atropine, and the reverse after Calabar bean. A distinguished anatomist observed that, at the instant of waking, things in the bedroom appear nearer; and this Dr. Jackson has since remarked. On waking, the pupils dilate; but of what further occurs in the eyes, and of how the illusion is produced, Dr. Jackson did not know. Such facts are of importance as bearing on Bain's doctrine of the "out-going current"; probably an excited state of ocular motor centres accounted for "swelling of space" in De Quincey's opium-dreams. It may be suggested that some of the peculiarities of the delirium of belladonna poisoning are due, not solely to the morbid cerebral conditions induced by the drug, but also to the altered state of the accommodation. Dr. Fraser has recorded (*London Hospital Reports*, vol. 3) a case of belladonna poisoning; and, among other symptoms, the patient said things seemed a long way off, which is equivalent to appearing smaller.

*Neuralgia: Relief from Strychnia*.—In a case of persistent facial neuralgia in a woman, aged 60, who had suffered for nearly three years, marked relief was given by strychnia, after the failure of phosphorus, chloral, gelseminum, and valerian. She had some time before suffered from severe neuralgia, and said that then she was cured by strychnia. It may be noted that the patient had been subject to sick headache in early life, and had had rheumatic fever. Anstie has pointed out that many patients, subject to sick headache (migraine), later in life have facial neuralgia.

*Gouty Arthritis: Local Galvanism*.—A man, having the joints of the hand enlarged and disfigured, as the result of gout, and who had taken lithia and colchicum without benefit, had obtained much improvement in his hand-condition from the use of the continuous current, applied for ten minutes daily to the hands, when placed in salt and water. Dr. Althaus has expressed himself very strongly in favour of this method of treating deformities which rheumatic gout produces. Dr. Hughlings Jackson said that this was the first time he had employed this treatment in such a case; but, so far as one case went, the results were very good. He was induced to try the remedy by hearing of great improvement in a somewhat similar case in Dr. Buzzard's practice.

## NOTES ON BOOKS.

*FREY'S Compendium of Histology*, translated from the German by G. R. CUTTER, Smith, Elder, and Co. London. 1876. In the space of two hundred and sixty-three pages, we have here a short compendium of the most essential facts of histology from one of its most accomplished masters, illustrated by two hundred and eight excellent drawings. Such a book is simply invaluable to the student, and will be a great boon to those who, long past their studentship, still desire to keep themselves informed of the results of modern research on the structure of the tissues, and the meaning and application of the terms which the modern pathologist and physician adopts with his nomenclature in the description of disease. The most modern views are here clearly and concisely stated and appreciated, and there is little doubt that this much needed handbook will become a class-book of almost universal use.

MESSRS. LIPPINCOTT, Philadelphia, send us the first part of an excellent *Atlas of Skin-Diseases*, by Dr. L. A. DUHRING, the artists being Messrs. Faber and Morris. We can thus far speak very highly both of the author's and artists' parts; the plates represent varieties of eczema, lupus, and psoriasis, and are unusually good.

THE first volume of a large surgical work—*Leçons de Clinique Chirurgicale*—by M. PÉAN, Surgeon to the Saint-Louis Hospital, has lately been published by G. Baillière and Co. of Paris. The volume contains fifteen lectures on clinical surgery delivered at the Hospital during 1874 and 1875; observations collected in the author's hospital wards; statistics of the operations of gastrotomy performed by him from 1864 to 1875; and considerations on forcipressure. The eminence which M. Péan enjoys as a bold and successful operator will give an additional interest to his work; to which we hope to be able to return at greater length on a future occasion.

THE sixteenth part of BENTLEY and TRIMEN'S *Medicinal Plants* has just appeared, and maintains the character of its predecessors. The plants illustrated are, pomegranate, ferula galbanifera, Achillea millefolium, lactuca virosa, rhubarb, aristolochia serpentaria, and rice.

WE have received from Mr. F. Vacher, Medical Officer of Birkenhead, a reprint of an excellent paper on *Public Baths* (Spottiswoode and Co.), which he read at the Sheffield meeting of our Association, and of which we printed an abstract. He subsequently published the full text of his paper in the *Sanitary Record* for October 7th; and, in the present pamphlet form, it will be found extremely useful to those who are concerned in the management or desire to promote the erection of these highly sanitary institutions.

*Forms of Bills* by Dr. ANGUS MACKINTOSH of Chesterfield, also by Dr. BLAND of Macclesfield. (J. Wood of Macclesfield, and J. Barker of Chesterfield.) The forms of bills or notices first mentioned were issued by the sanitary authority of the Chesterfield Union at the instance of Dr. Mackintosh, by whom they were prepared. The first is a caution against drinking unboiled and unfiltered well-water; the second and fourth contain directions against doing certain acts which may spread, prolong, or intensify fever and scarlet fever; the fifth refers to small-pox. The next two are headed "Sanitary Precau-



tions", and were published in the *Times* in 1875, and in the *Sanitary Record* in the same year. There are also letters on the intermittent system of water-supply, burial boards, and on disinfection and isolation. The forms may prove of some assistance to those medical officers of health who prefer copying to drawing up notices themselves, and the same may be said of Dr. Blain's notice for placarding a district when a zymotic disease is epidemic.

*Handy Medical Visiting List.* By ALFRED SHEEN, M.D. (W. Lewis, Cardiff.) This is a handy little book, containing twenty-four leaves on the well known Letts's system of a visiting list, but without dates, so that it may be used for a small or large number of patients; and, in addition, a calendar, an obstetric table, an alcohol table, an useful table of therapeutical equivalents, of the strength of hypodermic remedies, and of the average weight and measurement of organs. The price is small and the book also, so that it can be placed in an ordinary pocket-book, and will be found useful. Forms are also sold by the same publisher for recording the temperature, pulse, the number of respirations, and the specific gravity of the urine, either daily or more often, as the case may require, as well as space for the "signs and symptoms, daily progress, and treatment", of patients.

## REPORTS OF SOCIETIES.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 9TH, 1877.

R. P. COTTON, M.D., Vice-President, in the Chair.

LARGE PENDULOUS TUMOUR FROM THE CHEEK, REMOVED BY OPERATION. BY EDWARD LAW HUSSEY, F.R.C.S.

A GENTLEMAN, aged 73, was the subject of a parotid tumour, of unusually large size, which had been growing slowly for more than fifty years, and hung down far below the jaw, and rested on the clavicle and shoulder. He had taken the opinion of a medical practitioner in an early stage of the growth; but never consulted one in subsequent years, notwithstanding the increase of the incumbrance and the attending deformity. In May last, he had a sudden and alarming attack of hæmorrhage from the superficial vessels; and, after this, the tumour was observed to be growing more rapidly. After a consultation with Mr. Prescott Hewett, who concurred in the opinion given of the practicability of the operation, and advised the performance without delay, the tumour was removed by Mr. Hussey, and the patient recovered perfectly. The operation was attended with profuse and almost fatal hæmorrhage. Great difficulty was experienced in securing the large arteries in the pedicle. It was found to be impossible before operating to compress the pedicle in any way so as to arrest the hæmorrhage which was to be expected upon division of the vessels. In general structures, the tumour seemed to be of the usual nature of parotid tumours; the older part was of firmer consistence and of darker colour. It was free from cartilage, and from purulent or malignant deposit. The weight was three pounds avoirdupois. The preparation had not been preserved for minute examination.

Dr. BLACK had known the gentleman, whose case was related, forty years, and had observed the progressive growth of the tumour. He had seen him about six weeks ago; he appeared to be in perfect health and good spirits, and it could scarcely be perceived that he had been the subject of operation.—Dr. BEGLEY had known him thirty years, and had conversed with the late Dr. Kidd of Oxford on the subject of his tumour. He always refused operation, and took no care to conceal the disfigurement.—Mr. HUSSEY had not been able to meet with another case in which a patient so old had recovered in similar circumstances. The loss of blood was alarming. The tumour was painless; and chloroform was given only for the purpose of calming the patient.

A CASE OF SCLEREMA ADULTORUM. BY GEORGE GASKOIN, M.R.C.S.ENG.

The case was that of a married woman, aged 40, who experienced a mental shock when six months advanced in pregnancy, and was subsequently affected with certain stains or patches on various parts of the body, which had generally the character of morphea. They were large in size; and, in shade of colour, mostly dark, but varying from dark red to yellowish white, with much diversity of tint. These patches were extremely hard, and were the seat of pain, anæsthesia, pruritus, and constriction. A certain proportion of them were marked by a notable subsidence of the central portion of the patch. There was besides a temporary œdema and condition of tenderness. The stains were far more numerous on the lower than on the upper limbs. The region of the head and face was alone exempt. The constitutional

symptoms were not strongly marked, but assimilated to those of anæmia. During the course of the past year, these patches had gradually disappeared, and had given place to an intense staining of the general integument so as to rival the colour of a negro, but by no means with the same uniformity of tint, nor with the same universality in its distribution. It affected the greater part of the body, but more the lower half and the limbs. It was attended by a condition of sclerema, which answered generally to the sclerema of Thirlial, *i.e.*, the limbs were like logs of wood, they set firm, and were cold like those of a corpse, and the skin was tightly stretched, with a glossy shining superficialities. The sclerema affected not only the integument, but the muscles, aponeuroses, and tendons; the joints were painful and contracted, and there was also pain in the bones. The origin of the complaint seemed to be tubercular. Certain knots or aggregations of tissue were found in the deep and superficial tissues. These ran a certain course, which anticipated the tension and the hardness; in the process of their development, a blackness was added to the skin. The sclerema appeared to be of a mobile character. It was true that all the limbs were affected, and much of symmetry was discerned; but, in point of time, there was inequality; the invasion of these parts was not simultaneous. This disorder seemed influenced by damp and cold; it appeared to have something in common with the well-known arthritic affections. The urine was clouded with lithates. The catamenia were scanty and abnormal; in other respects, the functions were not disturbed, and the patient's strength, after three years' illness, was not materially impaired.

Mr. WILLIAM SEDGWICK had seen the case of sclerema described by Mr. Gaskoin. There appeared to be a common relation as to origin between sclerema, keloid, and some other cutaneous affections. The pigmentation reminded one of the pigmentary deposits observed in connection with the puerperal state around the nipples, on the forehead, etc. The disease appeared to be connected with some defect of nutrition.—Dr. TILBURY FOX said that the clinical history of such cases had been well described; he believed that about a hundred had been recorded. The point of interest was the identity of morphea nigra with scleroderma; this had been well made out by Dr. Hilton Fagge. He wished that more had been said on the treatment. Seeing that the disease was influenced by the general health, it might be expected that measures intended to improve this might be useful.—Dr. BLACK said that there was no physiological knowledge to guide one in the treatment of the disease. It was, however, very useful to record the case for future instruction.—Mr. GASKOIN briefly replied.

### ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

WEDNESDAY, DECEMBER 20TH, 1876.

S. CARTWRIGHT, F.R.C.S., President, in the Chair.

*On the Position of Dental Surgery in its Social and Ethical Aspects.*—Mr. HAMILTON S. CARTWRIGHT read a paper on this subject. He commenced by saying that, in the dental branch of the profession, even those most highly qualified professionally and socially had to suffer, to a certain extent, in public estimation by the action of many who, terming themselves "dentists", could lay no claim to education, or, in too many cases, to even a knowledge of the ordinary rules and obligations of professional life. He thought that, in some degree, the educated members of the profession were responsible for this if they permitted themselves, without protest, to be associated by the public in any way with those guilty of such practices as those to which he was about to allude; and, as a matter of fact, there had never before been any combination to disavow them and to teach the world that they were repudiated by all right-feeling persons in the profession. Alluding to the fact that it is only a few years since a special qualification was granted by the College of Surgeons to those who, through various circumstances, could not become Members or Fellows of that institution, he said that he trusted that the existence of the dental licentiatehip would never prevent those entering the profession from aspiring to higher diplomas, for the position of dental surgery would stand or fall by the educational acquirements of its members; whilst he thought that any attempt to place the special qualification above all others could only be viewed as a step in retrogression, as it would prevent men from aspiring to the higher and inclusive diplomas, the possession of which was as necessary in the treatment of the teeth as in that of the eye, ear, or other organs. He then considered some of those means of obtaining notoriety which, adopted for the most part by unqualified persons, discredited dental surgery. He divided them into public and private, saying that the most control could be exercised over the former, which were represented by mendacious advertisements and puffs of the



most disgraceful kind, the hideous progeny of empiricism and quackery. Mentioning the success he had met with in communicating with the editors of some well-known journals in relation to advertisements appearing in their columns, he spoke of the satisfactory results which had attended the efforts of their medical brethren who, some years since, combined to discover a means of arresting an infamous class of advertisements which sullied the columns of the best known journals, and he suggested that the means adopted by them of making an appeal to the editors might soon put a stop to practices which were such *opprobria* to the profession, disgracing it, and deceiving grossly a too credulous public. The practice of bringing forward names by means of washes, powders, and catchpenny pamphlets, he considered little less objectionable, and those resorting to them could only be looked upon as tradesmen, not as professional men. In alluding to private means of gaining notoriety, he specially stigmatised one which, he was grieved to say, was not uncommon, viz., the dastardly practice of those who endeavour to appreciate themselves by depreciating the work of others; whilst he spoke with reprobation of the means employed by some of touting amongst medical men for practice, by impudently forcing their acquaintance upon them by obtruding upon them specimens of their skill, or by disseminating amongst them *brochures*, the contents of which serve only to support a showy binding, which is a background to some name unknown to fame. In proposing the formation of a code of ethics, he said that there was no desire in that Association to impose any laws on any but themselves; although he thought that it would be for the benefit of the profession generally if the subject of ethics were fully considered. There were many questions in relation to fees which were undecided, as also to the conduct of consultations, of which he trusted there would be many amongst the Fellows of the Society, as they tended towards the benefit of science, patient and practitioner alike. Remarking that the advertising empiric was chiefly recruited from the lower class of mechanical workmen, he ventilated the question of the expediency of a partial separation of mechanical from surgical dentistry, whereby the surgeon would superintend the adjustment of the instrument as he does a truss or a spinal support, leaving its actual supply to the mechanician, a means which would by no means nullify a perfect knowledge of mechanics on his part. In speaking of the frequent use of anaesthetics in dental surgery, he alluded to the recklessness with which they were administered by many unqualified persons, saying that they should be given only under careful medical supervision, as, even in the case of nitrous oxide gas, which did not often kill outright, there were many constitutional conditions in which its administration led to serious subsequent mischief, the cause of which was too often unsuspected by patient and practitioner. Finally, he proposed the careful consideration of the topics he had broached by a Committee appointed for the purpose; and, concluding by proving the high claims which dental surgery, practised as it should be practised by qualified practitioners, had to an equal position with other specialities in medicine, he exhorted all in the Society to do their utmost to assert the position of their speciality in its claims to professional consideration and social standing.—The discussion which followed was animated, Messrs. Cartwright, C. Heath, Napier, Edgelow, Winterbottom, Gregson, Salter, and Grigg taking part in it. Mr. Napier, Mr. Heath, and Mr. Gregson laid especial stress upon the necessity that every surgeon, whatever branch he practised, should be a good mechanician, pointing out the fact that all the most useful instruments had been invented by the surgeon, whose idea had been only carried out by the mechanist. The subject of advertising was thoroughly discussed; and many disgraceful instances of fraud perpetrated by those owing their notoriety to such practices were noticed. Finally, it was resolved to reconsider the subject again fully, and to take means to arrest, as far as possible, unprofessional practices, and especially that system of public advertisement which disgraces the name of dental surgery.

#### MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, DECEMBER 6TH, 1876.

H. D. LITTLEJOHN, M.D., Vice-President, in the Chair.

*Strangulated Inguinal Hernia.*—Mr. BELL showed a young lad, on whom he had operated for a large strangulated inguinal hernia. The hernia had existed for a year, but had always until lately been reducible. The ordinary operation for relief of the stricture was performed. When the bowel was returned, it was noticed that the sac was large, with a large opening as well. He was unwilling to leave the patient in this state; and he, therefore, with antiseptic precautions, ligatured the neck of the sac with catgut. The wound healed perfectly; and now the impulse was less on the injured than on the sound side. The sac had

atrophied. The truss, of course, was still worn, and would be so for a year. The ligature, he believed, had set up as much inflammation as to mat all the structures at the opening together. A little of the cellular tissue came away as slough, and there was also some scrotal inflammation. He hoped the sac would be obliterated. In conclusion, he believed that this operation, from the adoption of antiseptic precautions, would be still more common.—In reply to a question from Dr. LITTLEJOHN, Mr. BELL explained that the ligature did not come away, but remained in the tissues.

*Osteitis Deformans.*—Mr. ANNANDALE showed nine photographs of the patient suffering from the disease osteitis deformans, whose case had been described by Sir James Paget at the Royal Medical and Chirurgical Society in London, on November 14th. He had lately been in Cumberland seeing this patient with Dr. Hamilton; and, believing the Society would be interested in a short account of the case, he had obtained Sir James Paget's permission to give it. The photographs, for which he was indebted to Dr. Hamilton, showed the great hypertrophy of the bones of the skull. This in no way interfered with the patient's intelligence, although it caused great deformity. This disease had existed for twenty years. What he had been consulted about was malignant disease of the bones of the forearm, accidental, and unconnected with the above malady.—The CHAIRMAN asked whether this *osteitis deformans* was really a new disease, or only an old disease with a new name.—Mr. ANNANDALE explained that it was an entirely new disease, first described and named by Paget.

*Foreign Body in the Oesophagus.*—Mr. ANNANDALE showed a halfpenny which had been lodged in the oesophagus of a child, five years old, for three or four weeks. It had been passed down while the child was playing with it. There were pain and difficulty in swallowing for the first three days, but, after that, she went about as usual. The mother, however, was anxious, and came to hospital to consult him. After chloroform was administered, he passed a metallic bougie down the oesophagus as far as a few inches below the top of the sternum, but could find no trace of the coin. He then passed an ordinary oesophagus bougie down to the cardiac end of the stomach. As he withdrew it, he felt it catch something. By bringing up the bougie with a wriggling motion, and by the help of his finger at the back of the pharynx, he got the coin out. The result was thus satisfactory, although accidental. In connection with this case, he showed the newest forceps for such attempts, which he had just got from Paris. They could reach down to the stomach, whereas ordinary ones only went as far as the sternum. They were modifications of what he had seen his grand-mother use for picking up objects from the floor.

*Removal of Tongue by the Thermic Cautey.*—Mr. ANNANDALE showed two entire tongues removed by the new thermal cautey. It had the advantage of simplicity over the ordinary galvano-caustic apparatus. The powerful galvanic battery in connection with the latter was constantly going out of order; but this new machine was both simple and efficacious. He had brought the tongues to show that they could be removed by it easily and without hæmorrhage. He had also used it in ulcerated mammæ and epitheliomatous tumours. Where, in such cases, there had been great pain prior to the operation, he had found that, after the operation, complete freedom from pain was got. This had also been the experience of Dr. Matthews Duncan.

*Excision of the Head of the Femur.*—Mr. ANNANDALE showed preparations illustrating excision of the head of the femur. In the first specimen, the members would see that the entire cartilage was gone. Although there was no external opening, he had yet, on the principle that incision should be made where there was suppurative, cut down on the joint. He found that there was a hole through into the pelvis. Unless, therefore, he had excised the head of the bone, pus would have gone on burrowing in the pelvis. By the operation, however, a free drain was given. The second specimen illustrated that form of the disease which began in the epiphysis between the head and neck of the femur, and where there often was necrosis. There was no external abscess, but yet he had found the head of the bone separated, and part of the neck loose. No treatment short of excision would have sufficed here. The necrosed part would have acted as a foreign body, and caused supuration, and perhaps death.

*Dislocation of the Patella.*—Dr. FINLAY showed a cast illustrating an edgewise dislocation of the patella, the result of direct violence. The dislocation had been easily reduced when the patient was put under the influence of chloroform. The house-surgeon, Mr. Daruty, had promptly taken the cast when Dr. Finlay was sent for.

*Typhoid Fever in Linlithgow.*—Dr. HUNTER of Linlithgow read notes of an epidemic of typhoid fever, with special reference to its treatment by antipyretics. The epidemic broke out in the small village of Linlithgow Bridge. There was a great deficiency of sanitary arrangements—surface-drainage only and bad water-supply. The epi-



demic, however, began in the best house in the village, where the drainage, etc., were very good. Thence, by means of milk and water-supply, it spread throughout the village until 68 were affected, of whom 10 per cent. died. The treatment was by antipyretics, viz., quinine in large doses. As to the first case, he believed the contagion was obtained in Edinburgh, and did not arise *de novo*. Details of some of the cases were given, and the effect of quinine in markedly reducing the temperature shown by carefully drawn-up charts.—The CHAIRMAN had listened with much pleasure to Dr. Hunter's admirable paper; and could bear record to the accuracy and diligence with which Dr. Hunter had collected his facts. In his visits to the village, nothing struck him more than that in every house there were charts for accurate record. Wherever he went, he found Dr. Hunter and his assistant anxious to treat the outbreak in a scientific manner. No expense or toil was spared; and he felt sure that no epidemic had ever been treated more successfully. He could vouch for the accuracy of the whole paper as to its description of the village itself and the history of the epidemic. He was quite at a loss to account for its beginning. He was astonished to find, on inspection, that, in this dirty hamlet, the outbreak began in the only house of the nature of a villa in the place. The sanitary arrangements of this house were almost without a flaw, unless that the ventilation was somewhat defective. When he visited Braefarm, he found churning going on within a foot and a half of a bed with two adults in it affected with the fever. When he entered the room, the peculiar febrile odour was so marked that he felt compelled to retreat at once. Dr. Hunter had given it as his belief that the first case contracted the disease in Edinburgh. He doubted whether this could be the case; because, although typhoid fever was endemic in Edinburgh, it did not act as a focus of contagion. If Dr. Hunter's view were true, then typhoid fever might spread over the whole of Scotland, as Linlithgow Bridge stood on one of its principal highways.—Mr. D. J. HAMILTON had noticed that Dr. Hunter, in the beginning of his paper, had raised the question of the origin of typhoid fever. It was generally supposed that it was propagated by water, or by actual contact of contagious material from dejecta. He had the opportunity last summer of examining an interesting case, where the mode of origin was different. A family with three children came to reside in a house near Edinburgh, which had been unoccupied for some time. The three children were put into a room in the sunk-flat, and a fireplace fitted up there. After being there for three weeks, they all took typhoid fever. Two died; and on one of these he made a *post mortem* examination. It came out afterwards that there was an old drain there with an entrance but no exit, so that it was a *cul-de-sac*. The sewage accordingly soaked through the walls; and, therefore, when a fireplace was made, emanations filled the room. The water used was the ordinary water supplied to the town. On making the *post mortem* examination of the one child, he found that, although the illness had lasted only for three days, there was yet a lesion of a diphtheritic nature of the solitary glands and Peyer's patches; all the small intestine was covered with an ash-grey slough, giving a cast of the shed epithelium beneath. He examined it microscopically to see if he could discover any of the spores described by Klein. He found numbers apparently similar to them, greenish in colour, and certainly, from their mode of division, vegetable in nature. He could not say whether or not the green colour was due to bile-staining. He placed some of these in Pasteur's fluid, and kept it at a suitable temperature in order to cultivate the fungus if possible; but he only got a copious growth of *aspergillus niger*. He asked Dr. Hunter if any microscopic examination of the water had been made. It was strange that, as a rule, such waters, while examined chemically, were not examined microscopically. At Breslau, the water of a well, famous for giving typhoid fever, was examined microscopically by Cohn, and found to contain a peculiar fungus, *crenothrix polysporon*, whose spores were said by Klein to be the same as those found by him. In typhoid fever, he had always found in the intestine plenty of micrococci; but, whether these were specific or only due to decomposition, he could not say. Microscopically, therefore, the appearance found was the same as in diphtheria.—Dr. GAIRDNER (Glasgow) concurred in the praise awarded to the paper. It was an admirable sketch of an epidemic; and, whatever might be the ultimate view as to the use of salicylic acid and salicylate of soda, yet no one could say but that Dr. Hunter's treatment was most scientific. He had nothing to contribute except the record of one case. In this instance, the temperature had risen in two distinct relapses after it had gone down. Thus, on the forty-first day, when it was 104.4 deg., he gave the salicylate of soda. The temperature was taken every three hours, and showed a rapid depression by about 5 deg. in a few hours. Unfortunately, so much disturbance in stomach and bowels followed that, when the temperature again rose, no drug was given, and it fell spontaneously. He had given salicylate of soda and salicin in a number of febrile cases, such as febrile phthisis,

remittent fever, and so on. The opinion he had formed, and which he wished to put as an hypothesis, was that he was not so sure that, in reducing the temperature, they did so by removing the cause. In acute rheumatism, he thought a strong case had been made out in favour of salicylic acid; but, after reading Dr. MacLagan's paper in the *Lancet*, he had gone back to salicin. On looking over his experience, he felt sure that, by such antipyretics, he would have done good and saved life where death was caused by the high temperature. In view of the excruciating torture a patient suffered, he thought such drugs as salicin and salicylic acid much better than the cold bath. He believed, in conclusion, that the whole subject was not in a settled state, but needed working out.—Dr. C. MUIRHEAD described the different plans he had adopted during his tenure of the fever-wards to reduce temperature, showing the practical difficulties in the way of doing so by means of baths. He described his method of reducing temperature by quinine in large doses, and the periods of giving it so as best to reduce the temperature. As they had found the temperature highest from 7 to 9 P.M., they gave the quinine at 3 P.M. They then found the temperature gradually falling until 7 or 8 A.M. next morning. It then rose till 3 P.M. of the same day; but they did not repeat the quinine again until twenty-four hours after the large dose. If this first dose did not reduce the temperature, they then gave forty grains in twenty-four hours. During the interval, they gave digitalis either as powder, tincture, or digitaline granules. They found it had little effect. He had tried the salicylate of quinine, but found no advantage in it over quinine. It was difficult to dissolve; was as expensive as quinine; and, from its grittiness, disagreeable to take. Salicylic acid the patients had refused to take. He had used it combined with borax. Salicylate of soda had been also given. He had, however, found nothing so good as quinine. Salicin had been tried, but with no marked result; and the patients objected to it. The quinine should be given in solution, not in powder. It is taken in the latter form abroad; but it was an expensive and foolish way. The stomach could not supply enough acid to dissolve it; and, therefore, so much was wasted. He could not, in conclusion, sit down without expressing his admiration at the time, labour, and skill displayed by Dr. Hunter, notwithstanding his arduous duties elsewhere.—Dr. G. W. BALFOUR said that, while the expectant and antipyretic treatment had been discussed, yet one had been omitted, viz., the antiseptic. He had used it in many cases in the fever-wards before he had been supplanted by Dr. Muirhead, with the result of no cases rising above a temperature of 103 deg., if it was begun early enough. He hardly remembered a case of death; and in only one case did the temperature rise above 103 deg. In one case recently, he had given sulphurous acid in large doses. This has, as one result, the effect of converting the fecor of the stools, and thus obviating any forgetfulness on the part of the nurse. Usually, under this method, the temperature falls, or, at least, does not rise. But in this instance it rose to 104 deg.; and he, therefore, ordered an antipyretic. On the day following, the temperature had fallen; and he, therefore, asked what antipyretic had been employed. To his delight, he found that none had been used, as the reduction had happened shortly after he left. As to the mode of origin of the first case, he was inclined to believe that it originated *de novo*, and was not picked up in Edinburgh. He had noted the origin in a case of diphtheria, which, as Mr. Hamilton had shown, was analogous to typhoid. On paying a visit to a farm-house in a certain village, one of the healthiest in Scotland, where there never was any typhoid fever nor diphtheria, he found that a case of diphtheria had occurred. No reason could be given for it; there was no midden-stead, nothing but the free breath of heaven. It turned out, however, that, in the house where it happened, an Irishman's, the dirtiest in the village, the farmer had introduced sinks communicating with a manure-tank; and thus an evident explanation could be given. He wished, in conclusion, to express the pleasure he had in listening to the paper.—Dr. MUIRHEAD said that, from a mortality of 10 per cent. spread over nineteen years, the rate under antipyretics had fallen to 3 per cent.—Dr. FOULIS had been struck by the absence of any allusion to the treatment of pyrexia after surgical operations. Dr. Hunter's remarks on the treatment by quinine, salicylic acid, salicin, etc., had reference to typhoid fever. But there was a whole host of cases, viz., pneumonia, pyæmia, etc., in which the question might be asked, How would quinine, etc., act? Would they act on the cause of the high temperature, or on the nerve-centres, whose alteration caused increase? He believed that their whole good depended on the answer given. He had lately two cases of high temperature, viz., one in a case of puerperal fever, where the temperature was 110 deg. Fahr. before death, and, indeed, may have gone higher. In the second case, the high temperature followed the tapping of an ovarian cyst. Salicylate of soda in fifteen-grain doses caused vomiting; and, therefore, Dr. Keith removed the cause of the high temperature, viz., a suppurat-



ing ovarian cyst, and the temperature fell. In reading Liebermeister's cases, he was struck by his saying that the object was not to treat the disease, but to reduce the high temperature, and thus allow the heart and brain of the patient to carry him through the disease. It was, therefore, essential to know whether the drugs given reduced the temperature by acting on the specific poison or on the nerve-centres.—Dr. HUNTER thanked the members for their kind criticisms. He would only reply to Mr. Hamilton's question. No microscopical examination of the water was made. The chemical examination was conducted by Drs. Stevenson Macadam and Falconer King. As to the reduction of the temperature for the purpose of allowing the heart, etc., to carry the patient through, they should remember that it had been found by experiments on dogs that, when the temperature of the blood was greatly increased, such changes took place in the liver, brain, etc., that life could not be carried on.

## REPORTS AND ANALYSES

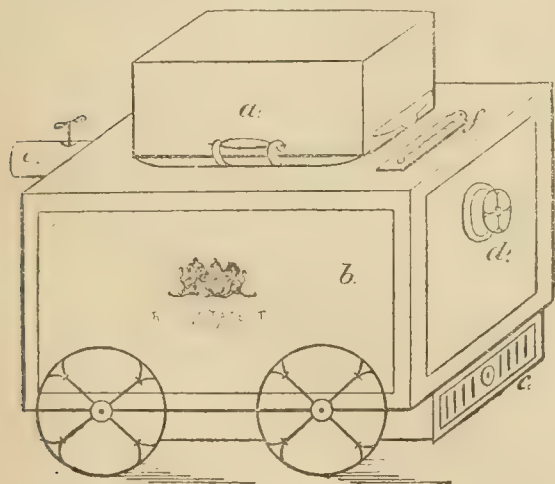
AND

## DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

### PORTABLE DISINFECTING CHEST.

At the meeting of the Association at Sheffield in August last, Dr. Charles Rogers of East Retford, Notts, exhibited a portable disinfecting chest, a sketch of which we append. It consists of—*a*. A wooden box, by which clothing, etc., can be brought from the sick room; *b*. Hot air disinfecting chest; *c*. Fireplace, which may be constructed to burn gas or ordinary fuel; *d*. Fresh air valve, by which noxious vapours, etc., may be forced into the chimney; *e*. Which may be connected with an ordinary flue; *f*. Thermometer.



The chest contains an outer and an inner casing of iron, round the bottom and four sides of which runs the flue. The fire-box is made removable when the required temperature, 220 to 240 deg., is reached, which is readily recognised by the thermometer, which is graduated up to 300 deg. Fahr. So soon as the above temperature is obtained, the fire is removed and a throttle-valve turned on in the flue, so as to prevent the heat from escaping.

The advantage which this chest offers is that, owing to running on wheels, it can be taken to the house where contagious disease exists, and can there be put in operation, or the infected clothing can be removed in the box, if the apparatus be stationary. In hospitals and workhouses, such an apparatus would be found specially useful; and in the latter places particularly, as it may be utilised for the destruction of lice, etc., in the clothing of casuals and dirty paupers frequently admitted into such places.

Not the least point about Dr. Rogers's chest is, that it can be provided at an expenditure of from £10 to £30, according to size. Altogether, we strongly commend this ingenious apparatus to the consideration of medical officers of health and to boards of guardians.

## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, JANUARY 13TH, 1877.

### BRITISH PHYSICIANS IN FRANCE.

THE public journals of this country are much occupied with the sudden discussion of the proposed Bill introduced into the French Assembly for the better regulation of the practice of medicine in France by foreign physicians. Naturally, our English journals are chiefly occupied in discussing this question as it affects British invalids and British physicians. The Paris correspondent of the *Pall Mall Gazette* called attention to the terms of this measure and to its probable effects, in language somewhat sharply expressing a fear which may possibly be exaggerated, but which is obviously not without some solid foundation, that it would have the effect of practically prohibiting, to a very large degree, a British physician, however highly qualified or however highly recommended by his capacity, character, and antecedents, from taking up practice in France; and that it would prevent the large colonies of English invalids who annually migrate to such places as Mentone, Nice, Pau, Cannes, Hyères, Biarritz, Eaux-Bonnes, and others, from continuing under English hands the treatment commenced by their physicians at home, and which is often intended to be resumed at another season on their return in the milder period of the year. Moreover, he discerned in the wording of the Bill, and in certain other indications of a changed temper in the Faculty, grounds for the belief that the Bill was intended to be restrictive of the privileges of practice hitherto accorded to foreign physicians.

No doubt, there were some strong reasons for entertaining such a view; and the great difficulty which has been recently experienced in obtaining permission to practise in France and in health resorts largely populated by English invalids, even when application has been made for highly qualified graduates of our best universities forced to select such climate from reasons of health, has for some time indicated a growing jealousy of foreign practitioners, or at least a growing tendency to interpose additional obstacles to their settling in practice on French soil.

The publication of this letter in the *Pall Mall Gazette*, however, and the strong impression which it produced on the public mind here, has led to a semi-official statement in the *Times* on behalf of the French Minister of Public Instruction, which somewhat modifies the position. The full text of the Bill, and the statement of reasons accompanying and explaining it, have been transmitted for publication here by telegraph. This statement of reasons is very detailed and long, occupying upwards of a column of the *Times*, which published it on Monday last, devoting another column to its discussion in a leading article, which indicated clearly how strongly such a law could be resented by the public here, and how urgent it is that this subject should be considered from other points of view than those in which the framers of the Bill appear thus far to have regarded it. Since then, the whole of the English press has joined in expressing a similar feeling.

The Bill, it is intimated, proceeds from the medical men who, being members of the French Assembly, have formed themselves into a committee, under the presidency of M. Laussedat, for the special discussion of measures desirable for advancing medical interests in the legislature.

This parentage gives the measure particular claims to our consideration, although it does not, of course, exempt it from criticism.

It appears that, in France, as in England, the public and the profession suffer a good deal from the proceedings of pretenders to medical knowledge, who shelter themselves under sham diplomas, and purchase degrees from American colleges of merely nominal standing, and of no legal authority on that continent. It is alleged that, under the pretext of possessing diplomas of this kind, various persons have obtained permission to practise as doctors in France, and are practising there to the detriment of the population and to the manifest injury and dishonour of the profession. The Bill proposes to remedy this by providing that henceforth the minister shall be deprived of the power which he now possesses of granting permission to practise; and that the sole condition shall be that of passing all the five examinations which constitute the "test-examinations of the doctorate".

Granting the reality and the serious character of the evil, we must confess that the proposed remedy appears to us to be beyond any possible requirements of the case. It is superfluous to point out that to require a physician who, from the nature of the circumstances, is commonly one who has been for many years in practice, to pass examinations in the whole range of collateral medical sciences in a foreign language, and from examiners accustomed only to the French textbooks and French nomenclature, is virtually to require him to go to school again for two or three years, although the terms of the Bill do not expressly require it. Such requirement is obviously superfluous, and must, in a great majority of cases, be oppressive, if not prohibitory. On the other hand, the powers already vested in the Minister and his Superior Council of Education are so extensive and paramount as to be adequate to meet any necessary caution. No graduate of any foreign university can practise until the Council has reported to the minister, and the minister has ascertained that his diploma is *bonâ fide* and adequate and his character good. It is strange enough that any abuses such as those described should have sprung up under such regulations. They can only have arisen from an undue relaxation, or a careless or designed disregard of them. At any rate, to afford the most ample protection to the public and the profession in France, it would seem to be sufficient to take proper guarantees that in future any applicants shall be the subject of a serious report by the university authorities associated with the Ministry of Public Instruction, and that no permission be accorded, except upon such a report duly *motivé*.

We have reason to believe, from communications which have reached us, that the committee of French medical deputies would be willing, in the further stages of the Bill, to modify it so as to require only the clinical and practical test-examinations of the holders of respectable foreign diplomas. That would, no doubt, materially lessen the objections to it; but we doubt whether this would satisfy the feeling of our people and our profession. We have been accustomed to afford a very hearty welcome to respectable French graduates desiring to settle on these shores, and we have not been accustomed, as it is the present fashion in France, to take the opinions of prefects or local authorities as to whether their services were required, but only to consider whether they had the needful personal and professional guarantees, and were under a necessity to use their talents on these shores rather than in their native country. Thus, to mention only the names of two Paris graduates (no longer with us) we received successively in London Dr. Henri Gueneau de Mussy, who followed here the fortunes of a distinguished family who once occupied the throne of France, and Dr. Deville, a prosecutor of the Faculty, whose republican sentiments procured his exile on the attainment of power by the Emperor Napoleon III. Dr. Henri Gueneau de Mussy, by his high acquirements and admirable personal qualities, won speedily for himself, not only a considerable practice, but a high place in the College of Physicians, and an enviable position in the esteem and affection of

his professional brethren. He left our country a few years since, universally regretted, and his departure was not allowed to take place without a striking public testimony of the affectionate regard of the most eminent of his brethren. Dr. Deville was almost immediately received into our medical schools, and recommenced here the duties of a public teacher of anatomy, in which he was highly skilled, as well as the practice of medicine. He founded at once a lucrative practice, in which he was prematurely arrested by fatal illness. At this moment, practice is open to every qualified foreign practitioner, and he would certainly be unmolested in it. Nevertheless, we are fain to confess that, since the law of 1858, and the failure, owing to other circumstances, of the Government Medical Reform Bill, foreign practitioners do at the present moment labour under a certain disadvantage, owing to their inability to register any foreign diploma of however high a character. This disability it was proposed to remedy by the Government Bill and by the Bill of the British Medical Association, which has been twice subsequently introduced into Parliament by our Medical Reform Committee. It remains, however, unremedied at this moment; and, although the disability is, for the purposes of civil practice, not a serious one to the holder of a respectable diploma, it has a certain legal gravity, and we shall have no right to complain of any partially restrictive action of the French Government until we have carried into effect our own good intentions. It is stated that M. Waddington is not averse to submit the whole subject to an international commission; and possibly the best solution of this question may in this way be attained, although it would seem easy for each nation to settle it, the French Government agreeing to make their assent to all such applications conditional on the report on the diplomas of the French Council of Education, and our Government reproducing in Parliament those clauses of the Bill relating to foreign degrees to which the General Medical Council and the British Medical Association gave their assent.

#### UNSEAWORTHY CREWS.

SOME weeks ago, a ship arrived in London with a sick sailor on board, who died the following day in his mother's house. The circumstances of the illness and death of this man were brought under the notice of the public on account of an allegation, which was brought against the captain of the ship, that the man had been ordered to work whilst he was unfit for duty, and that he had been improperly treated for the chronic dysentery from which he was suffering. It does not come within our sphere to discuss the merits of this particular case, nor to decide as to how far it is an exceptional one. The fact of the man dying immediately after his arrival in London, and the action taken by his relatives, were the means of its finding its way into the newspapers; but, if the unfortunate sailor had died a few weeks before the arrival of the ship, it is likely enough that nothing would have been heard of the matter.

The whole question of the relation of the captains of the merchant navy to their sick crew, which this case suggests, is one that well deserves consideration. Much has been done of late years to protect the sailor at sea; but the problem, how to secure due care for the sick with the protection of the captain from imposture, is one that is well nigh insoluble. No one who has not had an acquaintance with sailors and their diseases can understand the trials which a conscientious commander, anxious in the interests of his owners to make a good passage, has to undergo. A ship may sail from London, on a three or four months' voyage, with a crew of twelve or fourteen men, their number being so accurately proportioned to the work of the ship that one sick man will tell on her ability to carry sail to the best advantage. Before she has been a fortnight at sea, the captain finds he has two or three cases of venereal disease on his hands for the rest of the trip. In spite of treatment, carried on vigorously according to rules laid down in his "book", the probability is that one or more of them are partly



disabled by bubo for the rest of the time. In a foreign port, the crew are entitled to a day's leave with a month's pay. By the majority, the night is spent on shore in low haunts, specially adapted to entrap the unwary sailor; and the result is, too often, a few more cases of "disease". If the ship remain for some time trading in the tropics, some of the men, frequently those who are enfeebled by the sickness they have brought upon themselves, and perhaps still more by remedies with which it is met, become affected by disorders of the liver, fever, or dysentery, and are left behind in hospital. Their places are filled up by men from Sailors' Homes, who have many of them just recovered from severe attacks of climatic disease. A man may have apparently quite recovered from dysentery or liver-disease, but, when he gets to sea, exposure on the first cold stormy night may bring back his symptoms in all their severity. Any one who understands what the proper treatment of a disease like dysentery presupposes, and who knows the capabilities of a merchant ship, will understand the chances the poor man has of appropriate care. Meanwhile, the captain, who has to work his ship so often under disadvantages of this kind, is only too apt to look on all sickness from an uncompromising point of view; and a spirit of antagonism has not unlikely been fostered, and perhaps justified, by the attempts of skulkers who sham illness to escape disagreeable work. There are such men even amongst English sailors, although we must, in justice to our countrymen, testify that their number is proportionately small. It is only when the captain is a man of rare judgment and calmness that the rights due to his owners and to humanity can be well balanced. But, as the masters of ships are, on the average, neither better nor worse than other men, it is not to be wondered at that cases of individual hardship and even severity are of frequent occurrence. As a rule, in cases of alleged maltreatment, it will be found that the captain is in the right. As a class, masters of merchant ships act with consideration and kindness. But exceptional cases occur. We have heard of captains who boast that they could always keep their crew healthy by giving a man, who reported himself sick, a tumblerful of salt water the first day and two tumblerfuls the second, and seeing the dose swallowed; and it is needless to remark that a hard and fast line of this kind must sometimes lead to deplorable errors. As every day that a man is off duty his share of work is distributed amongst his messmates, it is not to be supposed that they will always treat him with much consideration, especially if the disease be of a chronic kind that does not confine a man to his bed, although it unfits him for hard duty. The only hope for the sick man is in the humanity and discretion of his captain; and in the very great majority of instances, in English ships, these are not found wanting. But there is a small minority of cases in which the sick man is given over to the tender mercies of an unfeeling, irritated, and despotic master; and for such a contingency the regulations in force in the merchant shipping do not give sufficient protection. The circumstances are of extreme difficulty. It is necessary that the captain's authority should be, as far as possible, inviolate; but the rate of pay which is considered equivalent for the responsible charge of the crew, ship, and cargo is not sufficient to command the services of a very high class of men; and this is especially the case in smaller ships, in which the captain's wages hardly equal those of a skilled mechanic.

If it were practicable to make it a rule that no ship should pass certain fixed ports near the track of the great ocean highways without medical inspection, and, if necessary, discharge of every man reported sick, it would in some cases mitigate much suffering, and occasionally prevent loss of life. It would be a great boon, for instance, to the sailor, suffering from tropical dysentery, that he should not pass the Cape of Good Hope without being sent on shore to hospital; or that, instead of having to undergo the exposure attendant on a passage through the Bay of Biscay and up the English Channel in winter, it were compulsory on the captain to land him at Lisbon.

In Glamorganshire, the rapid spread of canine madness is causing much alarm, six "mad dogs" having been shot in Cardiff within a few days.

IN consequence of Ash Wednesday following on the 14th of February, we believe the oration at the Royal College of Surgeons in memory of John Hunter will be delivered on the 13th.

THE meetings of the Medical Microscopical Society will for the future be held at the Century Club, 6, Pall Mall Place, commencing with the annual general meeting on the 19th instant, at 8 P.M.

MR. GLAISHER states that the total fall of rain during the month of December was 5.92 inches, and that there is no instance since 1815 when the fall in that month was so large.

A SPECIAL department for the treatment of Diseases of the Throat was, by a resolution of the Weekly Board of January 10th, established at St. George's Hospital; and Dr. Whiphram, one of the physicians, was appointed to take charge of it.

DR. ARTHUR EVERSHERD has been elected Physician to the Artists' Annuity Fund, at the last general meeting of the Fund. A highly eulogistic notice of Dr. Eversherd's works in dry-point and etching appeared in a recent number of the *Gazette des Beaux Arts*, together with engravings of two of the most recent of his highly finished plates.

M. DUCHAUSOY has submitted a project for the foundation of a Nursing Society to the *Société de Médecine Pratique*. The religious communities which, up to the present time, have fulfilled the mission of nursing the sick in France, are no longer found sufficient for the task; an additional reason is, that many families would prefer a lay nurse to one belonging to any religious community.

As an introduction to the discussion on Visceral Syphilis in the Pathological Society, the meeting on next Tuesday evening will be devoted to the exhibition of pathological specimens bearing on the subject by Mr. Jonathan Hutchinson, Dr. Clifford Allbutt, Dr. Greenfield, Dr. Gowers, Dr. Goodhart, and others. The microscopic specimens will be ready for inspection at 8 o'clock.

M. VERNEUIL, in presenting lately to the *Société de Chirurgie*, in the name of one of his old pupils, Dr. Fontan, a *brochure* on the *Treatment of Hemorrhoids by Forced Dilatation of the Sphincter Ani*, expressed the opinion that the records contained in this volume, like the facts which M. Verneuil himself has had occasion to collect, are of a nature to suppress henceforth all bloody operations for hæmorrhoids.

THE recent numbers of the *Progrès Médical* have contained a very interesting and careful analysis by M. Teinturier, based, apparently, upon the investigations of Dr. Pelikan of St. Petersburg on the physical and surgical history of that extraordinary sect of fanatics the Skoptzky of Russia, who practise sexual mutilation as their distinguishing rite. An article on the same subject, by Professor Hofmann, has also recently appeared in the *Wiener Medizinische Wochenschrift*.

THE Odontological Society may esteem itself fortunate in electing Mr. Cartwright as President for the coming year. His name will be an ample guarantee for the full discussion of reforms which many consider to be urgently called for in the constitution of this Society, which, in its oft-repeated refusal to insist upon the possession of even a minor qualification from those who seek admission to its portals, has seriously imperilled its claims to be considered representative of that which is most hopeful and respectable in the specialty of dental surgery.

#### A HINT TO THE LONDON SCHOOL-BOARD.

IN the large majority of cases, diarrhoea in children is due to improper feeding. Children of but a few weeks old are attempted to be brought up on farinaceous foods. Thousands of children are thus sacrificed annually in London alone. The introduction of a little elementary physiology, as a part of the education of the lower orders, by the

London School Board would probably save more lives than all the medicines eagerly sought after at our hospitals and dispensaries. In every instance, the cause of the diarrhoea should be carefully inquired into and, if possible, obviated. Astringents and aromatics are too frequently ordered without any attempt being made to ascertain the reason why the bowels are so irritable. Proper instructions as to food are of far more importance than prescribing medicine.

#### A ROYAL EXAMPLE.

THE high example set by Her Majesty the Queen in requesting that the whole of the members of her household should be vaccinated, and in authorising a publication of the fact, will have, it may be hoped, a salutary effect. Efficient revaccination after puberty is practically an unailing protection against small-pox. Mr. Francis Godrich of West Brompton mentions this week, that during his great experience, ranging now over half a century, and extending to many thousand cases, he has found in revaccination an unailing means of protecting the households under his care from the attack of small-pox epidemics. He mentions, also, opportunely, that in his large parochial district (excepting one case), all the cases of small-pox have occurred among the domestic servants of wealthy persons. This certainly points very clearly to the duty incumbent on every head of a household to follow the example publicly set by the Queen; and, seeing the painless and harmless nature of the act, and the vast misery and expenditure, and large mortality due to its neglect, we trust that revaccination will be universally employed. In that case, we need not fear that any epidemic of small-pox would assume important dimensions.

#### TYPHOID FEVER AT WHITE LODGE, RICHMOND.

RECENTLY, in noticing the illness of Prince Adolphus of Teck, we mentioned that another sample of water from Sidmouth Spring in Richmond Park was to be forwarded by Dr. Wadd to Professor Frankland for analysis. It was duly sent, with the result that no cause for the typhoid fever of Prince Adolphus was discovered therein. Nor can anything wrong be so far found with the drainage of White Lodge. Her Royal Highness Princess Mary of Teck has consequently been advised to apply to the Metropolitan Board of Works or to the Privy Council, to have the sanitary condition of the Lodge thoroughly examined. The other children of Her Royal Highness were sent from White Lodge to Kensington when Prince Adolphus was taken ill; and we hear that Prince George of Teck has since had a feverish attack, with diarrhoea.

#### NON-PAUPER SMALL-POX PATIENTS.

DR. DUDFIELD refers, in his last Monthly Report, to the case of non-pauper small-pox patients. His memorandum is useful as setting forth the latest views of the Local Government Board on the subject. It appears that a man named Stacey, who was living in a room with another man, was attacked with the disease, and was refused removal to the hospital of the Asylums Board by the relieving officer, because he had a few shillings in his pocket and would be in receipt of 14s. a week from his sick-club. Thereupon Dr. Dudfield was applied to, and ordered him to be taken to the Small-pox Hospital at Highgate, where he was received on payment of £3:3. The clerk to the vestry therefore wrote to the clerk to the guardians, requesting the guardians to take this case into their consideration, as it was a type of many others. The guardians have replied that they cannot provide for cases of infectious diseases which occur in the non-pauper class, and that "the Metropolitan Asylums Board intimates that the Poor-law hospitals are for paupers only". Mr. Jebb writes also on this subject that the "medical superintendents of the hospitals would only be justified in admitting any person not a pauper, if they should be satisfied that a refusal to admit such person might be attended with dangerous results". Dr. Dudfield pointed out to his vestry, on the correspondence being read, that, under the forty-second clause of the Poor-law Amendment Act, the managers of the metropolitan asylums have power to admit non-paupers into their hospitals, but that, as it is evident they will not

avail themselves of it, the vestry should arrange for admission of such cases into the Highgate Hospital. This was agreed to, but certainly does not meet the case, as was shown by this hospital having since been filled, so that for a short time cases could not be admitted anywhere—at least, so we are informed. This want can be met at a comparatively trifling cost, after the first outlay is incurred, as was proved by the experiment of the conversion of Mrs. Gladstone's convalescent home into a small-pox hospital for reception of paying classes in 1871. It is true that a duplication of hospitals must lead to unnecessary expenditure; but it is better that unnecessary sums should be spent than that sufficient means of isolation for infectious diseases should not be provided.

#### SMALL-POX IN LONDON.

ACCORDING to the Registrar-General's return, the deaths from small-pox, which had been 75, 97, and 75 in the three preceding weeks, rose last week to 116, the highest weekly number during the present epidemic; 45 were certified as unvaccinated, 40 as vaccinated, and in the remaining 31 cases the medical certificates did not furnish any information as to vaccination. The 116 fatal cases included 47 in the Metropolitan Asylum Hospitals at Homerton, Stockwell, and Hampstead, 5 in the Highgate Small-pox Hospital, 2 in the North Street Infirmary (Poplar), one in an ambulance, and one in the House of Correction; the remaining 60, or 52 per cent. of the total cases, occurred in private dwellings. After distributing the hospital cases, it appears that 15 of the deceased small-pox patients had resided in Lambeth, 11 in Poplar and Bow, 10 in Hackney, 9 in Battersea, 9 in Stepney, 6 in Camberwell, 6 in Kensington, 6 in Southwark, and 5 in St. Pancras; in all (excluding 2 Acton cases, and 2 of which the previous residence was unknown), 15 belonged to the West, 22 to the North, 2 to the Central, 27 to the East, and 46 to the South groups of Districts. The fatal cases showed a marked increase in East and South London. At a special meeting of the Metropolitan Asylums Managers on Saturday, it was stated that, although the managers had provided 881 beds for small-pox patients at the hospitals under their management, they had been obliged to refuse nearly 200 other applications for admission during the seven days. It was determined to take premises in Dod Street, Limehouse, at a rental of £2,000, for a year, on the condition that a clause in the agreement, indemnifying the proprietors of the premises against any legal proceedings that might be taken against them, should be expunged. These premises, it was stated, could be fitted up for the purposes of an hospital in a fortnight at a cost of £1,800.

#### THE RATE OF MORTALITY IN METROPOLITAN SANITARY DISTRICTS.

THE annual report on the sanitary condition of Islington during 1875 has only just been issued, but the delay in its publication fails to rob it of all interest. The medical officer of health, Dr. C. M. Tidy, calculates the rate of mortality of the district at 19.0 per 1,000; and, as the average death-rate in the whole of London in the year was 23.7, and in England and Wales 22.8 (not 20.3, as stated by Dr. Tidy), it becomes interesting to consider the claims of Islington to the favourable sanitary condition that may be inferred from so low a death-rate, in a densely populated urban district. The parish of Islington has an area of rather more than three thousand acres; and, as Dr. Tidy estimated the population in the middle of 1875 at 244,680, the density averaged nearly 80 persons per acre, whereas the average density in London was 46. The Registrar-General's annual summary shows that 4,818 deaths were registered in Islington in 1875; but Dr. Tidy makes a deduction of 162 for the deaths of non-residents, occurring principally, we may presume, in the City of London Workhouse, the Holborn Infirmary, the Great Northern Hospital, and in the Fever and Small-pox Hospitals. It should always be remembered, however, that corrections for deaths occurring out of the districts in which the deceased had resided is a debtor and creditor operation, and Dr. Tidy, while deducting deaths of non-residents, makes no attempt to ascertain and add the



number of deaths of Islington residents occurring in hospitals, lunatic asylums, and imbecile asylums situated outside Islington. It is not difficult to prove how material an increase in the death-rate of Islington would be made if this correction had been thoroughly carried out. Dr. Tidy's one-sided correction naturally gives fallacious results. In London, during 1875, no fewer than 6.5 per cent. of the total deaths were recorded in hospitals; and, assuming that Islington contributed her quota to these hospital deaths, which there is no reason to doubt, 302 deaths of Islingtonians must have occurred in the metropolitan hospitals during the year. If to the number we add 40 deaths in the two county lunatic asylums, 32 in the imbecile asylums, and 20 in the Metropolitan Asylum Board hospitals, we shall arrive at 404 as an approximation of the probable number of residents of Islington whose deaths are recorded elsewhere. Thus, instead of deducting 162 from the deaths registered in Islington, it appears that, on the balance, an addition of 242 should have been made in order correctly to calculate the rate of mortality. Thus corrected, the rate of mortality in Islington becomes 20.6, instead of 19.0 as calculated by Dr. Tidy. Although the deaths of Islington residents in their outlying institutions have here been only roughly estimated, there can be but little doubt that the higher figure is nearer to the true death-rate in Islington during 1875. The sanitary authority of Islington could, without difficulty, get returns of deaths of parishioners dying in their institutions, and we shall be glad to see that, in future, Dr. Tidy, and other metropolitan officers of health, will endeavour in their annual reports to give nearer approximations to the true death-rates of these districts. Apart from the disturbing influence of institution deaths, it is also well to bear in mind that the deaths of town residents occurring in rural districts almost invariably exceed those of rural residents occurring in urban districts.

#### BIRTHS AND DEATHS IN LONDON.

LAST week, 2,819 births and 1,507 deaths were registered in London, the former having been 200 above and the latter 243 below the average numbers. The annual death-rate from all causes was 22 per 1,000. One hundred and sixteen persons died from small-pox, 28 from measles, 25 from scarlet fever, 12 from diphtheria, 32 from whooping-cough, 22 from different forms of fever, and 18 from diarrhoea; thus to the seven principal diseases of the zymotic class 253 deaths were referred, against 237 and 235 in the two preceding weeks.

#### THE WATER-SUPPLY OF THE METROPOLIS.

IT would appear from Dr. Frankland's reports upon the result of his analysis of the waters supplied to the metropolis during December, that the inhabitants of London are just now, in consequence of the flooding of the Thames, exposed to all the risks which arise from the use of impure water. He states, however, that this polluted water can be chemically purified by filtration through spongy iron. All householders would consequently do well to procure at once a filter for domestic use. Dr. Frankland's report states that, taking unity to represent the amount of organic impurity (on this occasion) in a given volume of the Kent Company's water, the proportional amount in an equal quantity of water supplied by each of the other metropolitan companies was: New River 3.1, East London 4.0, Lambeth 6.2, West Middlesex 6.7, Chelsea 7.0, Grand Junction 7.6, and Southwark 9.5. The Thames was in high flood during the greater part of December, and the water delivered by the five companies deriving their supply from this source was "utterly unfit for domestic use", in consequence of its large proportion of "polluting organic matter". The West Middlesex alone of these five companies delivered efficiently filtered water, whereas the four other waters were more or less turbid when drawn from the mains; all the Thames waters were, however, "loaded with organic impurities of the most disgusting origin". An analysis of a sample of the Grand Junction Company's water, after filtration through a spongy iron filter which had been in constant use for more than a year, showed that nine-tenths of the organic matter, and more than one half of the hardness, had been removed from the water. The

water supplied by the New River and East London Companies, principally from the River Lea, showed less pollution than the Thames water; the proportion of organic matter in the New River Company's water was, however, nearly three times greater than in November. The Kent Company's deep well-water, on the other hand, was entirely unaffected by the heavy rains, and was even purer in December than in the preceding months. Dr. Hill, the medical officer of health for Birmingham, reports that the water supplied to that town was slightly turbid, and contained a larger proportion of organic matter than in recent months, probably caused by the heavy rains. Dr. Mills of the Andersonian University reports that the Loch Katrine water supplied to Glasgow was of a pale yellow brown colour, was slightly ferruginous, and showed traces of suspended fibrous matter.

#### MILITIA BARRACKS.

BOARDS, colleges, official authorities, and all that genus of corporate existences which have neither souls to be saved nor bodies to be punished, are notoriously bad landlords; for, although it is absolutely necessary that a great number of things must be done by committee, it should never be forgotten that the best of all committees is a committee of one; and really actively working committees will usually be practically directed by the hardest working and most clear-headed working member of it. This digressive reflection leads us to observe that we are not surprised to find that among the most disgraceful buildings in Bethnal Green are premises of which the responsible holding lies between the county and the War Office. It is not long since barracks universally were among the most discreditable habitations in the country. A considerable amount of moral and economical remonstrance, however, aroused the authorities some years since to the costly folly of housing so expensive a human product as a trained soldier under conditions fertile in consumption and zymotic disease; and, after a good deal of costly blundering, of which the most fearful examples are to be found in India, the soldiers of our regular army are, except in some parts of London, generally very healthily housed. The militia barracks in Globe Street are, however, not much worse, we believe, than militia quarters in a good many parts of the country; but militiamen are not so costly as regulars, and perhaps their claims to be housed in premises which do not require to be "cleaned, whitewashed, and repaired throughout" by magistrate's order, to make them fit for human occupation, may for the present hardly be considered sufficiently urgent. If the militiamen, however, should think otherwise, it seems that the local medical officers of health can do very little to help them, as Secretaries of State are little amenable to legal process of any sort.

#### DEATH FROM CHLORAL.

THE death of Dr. Mercer of Beverley, an amiable and promising member of his profession, from an overdose of chloral, which we last week reported, is another casualty due to this drug to be added to a long and rapidly lengthening list of similar casualties which have been placed on record. In reviewing some of these casualties, we have been struck by the act that, while in all of them the responsibility of chloral for the fatal result has been amply proved, in many of them the evidence that an overdose had been taken has been defective. It is not to be lost sight of, that the weight of scientific opinion inclines to the view that chloral, when taken continuously for some time even in moderate amounts, exercises a paralyzing influence over the vaso-motor nervous system, and leads to failure of the heart's action. The latter effect may occur suddenly, without any serious warning; and it seems not improbable, therefore, that, in some cases in which it has been assumed that an excessive quantity of the drug had been taken because death supervened, the assumption has been groundless, as well as the suspicion sometimes built upon it that suicide had been intended because an excessive quantity had been taken. In these cases, it may have been that the ordinary dose, often taken with impunity—nay, with benefit—had been adhered to, but that the cumulative weak-

ness which its often repeated action had induced abruptly ended in the stoppage of vital processes. One lesson with reference to chloral has been enforced by many painful examples, and that is, that great danger attends its indiscreet or habitual use. It ought never to be taken but under medical advice; and no medical man ought to prescribe it for himself save under very exceptional circumstances, or take it frequently or continuously without the guidance and control of another medical man.

#### PATHOLOGICAL SOCIETY OF LONDON.

THE following is a list of the officers of Council elected for the present year. *President*: Charles Murchison, M.D., F.R.S. *Vice-Presidents*: Wilson Fox, M.D., F.R.S.; E. Headlam Greenhow, M.D., F.R.S.; Charles J. Hare, M.D.; Walter Moxon, M.D.; Thomas Bryant; G. W. Callender, F.R.S.; Thomas Smith; T. Spencer Wells. *Treasurer*: John W. Hulke. *Secretaries*: R. Douglas Powell, M.D.; W. W. Wagstaffe. *Council*: William Adams; Marcus Beck; Edward Belamy; Henry T. Butlin; William Cayley, M.D.; Dyce Duckworth, M.D.; Robert Farquharson, M.D.; Rickman J. Godlee; James F. Goodhart, M.D.; T. Henry Green, M.D.; W. S. Greenfield, M.D.; T. Carr Jackson; Howard Marsh; Henry Morris; Arthur T. Norton; Henry Power; Charles H. Ralfe, M.D.; P. H. Pye-Smith, M.D.; John C. Thorowgood, M.D.; C. Theodore Williams, M.D.

#### CLINICAL SOCIETY OF LONDON.

THE following is the house list of officers for the year 1877. The gentlemen whose names are marked with an asterisk (\*) did not hold the same office during the preceding year. *President*: \*George W. Callender, F.R.S. *Vice-Presidents*: \*Herbert Davies, M.D.; Charles Murchison, M.D., LL.D., F.R.S.; Henry Thompson, M.D.; \*Richard Barwell; Thomas Bryant; Christopher Heath. *Treasurer*: E. Headlam Greenhow, M.D., F.R.S. *Council*: H. Charlton Bastian, M.D., F.R.S.; \*George Buchanan, M.D.; Andrew Clark, M.D.; Dyce Duckworth, M.D.; C. Hilton Fagge, M.D.; \*Thomas H. Green, M.D.; J. Braxton Hicks, M.D., F.R.S.; \*A. J. Pollock, M.D.; Reginald Southey, M.D.; \*C. Theodore Williams, M.D.; William H. Brace, M.D.; \*Frederick J. Gant; J. W. Haward; \*William Mac Cormac; \*Arthur B. R. Myers; Michael W. Rice, M.D.; James Rouse; Edgcombe Venning; J. Soelberg Wells. *Honorary Secretaries*: William Cayley, M.D.; Thomas P. Pick.

#### OBSTETRICAL SOCIETY OF LONDON.

THE following were elected as officers for 1877 on Wednesday, Jan. 3rd. *Honorary President*: Arthur Farre, M.D., F.R.S. *President*: \*Charles West, M.D. *Vice-Presidents*: \*James H. Aveling, M.D.; \*James Braithwaite, M.D. (Leeds); William Frederick Cleveland, M.D.; William Newman, M.D. (Stamford); William Squire, M.D.; \*Alfred Wiltshire, M.D. *Treasurer*: G. C. P. Murray, M.D. *Honorary Secretaries*: A. W. Edis, M.D.; \*John Williams, M.D. *Honorary Librarian*: \*John B. Potter, M.D. *Other Members of Council*: \*John S. Bartrum, F.R.C.S. (Bath); William F. Butt, L.R.C.P.; \*Frederick H. Daly, M.D.; Alfred L. Galabin, M.A., M.D.; \*Frederick H. Gervis; Clement Godson, M.D.; William C. Grigg, M.D.; Thomas C. Hayes, M.D.; \*William C. Hoffmeister, M.D. (Cowes); \*William Hope, M.D.; William N. Price, M.R.C.S. (Leeds); \*John Randall, M.D.; George Roper, M.D.; H. Cooper Rose, M.D.; Thomas Taylor, F.R.C.S. (Birmingham); \*J. Ashburton Thompson, M.D.; John Thorburn, M.D. (Manchester); J. Lucas Worship (Sevenoaks). Those gentlemen to whose names an asterisk is prefixed were not on the Council, or did not fill the same office last year.

#### THE HARVEIAN SOCIETY.

THIS Society held its annual meeting and *conversazione* on Thursday evening last, at its rooms in Tichborne Street. The treasurer's report was satisfactory; and the report of the Council showed that the number of members was increasing, and that the papers read were of more than average merit. The retiring President, Dr. Frederick Cock, then

read his address. He alluded to the loss the Society had, during the last year, experienced by death. He then referred to the recent legislation to control vivisection, pointing out its obstructive character; after which, he reviewed the present course of medical study, having a good word for the old and now nearly obsolete apprenticeships. He finished by glancing at the present position of the profession, and said that self-respect would ever command the respect of others. A vote of thanks was proposed by Mr. W. Adams and seconded by Dr. Sedgwick; after which, followed the usual votes of thanks to the office-bearers. There was a fair attendance. One marked feature of the *conversazione* of the Harveian Society is its exhibition of works of art by members of the profession. There were oil-paintings, water-colour drawings, and etchings by Sir Henry Thompson; Drs. Buzzard, Blandford, and Gilbert Smith; Messrs. Prescott Hewett, Seymour Haden, Lennox Browne, Evershed, Propert, and Orrock. Amongst them, were works of much merit. Some fine paintings by well-known artists were lent by Dr. Farquharson. A new form of lustre ware, of original design and novel material, was exhibited by Dr. Reginald Thompson. The show of instruments by Pratt, Arnold and Sons, Meyer and Meltzer, and Krohne and Sesemann, was good. Some beautiful microscopic slides were shown by Mr. Collins and Mr. Wheeler. The officers and Council proposed for election by the outgoing Council (see JOURNAL of December 30th) were elected.

#### MEDICAL TEACHERS' ASSOCIATION.

At a meeting of the Council of the Medical Teachers' Association, held on Friday, January 5th, 1877, it was resolved: "That, in consequence of the lamented deaths of the President of the Association, Mr. Campbell De Morgan, and of the Treasurer, Dr. Sibson, the Council think it desirable that a general meeting of the Association should be held on the third Friday in November of the present year, for the purpose of electing officers to fill the vacant posts and to transact other business."

#### HAVERSTOCK HILL AND MALDEN ROAD PROVIDENT DISPENSARY.

THE above dispensary has so much increased in its numbers, nearly four thousand families now belonging to it, that it was decided to elect two medical officers in the place of the late Mr. Heelas, thus making the number up to four on the medical staff. It was also decided at a general meeting, that the election would be by voting papers, so that all governors, including ladies, might have an opportunity of voting without personal attendance. Out of the one hundred and nine papers sent out, eighty-eight were returned, resulting in the election from seven candidates of Messrs. Batterbury and Heelas (the latter, brother of the late medical officer). This important institution is a great benefit to the working classes in this populous neighbourhood. About four thousand families have joined, each paying a small monthly sum to entitle them to prompt medical attendance, and a choice of either of the four medical men. The kindly feelings of the "free members" towards their late medical man, Mr. Heelas, is shown by their subscribing together and presenting to each of his three orphan children (who have also lost their mother) a handsomely bound Bible, with a suitable inscription, and a portrait of their father in each.

#### THE BRITISH MEDICAL BENEVOLENT FUND.

IT is now some years since the British Medical Benevolent Fund appealed for support through the periodical press; but the existing depression, which this year seriously detracts from its means of aiding the distressed, has also only too surely increased the needs of those who suffer; and it is trusted that this plea may find acceptance. The objects of the Fund are sufficiently well known; the details of its operation will be gladly forwarded to any inquirer by either of the honorary secretaries. It may be permitted, however, to state that, in addition to providing annuities for the aged, its distinguishing feature is the immediate relief, or re-establishment where practicable, of members of the profession in distress, and the aid of their widows and orphans in destitution; the necessities and desert of the applicants being their sole indispensable passports; and a careful scrutiny of these, and a discou-



ragement of improvidence, the rule of action of the Committee. The means at the disposal of the Fund are grievously inadequate to meet the wants of the many distressing and deserving cases which are pressed upon it from all quarters; and the help of the profession is earnestly sought to support the Committee in their work, the executive for carrying out which is entirely honorary. It is also submitted that the good cause of a profession ever willing to devote its best energies, regardless of self-sacrifice, to the succour of all in poverty and sickness, may not inappropriately be advocated by its influential members amongst a generous laity, whose confidence they have justly earned. The Treasurer of the Fund is Dr. W. H. Broadbent, 34, Seymour Street, Portman Square.

#### THE NORFOLK AND NORWICH HOSPITAL.

It will be remembered that in November the Prince of Wales attended a meeting in St. Andrew's Hall, Norwich, to raise funds for an extension of the Norfolk and Norwich Hospital. The appeal thus made to the local public, with the aid of the Prince, has been eminently successful, subscriptions having been received to the amount of £22,942. This sum having exceeded the expectations of the Board of Management, the extension will probably assume a wider range—in fact, the entire rebuilding of the hospital has been proposed. In addition to the £22,942 subscribed, the Earl of Leicester, Lord-Lieutenant of Norfolk, has also offered £13,000 to an endowment fund.

#### A CASE OF TRANSFUSION OF BLOOD.

A MAN was brought this week to St. Bartholomew's Hospital on account of hæmorrhage resulting from a ruptured varicose vein. The patient was exceedingly exhausted, very anæmic, quite pulseless at the wrist, unable to speak, and in a most critical condition. The hæmorrhage was quickly arrested; but, the use of stimulants and other means of restoration proving ineffectual, the only resource left was transfusion. Mr. Langton, who was in the hospital at the time, opened a vein in the arm with some little difficulty, as the vessel was empty. Mr. Hubert Weiss, house-surgeon, in a spirit of loyalty to his profession, allowed four ounces of blood to be drawn from himself; this, after defibrination, was injected into the patient by means of a Ferguson's transfusion-syringe. No perceptible benefit was produced in the patient, on account of the advanced stage of syncope to which he had been reduced before he was brought to the hospital. He died within an hour. The coroner's jury returned a verdict of "Accidental death", and expressed their appreciation of Mr. Weiss's self-sacrifice for the good of his patient.

#### INFANT MORTALITY.

SOME correspondence has taken place between the Clerk to the Guardians of St. George's, Hanover Square, and the Home Secretary relative to the excessive mortality among the infants received at the Convent of St. Vincent de Paul in Carlisle Place, Westminster. By order of the Local Government Board, Dr. Edward Ballard has held an inquiry, and has presented his report. After enumerating the various causes of death, Dr. Ballard states that three circumstances appear to have conduced to the high mortality: 1. The unfavourable condition in which the infants are for the most part received, as they have generally—either from illness or death of their mothers—been deprived of maternal care for longer and shorter periods before they are brought to the convent; 2. The almost insuperable difficulties of rearing such infants upon the ordinary substitute for breast-milk; and, 3. The inappropriateness of the room used as a nursery.

#### POISONED ARROWS.

PUBLIC attention has been prominently directed recently to a very interesting question which was raised by Dr. Messer, R.N. (well known to the profession by his researches on enlarged prostate carried out at Greenwich Hospital), as to the effect of the poisoned arrows used by the natives of the South Sea Islands. The paper will be found in the *Naval Medical Report* for 1875. Its object is to show that, whatever the

poisonous substance with which the arrows are smeared (a point on which nothing certain is known), it does not produce any specific effect, but that, when it proves fatal, it does so by inducing ordinary traumatic tetanus; and this result, always more or less probable in a tropical climate, is, according to Dr. Messer, much more likely to ensue, if the wounded man have a nervous dread of the poison, and still more if (as would be the case with a savage) he be also under the influence of superstitious terror. The case which has led to this publication was the skirmish in which the lamented Commodore Goodenough lost his life. He was one out of seven of the ship's crew who were wounded; and, of these, three died of tetanus, the earliest symptoms of which did not show themselves till the fifth and sixth days after the injury. This long interval is, indeed, very different from what is observed in the case of any known poisonous inoculation; but anyone who reads Dr. Messer's report will see that it is by no means conclusive, nor probably does it pretend to be so. The power of nervous dread to produce tetanus is by no means admitted. Of Dr. Messer's three patients, the Commodore is allowed to have been a man of firm mind and wide knowledge; and it seems that the only proof of his being under the influence of nervous apprehension is, that he made preparations for the fatal event (which any man might and ought to do after suffering from a wound said to be poisoned), while a second patient is allowed to have had no dread at all. The question could only be settled by procuring some of the poison and by testing its effect, or that of the arrows, on some of the lower animals; but meanwhile it is one of great interest (even apart from the lamentable event which gives it its special significance at the present time), and Dr. Messer has done well in bringing the special subject of the arrow-poison, and the more general one of the effect of fear in inducing tetanus, under the notice of surgeons.

#### NOXIOUS FUMES.

THE whole of the trees on the Albert Embankment from Lambeth Bridge westwards were removed recently; the reason being, it is alleged, that the exhalations from the adjacent potteries have destroyed their vitality. The subject, the *Globe* observes, is serious from a sanitary point of view, and no less so in its æsthetic aspects, as fumes which prove so deadly to vegetation cannot fail to have fatal effects not only on human beings, but possibly upon the architecture of the Houses of Parliament as well. We shall be glad to know whether the medical practitioners of the district have made any observations of a confirmatory character.

#### GRATUITOUS MEDICAL ADVICE IN LIVERPOOL.

WE are glad to learn that this matter is at length engaging the attention of the profession in Liverpool. It is almost the last of the large towns to take it in hand, and the necessity for doing so seems to us none the less urgent. At the last meeting of the Liverpool Medical Institution, it formed matter of considerable discussion amongst the "miscellaneous business", and ultimately was referred to the consideration of a subcommittee (to be nominated by the Council), who would report upon the public institutions of the town. We hope the matter will not be allowed to drop until any abuses found to exist shall have undergone considerable amelioration; and some statistics which have been prepared are alleged to show that many are present. We do not propose to make further comment at present, but shall look with interest upon the future development of this question by those who have undertaken to deal with it; and we hope that they will receive every encouragement in their efforts.

#### SCOTLAND.

SEVERAL dealers have been fined in Glasgow for milk-adulteration, in amounts from £1 to £2. In one case, there was shown to be an addition of 47.8 per cent. of water; and in another a mixture containing just half of skimmed milk was sold as cream.

THE number of deaths in Edinburgh rose last week considerably, so that the death-rate was 25 per 1,000—no doubt owing to the severe weather which prevailed. Notwithstanding this unusual mortality, no death from fever or other zymotic disease, with the exception of whooping-cough, was recorded.

THE new waterworks for Galashiels were begun last Friday, when the first sod was cut by Mrs. Hall, the wife of the Mayor. When completed, which will be in about twelve months, the works will be capable of supplying a population of from twenty to thirty thousand with thirty gallons per head daily; and the total cost is expected to be about £40,000.

THE vital statistics of the town of Arbroath during 1876 are remarkable. There were 717 births and 419 deaths, the latter showing a decrease of 63 on the numbers of the previous year. The town has been very healthy. The total rainfall of the past year was 36.7 inches, an increase of 6 inches on that of 1875.

#### SIR JAMES SIMPSON.

THE Lord Provost's Committee have decided that the Edinburgh statue of the late Sir James Simpson, Bart., M.D., which is now standing complete in bronze in Mr. Brodie's studio, shall be placed in the West Prince's Street Garden walk between Castle Street and St. John's Episcopal Church.

#### PRECAUTIONS AGAINST SMALL-POX IN EDINBURGH.

THE Town Council of Edinburgh, in accordance with a circular from the Board of Supervision, are taking steps to avoid, if possible, the outbreak of small-pox in the city. The circular directs special attention to vaccination and revaccination, the removal of nuisances, the obtaining notices of cases of small-pox from medical men, the establishment of hospitals, and the isolation of cases. From a statement of the medical officer, it appears that no case of small-pox has as yet appeared in Edinburgh. The rate of mortality of the city in December was 21.34; in the last quarter, 17.57; and for the whole past year, 19.62.

#### PATHOLOGY AT THE ROADSIDE.

AN extraordinary scene was witnessed a short time since on the public road near the village of Carrington, a few miles from Edinburgh. An old woman had died suddenly at that village at the beginning of the week, and a *post mortem* examination had been ordered by the parish authorities. According to instruction, a medical man, accompanied by his assistant and a sheriff's officer, went to the house of the deceased for the purpose of making the examination. To their surprise, they were told, on arrival, that the corpse was on its way to be buried; upon which they hurried after the funeral party and caught them up before the graveyard was reached. Their proposition that the body should be taken back to the house for the intended examination was resisted by the people in charge of the funeral; and the sheriff's officer had to stop the coffin, which was being carried country fashion, and placed it upon a roadside heap. The doctor had the coffin opened, and there and then made his examination of the corpse. This over, the coffin-lid was refastened and the funeral duly proceeded with.

#### EDINBURGH ROYAL INFIRMARY.

It is stated in the Annual Report of the Edinburgh Royal Infirmary that in the spring the building of the pathological part of the new Infirmary will commence on the site of the houses known as Wharton Place, which will be then demolished. The new building will have a frontage of 87 feet towards Lauriston. The theatre, which occupies the centre portion of the block, is 43 feet long by 30 wide, and 23 feet high; efficient lighting being obtained by means of dormer windows in front and a large window in the roof. Accommodation will be provided for about two hundred students. On the east side of the theatre is a demonstrating room 29 feet square, above which is a room of similar size or microscopic purposes. To the west of the theatre is a *post mortem*

room, while another room near it, with a separate entrance, is intended as a meeting place for mourners, where religious services can be conducted. A large entrance-hall on the east side gives access to a spacious staircase leading to the theatre. Of the general building, we may mention that the four medical pavilions, being those nearest the windows, are now all but completed; two of the surgical pavilions are roofed in, while the tower is nearly ready for roofing; the two remaining ones are more than half built.

#### ACTION FOR RECOVERY OF MEDICAL FEES.

THE Sheriff of Banff has given judgment in an extraordinary case which was recently tried. Dr. Sharp, a medical practitioner in Cullen, sued the defendant, a farmer in Ruthven, for £35 odd for professional attendance on a sister of the defendant aged 80. The attendance consisted of twenty-five visits to the patient (who was suffering from ulcerated legs), dressing the woman's sores, and "assisting in cleaning out the abominations of the house". The plaintiff described the dwelling and the room in which the patient lay as being in a most filthy and disgusting condition, crammed with all sorts of abominable rubbish. He further stated that, in cleaning away the rubbish, he was occupied from twelve o'clock noon until six at night. For the defendant, two witnesses only were called, both of them medical men. They gave it as their opinion that the amount sued for was overcharged, and said that the filthy state of a house or of a patient had nothing to do with the charges they made. The sheriff gave a decree for £18:10, the amount offered to the plaintiff, being at the rate of fifteen shillings a visit.

## IRELAND.

THE Lords Justices have appointed Sir George Bolster Owens, M.D., a member of the Board of Governors of the Westmorland Lock Hospital.

THE outbreak of fever on board H.M.S. *Valiant*, to which we lately referred, has caused one death among those removed to St. John's Hospital, Limerick; but the remaining cases are progressing favourably.

AMONG the candidates under examination this week at the King and Queen's College of Physicians for the licence in Medicine was Eliza Louisa Walker Dunbar, a Doctor in Medicine of Zurich, 1872. She was not examined for the diploma in Midwifery.

IN a recent report on Public Health, by Dr. Cameron, city analyst, in reference to the spread of enteric fever by contaminated water, he remarks that great stress is laid upon the presence of common salt in well-water, but he has no doubt that, in many well-waters in which it is contained, it by no means indicates "previous sewage impurity". The explanation Dr. Cameron gives is, that the sandstone and other sedimentary deposits which constitute the primary rock formations in most countries, having been formed upon the bed of the sea, it is not remarkable that the water percolating through them should meet with and dissolve common salt, and occasionally in abundance.

#### SMALL-POX.

It has been determined by the Public Health Committee of the Corporation that the bedclothes, bedding, and clothes of all parties who may contract small-pox shall be destroyed by fire, and compensation given, in the case of poor persons, to the owners.

#### NATIONAL EYE AND EAR INFIRMARY.

A BAZAAR in aid of the funds of this institution for its enlargement, will be held early next February. The Infirmary was established in 1814, and is consequently the oldest ophthalmic institution in Dublin. The accommodation at present is limited, and is unable to afford relief to the number of patients who seek for admission to its wards. We trust that the liberal support of the public will not be withheld from so deserving an institution.



## MEDICAL AND SURGICAL CLINQUES OF PARIS.

## II.

*M. Verneuil's Clinique.*—*His Manner of Teaching.*—*Antiseptic Methods.*—*Epithelioma.*—*Myelitis from Retention of Pessary in Vagina.*—*Successful Gastrostomy for Oesophageal Stricture.*—*Defects of Hospital Organisation.*

As an example of serious, erudite, and thoroughly well considered clinical teaching, and of well-balanced and eclectic practice, the *clinique* of M. Verneuil is not to be surpassed in any country. In many of his most valuable characteristics as a hospital surgeon and a teacher, M. Verneuil resembles the late M. Nélaton. More or less well informed of all that passes in other countries, he is free from the reproach, which is not without application to many physicians and surgeons of Paris of the present generation, and even of that which is rising, of being either wholly unacquainted with what passes outside of French limits or being only acquainted with it after it has filtered through a French medium, and then by some French name. For M. Verneuil, there is something to learn from as well as much to teach to his foreign visitors; and the marked courtesy with which they are received is characteristic of the highest and best school of French manners. From the first, the visitor is favourably impressed with the relative freedom of his wards from bad smells, with the cleanliness and wholesomeness of his wounds, and with the really "surgical" purity of the dressings applied. This is most refreshing, for to see the foul-smelling putrid masses of charpie removed from the foetid wounds which abound in many of the hospitals, and to smell the horrible odours which arise when large wounds are unbandaged, is enough often to make the heart sink and the gorge rise. M. Verneuil appreciates, however, fully the principle which lies at the bottom of the methods of Lister, of Callender, and of Guérin. Thus he enters fully into the spirit of the antiseptic method. He does not get results which are at all comparable with those of Lister as a whole. He has not the courage—he would possibly think it the temerity—to open joints, empty psoas abscesses, and lay bare synovial cavities, with the conviction that, by the scientific and rigorous exclusion of germs, such proceedings are as devoid of danger as ordinary incisions to which "unfiltered air" is admitted, and on which undestroyed albuminoid germs rest; but he showed me with just satisfaction a case of penetrating wound of the knee-joint, with laceration of the deep parts, treated by occlusion in a large packing of cotton-wool (Guérin's method), and in which, this compressive cotton-wool filter having been left in place for forty days, perfect healing had taken place without any bad symptoms. Such a result would, with a true application of Lister's method, be commonplace; but it is always highly satisfactory, and in this case no method could possibly have given a better result. In another case, M. Verneuil had attained excellent results by the use of a bath of carbolic water four hours a day to a lacerated wound of the hand in which five fingers had been torn away; and in another case, in which an ablation of the jaw had been made, he employed cotton-wool dressing, with continuous use during several hours daily of a carbolic spray. In both cases, the wounds were healthy and "English looking", as the late M. Velpeau would have said.

The principles of Lister are so imperfectly understood by a good many French surgeons, that I had shown me at various hospitals "modifications" of his method in which everything is present except his principles. Thus one surgeon will syringe a wound with carbolic water, apply the "protective gauze" to it, and dress it with a rag steeped in carbolic water, leaving in it a drainage-tube communicating with the open air; and this, he will tell you, is "almost Lister". And I have not always found it possible to make it understood, without giving unintended umbrage, that it is in fact an unreliable parody of Lister's method, in which the one essential point of the exclusion of infective germs is left out. Needless to say that, in wards in which erysipelas is common and large purulent depôts are abundant, it is not possible to achieve results by such methods which accord with what Lister claims; and that any attempt to proceed with the boldness and largeness of expectation which his method warrants is apt to end, as I have seen it end here, somewhat disastrously. M. Verneuil, however, trusts with justice to his own observation of the relative value of methods, and knows how far he can rely on those he employs. Moreover, he is eminently a careful surgeon and a cleanly surgeon; and thus he attains excellent results, and his wounds may always, so far as I have seen, be uncovered with satisfaction. His wards, he tells me, are very free from pyæmia; and erysipelas, if admitted from without, rarely spreads.

On the day of my visit, besides his most highly interesting and unique case of *successful gastrostomy*, of which I shall presently speak,

he showed me a series of cases of ordinary surgical character, but which his clear, learned, and skilful commentary made full of instruction to the large surrounding class of students who always follow his teaching. There were in the ward three cases of new growths; one of epithelioma of the rectum, one of parotid tumour, and one of commencing epithelioma of the sublingual gland. There were also cases of epithelial cancer of the lip, and of extensive epithelioma of the floor of the mouth, invading also the lower jaw. The case of epithelioma of the rectum (in a female) had entered the service under the "rubric" of hæmorrhoids, for which she had been treated until all hope of any operative interference was now long past. Hence M. Verneuil warned his students against the habit of taking "piles" for granted on the word of the patient, and referred to the many cases in which such a verbal complaint really concealed more serious affections, and the negligence by which they were allowed to reach a desperate stage, because the surgeon had not had the industry or the wisdom to use his forefinger and a little oil. In speaking of the cases of neoplasm for which operative interference would be necessary (and among these, by-the-bye, was a case of sarcoma of the testis), he observed that it was much to be desired that the time might not be very distant when the knife would not be the chief or only resource of the surgeon in dealing with them. These cases, for example, of sarcoma of the testis, however benignant, although they lend a temporary success to the operator, are rarely free from recurrence. In two or three cases out of a very large number, he could affirm that there had been no return during a long period of years. This patient would have the benefit of a respite and of a possible recovery; but, good as the temporary result might be, these cases are not really such as afford the legitimate satisfaction which results from the consciousness that the patient is cured. He went carefully through the chapter of epitheliomata; defined rapidly their seat, mode of growth, extension, and termination; and pointed out the measure of success which might be anticipated in each case; and through all his words there penetrated the spirit of the medical philosopher, as much as of the mere operative surgeon. Like all really eminent teachers, he finds in the knife, which he wields skilfully, the great resource, but also the great opprobrium, of the surgeon.

Referring to a necropsy which had just been made of a case of fatal myelitis, M. Verneuil detailed its interesting antecedents. This woman had for some time suffered from severe vaginal and uterine symptoms, which were found to be due to the irritation of a pessary which had been left in the vagina, and, so to speak, lost there. Relieved of the cause of her suffering, her most pressing symptoms disappeared; but presently were noticed spasmodic contractions of the great toes, in which she complained of severe pains; then spasmodic contractions of the forearms and hands; presently, the fully developed symptoms of myelitis, affecting not only the limbs, but also the sphincters of the bladder and rectum. The limbs were the seat of those severe "herpetic eruptions with gangrene", leaving depressed cicatrices, which have lately been much noticed by foreign and British observers as associated with disorder of the trophic nerves. A characteristically extensive bed-sore formed rapidly, and the patient sank. The necropsy showed the signs of myelitis of the cord in the lumbar region. The association of deep-seated and distant nervous lesions with the peripheral irritation excited by foreign bodies is, of course, well known, and M. Verneuil referred to a number of interesting examples; among others, to a case of severe epilepsy of long standing, which proved to be due to the presence of a foreign body, long unsuspected, in the external auditory canal, and which entirely disappeared on the removal of that body.

M. Verneuil keeps all his patients a week in the wards before operating on them: a measure of acclimatisation which he considers to be very important, in order to avoid nosocomial accidents. He does not, however, consider it to be necessary to keep them confined to bed. Thus the preliminary information which he communicates to his pupils as to the diagnosis, history, and prognosis of the cases for operation, accompanied as it often is by bibliographical indications, enables them to acquire a complete view of the clinical characters of the cases, and to extract from them all the information which can be desired.

I had the opportunity of inspecting M. Verneuil's successful case of gastrostomy; and of this brilliantly successful piece of surgery I may be permitted to give a somewhat detailed note. The operation of gastrostomy has been performed twenty-three times since 1849, but with an invariably fatal result. It is, therefore, extremely satisfactory to be able to record this case, in which the operation has been entirely successful; the honour of being the first to save life by its means thus falling due to M. Verneuil. The patient, R. M., a boy seventeen years of age, but of small size and child-like appearance, swallowed by accident, on February 4th, 1876, a solution of caustic potash. A sensation



of intense heat was immediately produced in the oesophagus, and for some days deglutition was very painful and almost impossible. Cicatricial and membranous *débris* were expelled after a few days. In two weeks, the oesophagitis had diminished, but still only fluids could be swallowed with difficulty. On March 31st, the boy was admitted into the wards of Dr. Dumontpallier. Here oesophageal catheterisation was practised, but with no beneficial result; it became difficult even to swallow fluids; and, the patient losing flesh and strength, he was passed, on May the 24th, into the wards of M. Verneuil for active surgical treatment. On examination, M. Verneuil found that the oesophageal sound was arrested two inches and three-quarters below the cricoid cartilage, and that it was impossible to overcome the stricture and reach the stomach even with a whalebone bougie of the smallest calibre. Efforts at catheterisation were made only at an interval of two or three days, as, after each attempt, the irritation of the oesophagus was such as to prevent, for twenty-four hours, the passage of the smallest quantity of fluid. The strength of the boy was sustained by nutritive enemata, but it failed rapidly; and at last R. M. himself begged that something might be done, as he felt he was dying. Before finally deciding on gastrostomy, M. Verneuil, thinking that possibly muscular spasm, in addition to the actual fibrous contraction, prevented the passage of the sound, placed the boy under anaesthesia by the administration of an enema containing eight grammes of chloral, and examined the oesophagus again with a whalebone bougie. The one used presented, at about two inches from its extremity, a fusiform enlargement two lines in diameter. This bougie passed without difficulty through the stricture, giving to the hand at the moment a sensation of rubbing against a rough surface. The pain produced was so intense that the boy was roused from the anaesthetic sleep, and cried loudly. The pain was quickly subdued by a hypodermic injection of morphia. As a result of the catheterisation, the boy was, however, enabled to swallow the same evening soup, milk, and wine, with comparative ease. The catheterisation was repeated three days later, with the same results. It was then practised every alternate day; and for a time M. Verneuil abandoned the idea of performing gastrostomy, and began to consider the advisability of substituting internal oesophagotomy, when suddenly, without any ascertained cause, the stricture became impassable. By the middle of July, the state of the lad was deplorable; reduced by inanition to extreme emaciation, he never quitted his bed; he was tormented by constant hunger and thirst, and though in the heat of summer, suffered from cold of the extremities, the thermometer varying between 95 deg. and 97 deg. After consulting with M. Léon Labbé, M. Verneuil resolved, on July 26th, to resort to gastrostomy. The operation was performed on the antiseptic method of Lister, everything used being submitted to the action of a two per cent. solution of carbolic acid, and the carbolic spray was kept playing on the field of operation. An incision, two inches long, was made parallel to the inferior border of the cartilage of the eighth rib, at about three-quarters of an inch distant from this border, and running obliquely downwards and outwards. The skin, subcutaneous cellular tissue, and aponeurosis were successively divided; the external border of the rectus was uncovered and incised for about three-quarters of an inch. The peritoneum was raised by a pair of forceps, opened, and slit upon a director. The wound being kept gaping by two blunt hooks, the stomach was quickly recognised by its greyish-white colour. The external wall was seized by catch-forceps, and drawn outside, so as to form a hernia exactly filling the wound. To maintain it in this position, it was transfixed by two long acupuncture-needles. This occupied about three minutes, and during this time not a drop of blood escaped into the sac of the peritoneum. The gastric and abdominal walls were united by the process used by Nélaton in enterotomy, which consists in fixing a circular series of sutures before opening the intestinal cavity. Silver wire and a bent needle were used, and fourteen sutures were inserted at a distance from each other of from two to three lines, and at a distance of four lines from the edge of the incision. In order to be perfectly certain that the peritoneum was contained in each suture, the border of the buttonhole incision formed in the peritoneum was seized, and held beforehand by a series of hæmostatic forceps. The acupuncture-needles were then removed, and the stomach opened at the most prominent point of the viscus to the extent only of three-eighths of an inch. The viscus became immediately red and then violet, and rather abundant hæmorrhage occurred from two divided arteries, which were seized, held by hæmostatic forceps, and left thus till the evening. M. Verneuil, considering that a foreign body would be less irritating to the wound than the repeated application of a syringe, inserted a tube of red India-rubber, and fixed it *in situ* by means of a silver wire, which traversed both its walls and that of the stomach. For dressing, little strips of tarlatan, dipped in a solution of carbolic acid, were placed round the wound, and these covered with charpie moistened with the same. The

abdomen was painted with collodion. The India-rubber tube was closed by a stopper to prevent air from entering into the stomach. On awaking from the chloroform sleep, R. M. felt very little pain, and soon afterwards nearly half-a-pint of milk (200 grammes) was injected; a slight feeling of nausea was excited; but the milk did not seek to escape between the tube and the wound. Every two hours, the carbolic spray played upon the wound. At five o'clock in the evening, a quarter of a pint of milk and the yolk of an egg were injected. The hæmostatic forceps were removed, the hæmorrhage not reoccurring. At nine o'clock, the temperature was 96 deg., and there was severe pain in the left hypochondrium, which was relieved by a hypodermic injection. At midnight, about one-third of a pint of milk was injected (140 grammes). Violent vomiting was provoked, which was, however, checked; then a small quantity of milk was allowed to escape by the wound. The following day, soup and Bordeaux wine were injected, and were well borne. The temperature remained still always at 96 deg. Small quantities of food were injected every four hours. At the moment a feeling of suffocation was often produced, and sometimes that of nausea. Bile in the urine and an icteric tint were observed, and the patient complained of pain in the right shoulder and dyspnoea. These slight complications, however, soon disappeared. On the 30th, no action of the bowels having taken place since the operation, nearly two ounces (15 grammes) of castor-oil was injected, with the desired effect. On August 1st, the improvement in the boy was marked. His face began to fill out, he recovered his spirits, and asked to be allowed to get up. The temperature, so long below normal, rose to 98 deg. The injections were repeated every two hours during the day and every three hours during the night. The food injected consisted always of milk, eggs, concentrated soup, and Bordeaux. The sutures began to cut through and fall out; and, by August 15th, they had all fallen, and cicatrization was complete. The boy was able to leave his bed on August 20th, and in September began to make himself useful in the wards. Sleep and strength returned, and the temperature remained normal. Alimentation was regularly performed by the means of soup, minced meat, eggs, milk, and wine. The quantity injected was considerable; for hunger, and more particularly thirst, were very marked. Taste was not abolished, for the boy frequently asked by preference for certain foods, and he liked to hold a mouthful of food in his mouth, to taste it, and spit it out again. The injections only produced sensations of heat or cold in the stomach. Sometimes, they excited an abundant secretion of saliva, which the boy was obliged to expectorate, as there is reason to believe that a drop passes into the stomach. The evacuations were normal, and occurred every two or three days. Though the action of the saliva is completely suppressed, yet substances the most variable are perfectly digested and assimilated. The patient has gained considerably both in weight and height. At the time of the operation, he weighed seventy-two pounds. On October 20th, he weighed ninety-one pounds. His growth has been equally marked, though, as he was not measured in August, the figures cannot be given. The fistulous opening has remained now in the same condition for some months. The circular form is maintained by the India-rubber tube, one-half inch in diameter; the lower lip is concave and perfectly cutaneous; the upper has an uneven, bright red edge, formed by the gastric mucous membrane in the condition of ectropium. It acts well, and, closely applied against the tube, lets nothing escape. The tube has no tendency to slip out, and it is inserted to the depth of from three to four inches into the cavity of the stomach without producing any discomfort. This operation must thus be considered a complete success. The life of the young patient has been saved, and he has been restored to comparative health and comfort. The life thus saved will be most valuable to physiologists, who have already begun to make on the lad a series of minute investigations on certain disputed points in digestion.

I do not know any better clinical school than this; and, whatever may be said in depreciation of the present position of French hospital practice and teaching, as compared with that of Vienna or of Berlin, I am persuaded that surgery cannot anywhere be studied with greater advantage and completeness. Nevertheless, the surgeon here also suffers under many disadvantages, which are due mainly to the defects of the hospital administration. The latrines at La Pitié are horrible; the washing arrangements miserable. The atmosphere of the wards close; the nursing very imperfect. The patients for operation have often to be carried to their beds, unprotected from the weather, across an open court-yard. Water might be supposed to be a most precious article. The patients not only are not washed and clean, but are apt to look almost as if they had never been washed. Their bodies and limbs are often literally encrusted with dirt. In one bed, as the clothes were turned down, the sheets were literally stained with flea-marks from top to bottom, and quite a colony hopped freely all over the place. The instruments, after being used, are not, so far as I have seen, thrown



into boiling water, but for the most part are merely wiped. The surgeon's assistants go freely from patient to patient fingering filthy wounds, and then, as I have twice in one day seen with my own eyes, without ablution, passing their fingers into a mouth to examine a ranula or an epulis. Probes and spatulas are freely employed, without immersion in scalding water, for a variety of extremely disoedant purposes. Then, too, there is here also the same absence of complete scientific registration of the cases, or of uniform clinical case-books. A hospital in which the patients are not regularly and invariably bathed on entrance, in which the latrines are malodorous, the wards close, in which hot water is regarded as an occasional luxury, in which the nursing is perfunctory, and the material for nursing scanty in quantity and defective in quality, is one which must offer considerable difficulties to the surgeon. So thoroughly ingrained, however, are these defects in the system of centralised hospital administration which prevails here, that they are accepted with resignation and almost with indifference. It is highly honourable to the skill of surgeons and physicians that they succeed so well in overcoming these disadvantages. Nowhere in the world, perhaps, are the medical officers under such serious disabilities in these respects as in the Paris hospitals; but nowhere do they personally show greater skill and capacity.

### THE CONVICT SERVICE.

SOME years ago, the relative rank of the superior officers in the convict service was laid down by the Secretary of State, and has not since been altered. The governor, chaplain, and medical officer had coordinate rank, and were each at the head of his own department. Below them came the deputy-governor, assistant-chaplain, and assistant-surgeon. At that time, the relative pay bore some proportion to the rank and responsibility of these officials; but changes have been introduced within the last few years. The pay of all in the department, from the surveyor-general down to the stewards and clerks, has been at different times increased, but not that of the medical staff, who have the most laborious and responsible duties.

The result of this is that, whilst the rank remains unaltered, there is a grievous disparity or inequality of pay, and this quite apart from the claims they have on the Government, owing to the increased expenses of living and the greatly increased duties thrown upon them.

Previously to Colonel Henderson's departure from the department, it was known that it was his intention to ask for a general increase of pay for the medical staff, provided they did not themselves move in the matter. This was in 1869. They did not move for an increase. Colonel Henderson left, and the salaries were not increased.

In some instances, the pay of medical officers is less than that of deputy-governors in the service, whose duties were formerly performed by a warder, and cannot, under any circumstances, be compared in importance with those of the medical officer. In other instances, again, the salary of the medical officer is only on a par with that of the deputy-governor, whereas it was much higher a few years ago, and more appropriately also indicated the relative rank of these officers.

The injustice of this inequality is more evident when, as in cases presently to be mentioned, the medical officers have brought into the department the experience gained in other branches of the public service, and were holding Her Majesty's Commission when deputy-governors were children. In three of the prisons, the medical officers are naval surgeons on retired pay. They are all forbidden to expect pensions, however long they may continue to serve; although they were, without any warning, placed on the retired list of the navy, and so debarred from obtaining, by further service, if they had desired it, any participation in the increased scale of retiring allowances subsequently granted to the navy. A greater injustice was perpetrated upon the surgeons of Chatham and Pentonville prisons. In their cases, even the inadequate salary granted to a civilian was cut down to a minimum of £175 *per annum*, increasing by a small annual increment to £250, and so continued for several years, in spite of repeated memorials from the victims to be placed on the same footing as the medical officers of other prisons. At last, and only recently, the authorities were pleased to listen to their prayer; but they were required either to relinquish their retired pay, or to forego all claim to civil service pension. In other words, medical officers are selected for this special act of injustice, whilst the other officials, many of whom have been in the army and marines, from the surveyor-general downwards, enjoy their pensions, or are retained on the active list, as the case may be, and will come in time to take their civil service superannuations also.

Compared with the salaries of chaplains (whose pay has recently been increased), it will again be seen how unfairly the medical staff have been treated, and their repeated applications for consideration

ignored. The pay of the chaplains and medical officers was formerly alike in all the prisons. Most of the former now draw higher salaries, although their duties are light and trifling in comparison with those of the latter.

As to the assistant-surgeons, they receive a salary below that of the steward and several of the clerks; below that of the foreman of works, who is generally an old soldier from the engineer department; and lower than that of the chief warder, who is generally either an old sergeant or an ex-policeman. Several assistant-surgeons have resigned in disgust when they saw the very false position in which they were placed. All cannot afford to follow their example, however, and the country has only to become acquainted with the facts of the case, that a meritorious body of officers, to whose judgment and tact the good discipline of the state prisons is mainly due, are not only treated with indifference, but continue to be most inadequately remunerated.

We consider that the pay of the medical officers should never be lower than that of the chaplain; that it should, at all prisons, be £100 above that of deputy-governors; that the pay of assistant-surgeons should approximate the salary of deputy-governors; and that, inasmuch as pensions, half or retired pay, do not debar other officials from their claim to civil service superannuation, they should no longer do so in the case of medical officers.

### NEW YEAR'S FESTIVITIES IN THE LONDON HOSPITALS.

#### THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET.

THE usual Christmas treat to the little patients in this hospital took place last week, and a considerable number of the friends and subscribers of the charity were present on the occasion, among whom may be named the medical officers of the hospital, who always manifest great interest in the happiness of the children under their care. An immense Christmas-tree, which was literally ablaze with light and loaded with children's treasures, was speedily shorn of its beauty by the distributors, Mr. W. E. Cant and Mr. Henry Mason, the resident medical officers. The "tree" was followed by a magic lantern exhibited by Mr. C. Kemp Welch, one of the managers, all the slides being of an amusing character and well adapted to excite merriment. Creature comforts were not forgotten, and such small luxuries as the medical officers permitted, in the form of cake and fruit, were freely indulged in. The evening was enlivened by the singing of carols and such melodies as delight children, this part of the entertainment being admirably managed by the lady superintendent and the ladies who render invaluable voluntary help as ward-superintendents. In this hospital, all the nurses are young women (and, a noticeable fact, nearly all short of stature), and competent to amuse the children by singing, so that they were well able to "swell the full chorus" on the occasion. The enlarged hospital possesses a staff of twenty-two nurses; that is, seventeen for day attendance and five for the night duty, there being one hundred and four beds in the large wards, besides twenty beds in the special wards. The hospital has a convalescent home at Highgate, where fifty-two children are provided for. The Christmas festivities there were not on such an extended scale as at Great Ormond Street; but, under the direction of the lady superintendent (Miss Wood), and with the hearty co-operation of the medical officers (Dr. Sturges and Mr. Warrington Haward), the children enjoyed their afternoon extremely. A large number of friends gathered to witness the pleasure afforded to the children and to assist in the distribution of the gifts provided in abundance by thoughtful donors. In both instances, the period of amusement was not prolonged to the point of weariness, and, soon after seven o'clock, the wards of the two hospitals resumed their usual state of quietude, except that, on such a special occasion, the children were allowed to have their toy treasures in the cots until "tired Nature's sweet restorer" came to close the weary little eyes.

#### ST. THOMAS'S HOSPITAL.

On Saturday evening (Twelfth Night), the in-patients of St. Thomas's Hospital were entertained in a somewhat novel manner, for which subscriptions amounting to £50 were raised by the matron and the resident officers. At six o'clock, they were provided with tea and cakes, after which Mrs. Wardroper (the matron) distributed articles of clothing, each patient receiving something suitable. Later on in the evening, a large wire framework, measuring six feet in diameter, and covered with cotton-wool and decorated with holly, representing an enormous snowball, was drawn round each ward on a car, accompanied by Mr. Maples, one of the house-surgeons, who, attired as Father Christmas, carried his green satin cloak with fur trimmings, his hoary beard and



jovial countenance, to such perfection, that few recognised him. Father Christmas had his snowball filled with presents, and gave one to each patient, with a fitting remark. As the procession entered the various wards, it was greeted by the nurses from the Nightingale Home, who at once began singing carols and cheerful songs, in which many of the students present took a part. The wards were quite in character with the whole performance, the Christmas decorations showing great taste on the part of the sisters. To wind up the entertainment, Father Christmas was wheeled down the long corridor with his snowball, amidst the cheers of all assembled.

## ASSOCIATION INTELLIGENCE.

### BATH AND BRISTOL BRANCH.

THE third ordinary meeting of the Session will be held at the Royal Hotel, Bristol, on Thursday evening, January 18th, at half-past Seven o'clock: H. F. A. GOODRIDGE, M.D., President.

The evening will be devoted to the discussion of the subject of the Treatment of Acute Rheumatism, which will be opened by Dr. Skerriitt. Speakers will be limited to ten minutes each on discussion.

E. C. BOARD, Clifton. } *Honorary Secretaries.*  
R. S. FOWLER, Bath. }

7, Caledonia Place, Clifton, January 9th, 1877.

### MIDLAND BRANCH.

THE third monthly meeting of this Branch will be held at the house of the President, Joseph White, Esq., Oxford Street, Nottingham, on Friday, January 19th, 1877.

Coffee at 7.30 P.M.

Paper on Practical Disinfection by Dr. Seaton, Medical Officer of Health for Nottingham, at 8 P.M.

L. W. MARSHALL, M.D., *Hon. Local Secretary.*

Nottingham, December 17th, 1876.

## CORRESPONDENCE.

### THE ORGANISATION OF CHARITY IN HOSPITALS.

III.

SIR,—As you kindly allow me some further space in your columns for a few of the more important facts which I have been able to collect respecting the abuse of out-patient relief in London hospitals, I will endeavour to illustrate, by some additional details, one or two of the statements which were contained in my first letter, and especially those which relate to the magnitude and cost of medical charity in general, and the excessive and unnecessary crowding of the majority of out-patient departments.

It may be remembered that I quoted an approximate estimate, according to which it appeared that, exclusive of Poor-law patients, about twenty-five per cent. of the metropolitan population were, during each single year, in receipt of gratuitous medical relief. It may, however, be remarked that even this calculation, unless it be illustrated by other figures, fails to give an idea, by any means adequate, of the enormous scale upon which medical relief is administered, or of the immense aggregate of cases which are annually dealt with at some of the leading hospitals. If we take, as the basis of our investigation, a tabular statement which was carefully prepared in 1873 from the current reports of the principal London hospitals, and, in a few cases where these could not be obtained, from Low's *Handbook to the Charities of London*, we find that there are twenty-four hospitals whose annual number of out-patients exceeded, at that date, 10,000 *per annum*; and that, of these, the Charing Cross Hospital had 15,928; the Dental, 16,539; the German, 16,347; the Great Northern, 23,655; Guy's, 85,000; King's College, 33,111; the London, 64,285; the Metropolitan Free, 30,624; the Middlesex, 20,471; the North London, 17,263; the Royal London Ophthalmic, 18,700; the Royal Free, 46,392; St. Bartholomew's (including Home at Highgate), 100,000; St. George's, 18,612; St. Mary's, 20,783; St. Thomas's, 66,000; the West London, 20,240; and the Westminster, 25,279. Adding to these the out-patients of the other hospitals mentioned in the statement, we obtain a total of 830,519; and, if we add to this the total number of in-patients, which exceeds 58,000; the number of patients at the principal London dispensaries, which is upwards of 253,000; and the

moderate allowance of about 1,300 in-patients, and 55,000 out-patients, for eleven hospitals and six dispensaries which are not included in the return, the grand total is swelled to 1,200,000. Either, then, some very false statistics are contained in the reports of these hospitals, or else the total above given must be accepted as approximately correct. And this total becomes the more alarming when we reflect that it refers mainly to the year 1872 (while the out-patients at eight hospitals alone have been known to increase by more than 43,000 in a single year); that it excludes the various patients whose medical treatment is paid for by the Poor-law, or by private benevolence; and, lastly, that, out of the total number of persons who would resort in sickness to hospitals and dispensaries, only a certain proportion would have occasion to do so in any single year. Quite as striking, however, are the estimates which have been made as to the cost of this vast system of medical charity. According to a calculation, of which it is impossible in the present letter to give the method or the details, but which is also derived chiefly from the reports for 1872 of the London hospitals and free dispensaries, the total annual income of these institutions, not including the value of land and buildings, amounted in round numbers to £600,000, of which £568,000 belonged to the hospitals alone; and if to this £600,000 we add £41,031 expended in the same year by the Poor-law in ordinary medical relief; £24,817 expended by the Metropolitan Asylum Board on small-pox and fever hospitals; £65,857 expended by private charity on lunatics, idiots, and imbeciles; and £262,673 expended on the same classes of patients by the Metropolitan Asylum Board and other Poor-law authorities; we find that the total amount contributed, either compulsorily or by charity, for the gratuitous relief of those mentally and physically afflicted amounted, in that year and in London alone, to upwards of £994,000, or nearly one million pounds. That is to say, taking the population of the police circle, which is the largest of all metropolitan areas, and estimating it at 3,939,466 or in round numbers four millions, we discover that three shillings per head on this population are annually spent on the voluntary gratuitous medical relief of persons not afflicted by mental disease; a sum which, if divided among its 1,200,000 recipients, would yield ten shillings a head to each of them. Yet the Poor-law medical relief of those not afflicted by mental disease costs only fourpence per head on the same population, and in Manchester, where the excess and abuse of medical charity have been so thoroughly exposed by Mr. O'Hanlon, the sum expended in voluntary gratuitous medical relief amounts to only one shilling and fourpence halfpenny per head on the population, and, if divided among the recipients, would yield only six shillings and fourpence three farthings to each of them.

Some apology may seem to be needed for the introduction into the present letter of figures which only partially relate to out-patients and out-patient departments; but if the abuses against which these letters are especially directed are to be adequately appreciated, it seems to me highly necessary that we should have some idea of that enormous expenditure of which the out-patient departments have caused so large a portion, and that we should be aware of the extraordinary extravagance which pervades the whole administration of so many of the medical charities.

It has been remarked, in an article in the *Westminster Review* (to which we are indebted for many of the foregoing figures), that, unless the average weekly cost of each in-patient in the London hospitals exceeds, in spite of the fact that such patients are required to provide their own clothing, the weekly cost of each inmate in the magnificent asylum at Earlswood (as returned in 1865) then the sum which remains for the relief of out-patients amounts to 7s. 10½d. per head; whereas the cost of each patient at three important London dispensaries has been estimated at 2s. 10½d., 1s. 4½d., and 1s. 8½d. respectively. And, again, the unnecessarily munificent expenditure of at least one great endowed hospital is shown by the facts that, dividing the expenditure of capital by the number of beds, each bed at St. Thomas's has been estimated to cost £833, while each bed at the Poplar Hospital costs only £30; and that the six hundred beds at St. Thomas's, cost a sum nearly equal to that expended by the Metropolitan Asylum Board in providing six separate hospitals, containing collectively 4,271 beds.

Lastly, as to overcrowding and hasty prescribing or operating, I will quote a few figures which appear to me nearly as remarkable. According to statements in the *Lancet*, one physician at St. Bartholomew's has been required to prescribe, in a single morning, for 125 men, and another, on the same occasion, for 164 women and 62 children; and, in the same hospital, 120 patients have been dismissed in one hour and ten minutes, or at the rate of thirty-five seconds each. At the Royal Free Hospital, Mr. Hill has seen 208 patients in four hours and ten minutes; and Dr. O'Connor 318 patients in three hours and twenty minutes, or at the rate of thirty-seven seconds each; while, on another day, Mr. Hill saw 240 patients in two hours and fifty minutes; Dr.



O'Connor, 276 in three hours and forty minutes; Mr. de Méric, 135 in three hours; and Dr. Cockle, 150 in three hours and ten minutes. Although these figures refer to 1869, they were fully borne out by others collected at the close of 1873, when, for instance, Dr. O'Connor was in the habit of seeing, on an average, 275 patients in about three hours and a half; and various statistics show that these figures have not been without parallels in other hospitals and at more recent dates. Amongst the many hospital physicians and surgeons who have expressed their disgust at this state of things, and have severely criticised the uselessness, the injuriousness, and the unreality of such hasty examination and advice, there are several who in their writings and utterances on the subject have laid special stress upon the unsanitary condition of the crowded waiting-rooms, the serious risk of infection which is entailed upon the assembled applicants, the absence of adequate ventilation, and the entire unsuitability, from a medical point of view, of a large proportion of the cases, either because they are quite trivial, because they require rest and nourishment rather than medicine, or because they are in an unfit state to bear any exposure to the weather. Even the Committee of Inquiry appointed in 1873 at the Westminster Hospital has confessed, notwithstanding its somewhat palliative tone, that "the numbers and overcrowding of the accommodation, beyond the power of the establishment to do justice to the patients or themselves, has not been exaggerated"; and that "a considerable number of the applicants for out-door relief, both medical and surgical, are not cases fitted to derive benefit from any treatment as out-patients, and therefore should not be received".

Yet, so inexcusably do the hospital committees fail to appreciate the evils of enormous expenditure and excessive numbers of out-patients, that most of the hospitals habitually advertise the annual number of their out-patients as one of their strongest claims to support; many of them take means to swell the estimate artificially by counting attendances instead of patients; one has pursued a system which involves the frequent discharge of patients, after their first visit, and their subsequent re-enumeration as new cases; another has swelled its out-patient list by including 25,657 cases, which it afterwards admitted were not properly speaking out-patient cases at all; and, although the income of nearly all the hospitals has been shown to be almost always in excess of their expenditure, it is their constant practice to advertise their imperative need of money, and in many cases so to arrange their accounts and balance-sheets as apparently to justify the urgency of the appeal.

Again, so little is the mischief of overcrowding and hasty prescribing regretted, that one doctor has been dismissed from his office, in spite of the urgent remonstrances of the senior students, because he objected to prescribing for new patients at the rate of one hundred per hour, and refused to see more than fifty fresh cases each morning; while another physician has been discharged for writing on the subject in one of the daily papers; and it is rumoured that analogous remonstrances have more than once been stifled by the threat of similar treatment. Lastly, so little do the hospital authorities realise the excessive demands which they already make upon the time and energies of a most generous and hard-working profession, that in more than one instance a complaint that the excessive number of the cases is out of all proportion to the time available for their treatment has been met by a suggestion that the members of the professional staff should devote a still longer time to the duty of prescribing for out-patients.

Surely, when all these facts are fully taken into consideration, an urgent appeal for hospital reform will not be condemned as either superfluous or premature.

A MEMBER OF THE CHARITY ORGANISATION SOCIETY.

### THE POSSIBLE SPREAD OF SMALL-POX THROUGH THE AGENCY OF MONEY.

SIR,—I may not be out of place in drawing the attention of the medical profession to what appears to me a not unprolific source of the spread of small-pox. I refer to the circulation of money that necessarily takes place between the families affected with small-pox and the general public. Whilst almost every precaution possible is taken to disinfect the houses, clothes, etc., of small-pox patients, no means, as far as I know, have been taken to prevent the spread of small-pox by the agency of money.

Only the other day, I was attending a family attacked with the disease in this town, and, when handed my fee, I found it covered with "the virus", as doubtless were the various moneys sent to the different shops for the purchase of articles necessary for the family use. In this case, the mother had a sick infant (confluent small-pox) in her arms, whilst in one of her hands she held the money from which she paid me, and no doubt also the various tradespeople.

This is not the only case of the kind I have come across, and, in one or two isolated cases, I fancied I traced the attacks to the same cause; in one, a farmer, being fifteen miles from the nearest place where small-pox was prevalent, yet was attacked with the disease some fifteen days after receiving money for some animals he had got sold for him in the town where small-pox then raged.

It is quite possible the attention of the profession may have been long since called to the above; but, if so, I am not conscious of having read or heard anything about it, and most certainly I have never seen any means taken to prevent the spread of small-pox in the way mentioned; at all events, it can do but little harm to remind practitioners that small-pox may be propagated (at least I think so) through the medium of money.—I remain, sir, yours obediently,

JOSEPH EATON, L.K. and Q.C.P.I., etc.

Everton Cottage, Everton, Liverpool, January 8th, 1877.

### VACCINATION.

SIR,—Inquiries ought to be instituted by the Privy Council into the mode of vaccination practised by public vaccinators. It has been stated that lymph has been taken from revaccinated cases. In this way hundreds of persons in a locality may be trusting in a shadow, and may fall victims to an epidemic of small-pox such as that now raging in London, Chatham, etc.—I am, sir, your obedient servant,

FREDERICK J. BROWN, M.D.

Rochester, January 6th, 1877.

### "ALLEGED HOSPITAL NEGLECT."

SIR,—Your "annotation" with this heading, in your last Saturday's issue, evidently refers to the case of James Poole, of 4, Nichols Square, Hackney Road, whom I was first asked to see on Wednesday forenoon, December 13th ultimo, just one week after the accident. I found him suffering from a suppurating lacerated wound, over the left external angular process of the frontal bone—a triangular inch of the bone itself being bare. He had also a Colles' fracture of the left radius. He had then no serious general symptoms, complaining merely of troublesome diarrhoea. This was prescribed for, and the fracture was set and put up in pasteboard splints. The linseed-meal poultice ordered at the hospital was continued to the frontal wound.

On visiting him next morning, I found him semi-unconscious, with more or less stertorous breathing; right hemiplegia of both motion and sensation; unilateral twitchings on the right side of the body and on the left side of the face; pupils sluggish; tongue dry, brown, and cracked; respirations 43; pulse 130; bladder distended. Having a catheter with me, this last condition was promptly relieved: the urine was slightly albuminous. Mr. J. E. Adams, surgeon to the London Hospital, kindly saw the patient with me about 2 P.M., but could detect no fracture of the outer table of the skull. Our diagnosis was, however, a low form of meningitis, most probably supervening upon a fracture of the inner table or base of the skull. Our prognosis was necessarily very grave; in fact, Mr. Adams gave the relatives no hope of the man's recovery. We were told that he had fallen a distance of only seven feet, coming down upon the back of his left hand, and, rolling over, had struck the corner of his left eyebrow against the projecting flange of a boiler-pipe. We were shown a printed paper, received from St. Bartholomew's Hospital, with the name of the dresser who attended Poole, and the words "cut eye and sprained wrist" written upon it. We were also told that, on the Monday prior to my first visit, the patient had actually walked half the distance (at least half a mile) between his residence and the hospital.

At my night visit on the 14th ultimo, I was astonished at finding the patient perfectly conscious, able to recognise me, and answer questions in long consecutive sentences. There was now some slight effusion of fluid in the left knee-joint. This improvement in the cerebral symptoms was, however, only transient. The next morning, his condition was as on my second visit, and from this state he never rallied—becoming more and more unconscious and convulsed until death, about 5.30 P.M. on December 16th.

Mr. Adams was present at the judicial *post mortem* examination. There was no blood-extravasation about the frontal wound, nor fracture of the outer plate of any part of the skull. On very carefully removing the top of the skull—which was unusually thin—we found the whole brain intensely inflamed with a quantity of effused lymph in the sub-arachnoid space of both hemispheres, more especially of the right. There was no effusion or extravasation, either within the ventricles or at the base of the brain. On removing this organ, we found a comminuted fracture of both orbital plates of the frontal bone, extending



from the left angular process across the left plate, just in front of the lesser wing of the sphenoid, smashing up the cribriform process of the ethmoid, and reaching linearly across the whole right orbital plate. A square half-inch of the left orbital plate was completely detached, but there was no intraorbital extravasation. The thoracic viscera were perfectly healthy. The cavity of the peritoneum was slightly inflamed, with some blood effusion in small quantity at its lower part on the right side. The origin of this was a rupture of the right kidney. The remaining abdominal organs were perfectly healthy. There were no metastatic abscesses anywhere discovered; the effusion having subsided, the left knee-joint was not opened.

At the inquest, in answer to an awkward question about the duties of hospital-dressers and house-surgeons in general, by one of the jury, I informed the deputy coroner that Colles' fracture was very often one of the most difficult fractures to make out; and that, of course, it was practically impossible to detect, during life, a fracture either of the inner table or base of the skull. As a further consolation to Mr. Hubert Weiss, the house-surgeon, I may add that, a few days after the inquest, Poole's own son told me that the answer, stated to have been given to the offer to remain in the hospital, was just such an answer as his father would have made. Nevertheless, it must be admitted that the safer and the proper practice would have been to at once put to bed and carefully watch a "somewhat dazed and stunned man", who had received a cranial injury after a fall. Poole had been an exceedingly steady, industrious, and domesticated man all his lifetime.—I am, sir, yours obediently,

ROBERT FOWLER, M.D.

145, Bishopsgate Street Without, January 8th, 1877.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### DEATH IN A PADDED ROOM.

UNDER this heading, the *Liverpool Daily Courier* of the 20th ult. reports the evidence taken on the preceding day at an inquest at the Workhouse of the West Derby Union. It would appear that on the preceding Friday, at 9.30 P.M., a young man aged 32, who had been drinking hard some days before and had been attended by the district medical officer, was, under his direction, sent to the workhouse with a certificate that he was suffering from delirium tremens; but he omitted to state that he was also suffering from advanced lung-disease. On his arrival, the receiving wards woman, though noticing his dyspnoea, ordered that he should be placed in the insane ward; and, on reaching this ward, he was washed and put to bed. At first, he was quiet, but, becoming restless, the superintendent of the ward, who wanted to go to bed, had him placed at 10.30 P.M. in a padded room, contenting himself with giving a direction to the night pauper attendant that he should listen from time to time. This the attendant alleged he did; nevertheless, he never opened the door to see how he was getting on, for the reason (so he stated in evidence) that, if he had, the man might have run out and fallen down stairs and injured himself; the padded room being placed at the head of a staircase convenient for such purpose. The superintendent and pauper attendants both admitted that they had noticed the man's difficulty of breathing. On entering the ward at 7 A.M., the patient was found in a crouching position, dead. The *post mortem* examination showed that he died of pulmonary apoplexy; and the medical officer of the workhouse, who saw him just after his death, further stated that the state of the lungs proved that he had been nearly suffocated for days before his admission.

Such, in brief, is the history of a case which exhibits a melancholy picture of the way in which the pauper sick are too frequently treated; and, in apportioning the blame for the wrongdoing which was perpetrated, we agree with the very intelligent coroner who held the inquiry, that the certificate of the district medical officer was *informal* in solely stating that the case was one of delirium tremens, and neglecting to record that the man was suffering from serious chest-disease. From this omission much of the after-blundering arose; for it is the rule in workhouses for the officials, from the master downwards to the pauper help, to be guided by the wording of the certificate which accompanies a sick-admission; and we regret to state, from information within our knowledge, that these certificates are filled in, both by district medical officers and police surgeons, very frequently in a most unsatisfactory, indeed perfunctory, way. Now, such carelessness may not be of much consequence where there is a resident medical officer, because it would be his duty to see each patient on admission; but as, in the

vast majority of workhouses, the medical officer lives at a distance, it is all-important that the character of the case should be distinctly stated, and we trust that the Local Government Board will issue some stringent regulations on this subject. Similarly, we hope that the guardians of the West Derby Workhouse will be called upon to re-appoint a resident medical officer. Surely there is ample scope for him in a house containing one thousand two hundred inmates, made up as the population of an urban workhouse invariably is; and we trust that the Local Government Board will be judicious enough to insist on the retention of the services of the present visiting medical officer as well.

### A MEDICAL OFFICER'S FEES.

SIR,—J. W., of Leeds, was deserted by her husband and brought here by her parents suffering from acute mania. She at once came on the parish, and I attended her. She required two strong attendants for a fortnight, and could not be removed. Can I claim 2s. 6d. a visit from the guardians, or only one kind of 2s. 6d. for the whole attendance? I should feel much obliged if you would kindly give me your opinion.—I am, sir, yours truly,

T. M. C.,  
District Medical Officer.

\* \* T. M. C. cannot claim anything beyond the 2s. 6d. for the quarterly report that a lunatic has been visited, as, by the terms of his contract with the guardians, he is bound to give all necessary visits so long as the case is under his charge, application for such attendance having been duly made to him as the parochial medical officer.

### POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

SIR,—I shall be obliged if you will permit me to inform the members of the Poor-law Medical Service that one of the objects of the Association—that of giving information and advice to such Poor-law medical officers as apply for the same—is steadily though unostentatiously carried out not only by myself, but by our Honorary Secretary, Mr. John Wickham Barnes. We are continually receiving letters from all parts of England and Wales, and frequently from officers who have not joined our ranks, asking our advice, etc. The enclosed correspondence will show the nature of the information required and the favourable result we frequently achieve. The applicant in this instance was the medical officer of a large provincial urban workhouse. It will be thus seen that the operations of the Association are not limited to public meetings and deputations to cabinet ministers.—I am, sir, yours obediently,

JOSEPH ROGERS,  
Chairman of Council of Poor-law Medical Officers' Association.

33, Dean Street, Soho, January 3rd, 1877.

"33, Dean Street, Soho Square, December 22nd, 1876.

"Dear Sir,—In reply to the questions contained in your letter of the 21st, I have to inform you (1) that there is no law, general order, or instructional letter from the Local Government Board in existence which prohibits a medical officer of a workhouse who is non-resident from having the workhouse medical relief book sent to his private residence for the purpose of writing in the weekly or fortnightly return, for the obvious reason that no harm can accrue to anybody therefrom.

"2. There is no law, order, or instructional letter prohibiting any other paid officer of the workhouse, if his engagements permit of his doing so, from carrying forward the weekly or fortnightly report in the workhouse medical officer's books, so long as the medical officer duly initials each entry. Indeed, it must be apparent that such arrangement is tacitly admitted, when the order making it imperative to initial each entry is binding on the medical officer.

"In the metropolitan and urban workhouse, a very large portion of the medical officer's time would be taken up weekly if it were not understood that it was competent for him to make arrangements either with a fellow-officer, some clerk, or his assistant, to carry forward this return; and I have never yet heard that such rational arrangement has been objected to either by the Central Board, the auditor (who, by-the-by, is often a law unto himself), or by the board of guardians. I should imagine that some misrepresentation has been made either to the auditors or to the guardians, which has induced your board to take so harsh and arbitrary a view of your duty in this simple matter. I cannot but think that a temperate representation of the inconvenience to which you may be exposed by a rigid compliance with this order would induce your board to rescind their resolution.—I am, dear sir, yours truly,

JOSEPH ROGERS, M.D.,  
Chairman of the Council of the Poor-law Medical Officers' Association.

## MILITARY AND NAVAL MEDICAL SERVICES.

### UNPOPULARITY OF THE BRITISH ARMY MEDICAL SERVICE.

SIR,—An advertisement has appeared in the medical journals, offering fifty appointments for competition. To render this service effective and what it ought to be, so as to obviate the employment of civil practitioners, one hundred vacancies would be nearer the mark; but the authorities at the War Office and Whitehall Yard know too well how utterly hopeless it would be to attempt to obtain more than half the requisite number. This fact alone speaks for itself, and undeniably proves the unpopularity of the service under existing circumstances. The result of the present system, irrespectively of its injurious effects on the soldiers, is unjust and oppressive to the inadequate medical staff, who are called upon to perform double duty and often deprived, after their arduous duties, of their due share of home. In fact, the department is only worked at all by the employment of civil practitioners, and imposing on grey-headed surgeons-major the drudgery of the service formerly undertaken by the juniors. I feel quite sure that, if the re-



spectable civil members of the profession who are thus employed only knew the injury and injustice they are inflicting on their unlucky confrères in the public service, they would hesitate before offering their services to the Government at the petty remuneration which so many of them accept.

One word to the unfortunate classes, who from necessity or choice are being deluded by the bait temptingly held out in the shape of £1,000 after ten years' service in unhealthy climates. If they would like to know how many of them are ever likely to reap the reward, or even a moiety of it, let them consult an actuary, or any of the insurance companies, as to the value of life in India, where they would pass the whole, if not the greater part of their service; and let them ask themselves how a valetudinarian, even with £1,000 in his pocket, could undertake the drudgery of private practice, for which a military life is ill calculated to fit them. With regard to the unpopularity of the service, it is not far to seek, and can be confirmed by every old officer in it, viz., the notorious breaches of faith on the part of the Horse Guards and War Office to the medical officers, and the utter impossibility of obtaining redress for well known grievances. As an old officer who has suffered from all these causes, I feel it is my duty to raise a warning voice to those who contemplate entering the public service of the Army Medical Department under the present system.—I am, sir, yours, etc.

A RETIRED ARMY SURGEON.

London, December 7th, 1876.

#### MILITIA SURGEONS.

SIR,—I am sure the letter of the "Non-Militia Surgeon", in your impression of December 30th, gives expression to the opinions of a great number of your readers. I myself have thought that the claims for compensation of the militia surgeons are of the weakest kind, and that Mr. Hardy's answer to them fully met the case, when he gave them to understand that he did not feel himself justified "in submitting to Parliament a vote for the grant of compensation for any reduction they may have sustained in their emoluments by the adoption of the measures prescribed by the recent Royal Warrant".

The professional classes bear a considerable part in the burden of taxation, and it does seem something like sarcasm to ask a struggling practitioner who can hardly make ends meet to assist in compensating his more favoured brethren for the loss of a few of the perquisites of appointments which cost them neither money nor examination to obtain, and which have been instrumental in opening up to many of them practice and influence otherwise unattainable except by purchase.

I beg to remain, sir, your obedient servant,

January 1st, 1877.

A JUNIOR SURGEON.

#### ARMY MEDICAL DEPARTMENT.

SIR,—In the BRITISH MEDICAL JOURNAL of January 6th, under the head of Military and Naval Medical Services, is given the substance of a general order just issued from the Horse Guards, by which medical officers are relieved from paying contributions and subscriptions to regimental messes and bands. This, under the existing organisation of the medical service, is but an act of justice, and is another step towards making this branch of the army a strictly departmental one. At the same time, however, that this order was issued, another appeared in the form of an army circular, granting to all medical officers staff allowances, but, when they reside in barracks, they are only to be given *regimental* quarters. In accordance with existing orders, officers of the staff and all other departments, including those of the Army Hospital Corps, are given a larger number of rooms than regimental officers, so that they may take their meals in their quarters if they choose, rather than go to a mess to which they do not belong. Why, then, while such a decided step is taken towards making the medical service a strictly departmental one, as is done by the general order, should it not also be given the advantages in the matter of quarters, the same as every other department? This is far from being an imaginary grievance. For, while the circular referred to states that medical officers are to have staff allowances, it will mostly occur that the number of rooms allowed by regulation to regimental officers will be found for them in barracks, and they will seldom, therefore, have the advantage of the staff allowances. A married officer, unless he be satisfied to live in his two rooms, will accordingly be obliged to provide himself, at his own expense, with a house or apartments outside the barracks, while a bachelor must go to mess, paying the higher rate of a honorary member. Such an act of injustice as this to a body of officers who have always been found ready to do their duty when called on, can only tend to increase, if that be possible, the existing universal discontent of the so-called Army Medical Department.—I am, sir, yours obediently,

January 10th, 1877.

A SUBSCRIBER.

## MEDICAL NEWS.

UNIVERSITY OF DUBLIN.—The following Degrees and Licences in Medicine and Surgery were conferred at the Winter Commencements, on Wednesday, December 20th, 1876.—Bachelors of Surgery.

Marshall, Joseph  
Nelis, James Alexander  
Pim, William Joseph

Power, Edward Richard  
Story, John Benjamin (1874, 1876.)

Bachelors in Medicine.

Browne, John St. George  
Conolly, William Rogers  
Davison, Henry Alexander  
Flood, John Wellesley  
Frazer, William John  
Houghton, John Francis  
Lynch, Gilbert  
M'Cartie, Frederick Fitzgerald

MacDermott, Ralph  
Malone, Jonathan Hill  
Marshall, Joseph  
Nelis, James Alexander  
Pim, William Joseph  
Story, John Benjamin  
Thompson, James Edward

Masters in Surgery.

Fitzgerald, Dudley Loftus

Pim, William Joseph

Doctors in Medicine.

Greene, William Thomas

Maunsell, Henry Widenham

Licentiate in Medicine.

Duckworth, Richard Henry D'Olier

#### MEDICAL VACANCIES.

The following vacancies are announced:—

ADDENBROOKE'S HOSPITAL, Cambridge—House-Physician and Dispenser. Salary of the House-Physician, £65 per annum, with board and lodging. The salary of the Dispenser will be £100 per annum, with dinner. Applications to be made on or before the 17th instant.

CANCER HOSPITAL, Brompton—Resident House-Surgeon and Registrar. Salary, 100 guineas per annum, with board and residence. Applications to be made on or before January 18th, 1877.

CHELSEA UNION—Assistant Medical Officer and Dispenser. Salary, £100 per annum, with furnished apartment, board, etc. Applications to be made on or before the 16th instant.

CLIFTON UNION—Medical Officer for the Second District, and Medical Officer for the Sixth District.

GREAT NORTHERN HOSPITAL, Caledonian Road—House-Surgeon. Salary, 60 guineas per annum, with board and lodging. Applications on or before the 22nd instant.—Aural Surgeon. Applications to be sent in on or before the 30th instant.

HENLEY UNION—Medical Officer for the Caversham District.

HOLBEACH UNION—Medical Officer for the Holbeach North District and the Workhouse.

HOSPITAL FOR WOMEN AND CHILDREN AND LYING-IN INSTITUTION, Brighton—Honorary Surgeon. Applications to be made on or before the 17th instant.

MANCHESTER PROVIDENT DISPENSARIES' ASSOCIATION—Resident Medical Officer. Salary, £120 per annum, and private practice allowed.

MIDDLESEX THIRD COUNTY LUNATIC ASYLUM—Senior Assistant Medical Officer; Second Assistant Medical Officer; Junior Assistant Medical Officer. Salary of the Senior Assistant to commence at £200, that of the Second Assistant at £150, and that of the Junior Assistant at £120 per annum, and furnished apartments, board, washing, and attendance to each. Applications on or before January 16th.

NATIONAL DENTAL HOSPITAL—Assistant Dental Surgeon. Applications to the Treasurer, 149, Great Portland Street.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC—Resident Medical Officer and Registrar. Salary, £100 per annum, with board and lodging.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney—Assistant-Physician.

TUNBRIDGE WELLS DISPENSARY AND INFIRMARY—Resident House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 17th instant.

#### MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

\*POLLARD, Frederick, M.D., appointed Assistant-Physician to the Liverpool Infirmary for Children, vice \*R. Caton, M.D., resigned.

#### BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

##### BIRTH.

MORRIS.—On January 9th, at 13, Somers Place, Hyde Park Square, the wife of \*James Morris, M.D. Lond., Fellow of University College, of a daughter.

##### MARRIAGE.

HAYNES—MAUND.—On January 10th, at St. Luke's, Southampton, by the Rev. E. A. Ilingworth, M.A., uncle of the bride, assisted by the Rev. F. H. Bowden-Smith, \*Stanley Lewis Haynes, M.D., of Eastnor House, Malvern, to Caroline Henrietta Maund, of Portsmouth, Southampton, daughter of the late W. H. Maund, Esq., formerly of Laverstock, Salisbury.

DR. HANDSEL GRIFFITHS of Dublin has been elected Corresponding Member of the Pharmaceutical Society.



# CLINICAL OBSERVATIONS ON CASES OF TRACHEOTOMY.

By HECTOR C. CAMERON, M.D.,

Surgeon to the Glasgow Royal Infirmary, and Lecturer on Surgery at the Glasgow Royal Infirmary School of Medicine.\*

FOR the remarks on tracheotomy which I am about to read I can claim this merit, that they are based entirely on personal observation and experience of the matters with which they treat; and it will be my object to stray very little, if at all, beyond these limitations. I cannot, however, promise that they will refer to any points of novel interest, except such as grow out of the fresh illustration of well known facts and previously recorded incidents. My object, indeed, will be served if they give rise to a discussion among the members of the Society present on a subject of such general interest to all practitioners as that of opening the windpipe for the relief of obstructed breathing. I shall, then, first detail shortly the history of two cases very similar to one another, but differing widely from all the rest of which I have had experience.

On September 19th, 1872, I was asked by a medical friend to visit with him a young married woman, about thirty years of age, said to be suffering from laryngitis, with dangerously obstructed respiration. On arriving at the house, we found the patient in a condition of extreme gravity. She was in the sixth or seventh month of her first pregnancy, and, during the last few hours, labour-pains had come on, and were recurring at intervals, although with no great severity. From an examination, the doctor in attendance had already ascertained that the os was considerably dilated and the membranes protruding. Three or four days before this, she had been attacked with acute laryngitis, but it was only on the previous evening that distressing dyspnoea had come on. At present, her breathing was almost completely obstructed, and the lividity of her face was extreme. It was evident that she must die very shortly if unrelieved. My friend appeared to think that some amelioration might be expected to follow upon her delivery, and, accordingly, proceeded to rupture the membranes and turn the child. During this operation, she became markedly worse—indeed, completely asphyxiated. As soon, therefore, as the child was delivered, I opened the trachea; and although, for a quarter of an hour or so, the result seemed doubtful, breathing by the tube was ultimately fairly established with the aid of artificial respiration. In a short time, her face (livid before) became preternaturally flushed; she breathed tranquilly; and, in reply to an inquiry from her husband, indicated that she was comfortable and free from pain. She took nourishment and enjoyed some sleep during the day. My friend, at his evening visit, deemed it right to remove the placenta: a procedure which caused her some pain, and brought about an unusual complication in the wound, to which I shall refer again. Suffice it at present to say, that during the night she began to lose strength, and continued gradually to sink until next day, when she peaceably expired, without any recurrence of the difficulty of breathing.

The second case was in many respects very similar. The operation was performed, with the kind assistance of Dr. Coats and Dr. Scanlan, who were in attendance upon the patient, at midnight of Wednesday, the 13th September last. She was a young and healthy woman about twenty-five years of age, and said to be in the last month of her second pregnancy. She had been suffering for three or four days from acute laryngitis, accompanied by distressing dyspnoea. When we saw her together, she was in a state bordering on asphyxia. The lividity of the whole countenance was great, and during coughing, which occasionally occurred, grew even more intense. After the tube was introduced, breathing became rapidly re-established, and this change was quickly followed by all its usual beneficial effects. We left her in the course of an hour greatly relieved, and as comfortable as could be expected in the circumstances. I saw her again at eight o'clock the following morning, when her state was by no means unsatisfactory. About twelve o'clock, however, she was delivered of three children, and immediately expired.

The strictly parallel character of these two cases is sufficiently obvious. Both patients were strong, healthy, and young women far advanced

in pregnancy; in both, the disease was essentially the same and the symptoms of suffocation equally urgent; in both, the operation was successful in restoring easy breathing; in both, premature labour was commenced and completed; and lastly, after this occurrence, in both cases a fatal result ensued.

There are one or two points of interest here, to which I may be allowed to refer at greater length. And, first of all, it is evident that both of these patients were in the worst possible state, on account of their pregnant condition, to struggle with impeded breathing; while, on the other hand, it is interesting to observe that Nature made an attempt, as it were, to relieve the patient by emptying the uterus and so setting free the diaphragm to co-operate with the other respiratory muscles in the struggle for life. I was much struck by a very analogous occurrence, in the case of a woman who was under my care in the Royal Infirmary a short time ago, and in whose progress the public took not a little interest. I refer to the case of Mrs. Barr, for whose murder, and that of her mother, her husband was condemned and hanged in Glasgow last spring. At the time when the murderous assault was made upon her, she was in the sixth month of her second pregnancy. Amongst numerous stabs inflicted, there were two which were especially severe, viz., a penetrating wound of the abdomen with prolapse of a piece of omentum, and a penetrating wound of the left side of the chest. Had this woman been specially disposed to abortion, here were circumstances which might well have brought it about. But neither the mental emotion which was caused by witnessing her mother's murder and in being herself the object of a similar attack, nor the bodily injury which is implied by a penetrating wound of the pregnant abdomen, caused the slightest threatening of any such result; and in a few days, under antiseptic treatment, all the wounds had healed. A fortnight afterwards, a large collection of fluid and air existed in the left pleura as a consequence of the wound of the chest already referred to. For purposes of respiration, the left lung was entirely crippled and the heart was displaced to the right side, the apex-beat being discernible under the right mamma. The breathing now became greatly embarrassed and lividity of the countenance well-marked; and what was the result? I left her bedside one evening resolved to perform paracentesis of the chest on the following day if I found her no better. Premature labour, however, came on during the night, and she was delivered of her child. This relieved her breathing, but left her, for the time being, very prostrate. Now, gentleman, there can be no reasonable doubt that, in all of these cases, the onset of labour was a direct consequence of the asphyxial symptoms from which these women suffered; or, in other words, uterine contractions were excited by the circulation in their systems of non-aerated or imperfectly aerated blood. The presence of carbonic acid in the blood is fully recognised by obstetricians as a cause of abortion. Tyler Smith, in his work on *Parturition*, writes of it as follows:—"The inhalation of carbonic acid rapidly excites abortion, and, during accidental or intentional poisoning by this gas, the ovum is often expelled. During the celebrated *razzia* in Algeria, in which a great number of Arab women were suffocated in the caverns of Dahra, those of them who were pregnant were found to have aborted. Military histories offer examples of the same kind in other countries." Leishman, in his treatise on *Midwifery*, in reference to the same subject writes as follows:—"A similar action of the uterus (*i.e.*, contraction) is produced by carbonic acid, as has been abundantly proved by the records of cases of accidental or intentional poisoning. A precisely similar effect follows the retention of carbonic acid in the blood in asphyxia—a condition under which the expulsion of the ovum has very frequently been found to occur. Of five hundred Arabs, who were suffocated in the caves of Dahra in 1845—as issued, by the orders of the Duc de Malakoff—a considerable proportion were women, and of these many who were pregnant were found to have aborted, and other instances of a similar nature have also been recorded. The same fact has been proved experimentally by the researches of Dr. Brown-Séquard, who further believes that the oxytocic action of carbonic acid is the determining cause of labour at the full term, exciting, by the direct contact of venous blood, the irritable uterine fibre to contract."

I have been thus explicit in endeavouring to show the connection between the interference with the respiration and the supervention of labour in order to point out a lesson which, it seems to me, is logically deducible from the history of these two cases, and it is this: that in the case of a pregnant woman suffering from any form of obstructed breathing remediable by tracheotomy, the operation ought to be performed at a very early stage of the disease. If matters be allowed to go so far as that non-aerated blood shall continue circulating for some time in the patient's system, the strong probability is, that abortion will ensue and prove the last straw to break the camel's back. In fact, a delay, which in a non-pregnant woman might be just and reasonable, in a pregnant woman must be dangerous, since it introduces a very

\* Read before the Glasgow Medico-Chirurgical Society.



serious, and probably fatal, complication. I should be disposed also in future to prefer, in similar cases, laryngotomy to tracheotomy, since the obstruction must necessarily be above the true vocal cords, and the operation is easier, more rapid, and inflicts a less serious wound.

One other point seems worthy of notice before passing from this subject. It is well understood that natural labour is accomplished by voluntary expulsive efforts on the part of the woman as well as by the involuntary contractions of the uterus. In order to bring about these expulsive or bearing-down movements, the lungs are filled with air, the glottis entirely or partially closed, and violent, laborious expiratory efforts are made. In the second case detailed above, this combination of actions was, of course, a physical impossibility, seeing that there was a tube in the wind-pipe. She could make no expulsive efforts whatever, and labour was therefore necessarily commenced and completed by the unaided action of the womb. Such an occurrence must be sufficiently rare to deserve notice here.

In addition to these two cases, I have performed tracheotomy in ten children suffering from croup and diphtheria. In two of these, breathing had already ceased, and all attempts to re-establish it by artificial means, after opening the wind-pipe, proved futile. Of the remaining eight cases, five died and three recovered. The ages of those who recovered were respectively two years, seven years, and four years; of those who died, nine years, three years, twelve years, four years, and four years. Two cases of diphtheria and one of croup recovered, while four cases of diphtheria and one of croup died. Of the fatal cases, three died on the fourth day, one on the second day, and one on the fourteenth day after operation. In what remains of this paper, I propose to consider some of the complications and difficulties of the operation and its after-treatment, with which this experience has more or less familiarised me.

Of all the complications which occur during the operation, probably the most to be dreaded, because the most embarrassing, is hæmorrhage. In only one of my cases did I experience inconvenience from this source. The venous bleeding was profuse and rapid, and although constantly sponged away by Professor Andrew Buchanan, who kindly assisted me, it proved a source of considerable embarrassment. It entirely and quickly ceased, however, on the introduction of the tube. To guard against hæmorrhage and the mishaps to which it leads, I believe it is only necessary to attend to three points, all of which have been often insisted upon. These are to make the first incision scrupulously in the middle line; secondly, to make no attempt to open the trachea until its rings are visible, or felt with the forefinger of the left hand to be quite exposed and bare; and lastly (and, in my opinion, most important of all) the operator must be careful to make his deep dissection correspond as much as possible to the centre of his original wound, or, in other words, it is necessary that he should avoid cutting too much towards the trunk. The veins are largest and most numerous in this situation, and any free dissection here cannot fail to give rise to most undesirable hæmorrhage. Let the first incision, by all means, be free, extending through skin and fat from the cricoid cartilage nearly to the episternal notch. The deepening of this wound, however, must take place only in its central portion. As a French writer has well said: "An ideal operation would be that in which the wound of the integuments would form the base of a triangle, of which the apex would be represented by the tracheal wound."

Another reason for avoiding free dissection at the lower end of the wound is, that it facilitates the occurrence of the second complication to which I shall refer, viz., prolapse of the thymus gland from below. This accident is one not generally noted in surgical works, although it was pointed out many years ago by Dr. George Buchanan. Why it should have escaped attention it is difficult to understand, for its occurrence is apparently by no means very rare. I first met with it when operating in a case of croup, aged three years, with the assistance of Dr. Suttie, who had asked me to see the patient. Suddenly and quite unexpectedly, a large pinkish mass of tissue, of tolerably firm consistence, rolled out from the lower angle of the wound and entirely filled up and obscured it. It was clearly not fat, and a little examination served to show that it was the thymus gland. It was readily reducible, and, being kept in position by Dr. Suttie's forefinger during the rest of the operation, showed no disposition to prolapse again after the tube was introduced. On two subsequent occasions, I have exposed and seen part of the gland at the side of the trachea, where it lies under cover of the sterno-hyoid and sterno-thyroid muscles, but on neither occasion did it give trouble. I need hardly add, that the occurrence is of little significance, except in so far as it interferes with the safe and comfortable performance of the operation.

Another accident sometimes met with is emphysema. It is said that this may occur before the trachea has been opened. The loose cellular tissue of the neck having been incised, air is induced to enter it; and

this is not difficult of belief, when one recalls how, with every forced inspiration of the patient, the wound (and more especially that part of it corresponding to the episternal notch) is deepened and hollowed, and sucked in towards the chest; and I have myself observed emphysema follow the removal of a fatty tumour from this situation, in the case of a patient suffering from severe cardiac dyspnoea. The same conditions, it is well to remember, which produce emphysema at this stage, have in some instances, produced a much more dreadful accident, viz., the passage of air into the open mouths of divided veins, leading to the immediate death of the patient.\* There is a condition sometimes in the wound, associated with the suction into it of air during each inspiration, but stopping short of emphysema, which is of some interest, since I suspect it may sometimes give rise to an awkward mistake. I have observed in several cases an intimate mixing of blood and air in the deeper recesses of the wound, causing a frothy and finely bubbling appearance, which may lead to the belief that the trachea has been opened, when, in reality, this has not yet been accomplished. We know that this mistake has sometimes happened, and I cannot help thinking that the condition I have just described may have had some share in occasionally giving rise to it.†

When emphysema occurs after the opening of the trachea—and this is the stage at which it commonly occurs—it is usually because the wound in that organ does not correspond in situation with the wound in the skin and fat, and the obvious treatment is to enlarge the latter, either upwards or downwards, or in both directions. I have met with it in one instance only, and it occurred under quite exceptional circumstances. It was in the first of the two cases of laryngitis in pregnant women, which I have already detailed. When the medical man in attendance on that case proceeded to remove the placenta, several hours after the tracheotomy had been performed, the patient complained a good deal of the pain, and probably, through her uneasy movements, caused the tube to slip out of the wind-pipe. Attempting, no doubt, to make expulsive efforts, while the hand of the operator was in the uterus, she blew up the cellular tissue of the right side of her neck and face with air which passed out of the trachea, but failed to escape from the wound.

A complication is met with during the after progress of some cases of tracheotomy which, if the surgeon be not forewarned in regard to it, is apt to occasion surprise and alarm; viz., the escape from the wound of fluids which are swallowed. This I have observed in two of my cases. In the first it was very slight. On one or two occasions at the conclusion of a hurried and lengthy draught of milk, a few drops of it were observed to escape by the wound, but, apparently, if the patient drank slowly and deliberately, the accident was avoided. In the second instance, however, the evil was very great, and, as I believe, had a serious bearing on the ultimate issue of the case. The patient was a little girl, about four years of age, who was under the care of Dr. Scott Orr. She had been suffering from diphtheria for ten days before it was found necessary to open the windpipe. Several days after I had operated, it was observed that a large proportion of every drink which she took escaped by the wound and through the tube. This continued until her death, which occurred during an unexpected and sudden convulsion, on the fourteenth day after the operation. In such a case, Guersant advises that the child should be fed by a tube passed through the nose into the œsophagus, and the advice seems worthy of all consideration. The causation of this accident is somewhat obscure. When I first observed it, having heard much of ulceration caused by the pressure of the end of the tube, I dreaded lest a communication had been so formed between the trachea and the œsophagus, and this is exactly what would suggest itself to anyone's mind who witnessed the occurrence for the first time. But this certainly is an incorrect explanation. Holmes, in his treatise on *Surgery*, writes, in reference to this subject, as follows:—"It seems to depend on the obstacle which the presence of the foreign body causes to the elevation of the larynx under cover of the epiglottis, and possibly to effusion into the aryteno-epiglottidean folds from inflammation." If this were the case, however, surely the accident would be a more common one than it is, and would be present from the first insertion of the tube. But in both of my cases, and in the only other reported one which I have happened to see (viz., one of Dr. George Buchanan's), the complication did not show itself until the lapse of several days after the operation. Dr. Buchanan writes of the case in question as follows:—"On the fourth day milk and other fluids were observed to come out of the wound along the tube, and I could not determine whether this

\* A case of this sort is referred to at length in the *Edinburgh Monthly Journal of Medical Science* for November 1847.

† Since writing the above, a case has come under my observation, in which a medical man failed satisfactorily to insert the tube, after performing the operation. *Post-mortem* examination showed us that no opening had been made in the trachea, although both he and his assistants fully believed at the time that this had been done.



was owing to the insensibility of the glottis, or whether the displaced cannula had made an opening into the cesophagus from the pressure of its point against the back of the trachea." It is quite conceivable, no doubt, that the sensibility of the glottis may become impaired, seeing that, so far as respiration is concerned, it is now in a state of disuse; but there occurs to me still one other possible explanation of, at least, some of the cases. In all the three to which I have referred, the original disease was diphtheria; and may the passage of liquids into the trachea not be accounted for by the awkwardness of deglutition, which, we know, does exist during this stage, and which often leads to the regurgitation by the nostrils of part, at all events, of the fluids which are swallowed? May it not, indeed, be a paralytic symptom?

I have mentioned, incidentally, ulceration of the trachea by pressure from the end of the tube, but I am entirely without experience of it. If, as is averred by some, a bloody character of the sputa coughed through the tube be an indication of its occurrence, then, to this extent, I have observed it. But this is just as much an indication of the separation of false membranes, for I have seen blood flow from the mouth in considerable quantity during convalescence from diphtheria affecting the nostrils and fauces; but not at any time implicating the larynx, and therefore never at any time calling for tracheotomy. To mitigate, however, any evils due to the pressure of the tube, it is well to use one in which the cannula is movable upon the shield. Such tubes have, at all events, the merit of being worn with much greater comfort.

The management of false membranes or inspissated mucus obstructing the windpipe below the tube, and so frustrating the object of the operation, is a matter of some difficulty. Frequently Nature effects their expulsion in good time, and, on the whole, it is probably best to trust to what may be done in this way. I have in one case, as has been advised, removed the tube, and introducing forceps down the trachea, laid hold of whatever they could catch between their blades and withdrawn it. But it produced no improvement; on the contrary, it was probably prejudicial. Guersant and others advise sucking the tube, but in diphtheria the practice is a highly dangerous one, and hardly warranted in view of its small chance of success. Speaking of this recommendation, Giraldès says in his admirable *Clinical Lectures on the Surgical Diseases of Children*,—"The counsel is excellent, but, in acting thus you run the risk of contracting diphtheria, a disease, in my opinion, essentially contagious. You find yourselves, then, face to face with a question of feeling (*question de sentiment*). If you have courage to face the danger, your conduct will merit the greatest praise. Give over, on the other hand, to Nature the task of unloading the bronchial tubes, and no one can accuse you, no one can blame you." That the disease is essentially contagious is indicated, I have sometimes thought, by two facts, in regard to which I shall be glad to have the experience of any gentleman present. I have a strong impression, first, that while surgeons, who operate in a case of diphtheria, or remain in pretty close attendance upon it afterwards, often contract the disease, physicians visiting and prescribing for a case requiring no operation do not appear to run the same risk; and, secondly, that when an adult in a family contracts the disease from a child, that adult is most frequently the mother. Maternal affection and grief lead to the frequent kissing of the child in spite of warning.

All of us are familiar with the difficulty often experienced in supplying warm and moist air to the little patient who breathes by a tracheotomy tube; and many must have had experience of the trouble and toil which is implied in keeping up a supply of steam in the neighbourhood of the child's head. I am satisfied that this may be dispensed with for the following much more simple mode of after-treatment. If a sponge—the larger the better, a bath-sponge answers well—be wrung out of boiling-water and placed lightly over the tube, it will be found to be an excellent respirator, furnishing an abundance of warmth and moisture for at least a quarter of an hour; at the end of which time it ought again to be wrung out. The child inspires through the pores of the warm sponge, and, by its expirations, tends to keep the under surface warm even after other parts of it are being cooled. It may be fixed lightly in position by a tape or piece of bandage tied over it, and can be easily removed and re-applied even during sleep. It is, moreover, a grateful application to the part, especially when, towards the close of the second or beginning of the third day, a slight bluish of inflammation surrounds the wound, and the necessity for slackening the tapes tying in the tube indicates some swelling of the neck.

I must now conclude these very disconnected observations, and I take leave to do so by commenting in a single sentence on a matter which, in spite of much that has been said and written, is not generally sufficiently borne in mind. It is this, that the successful issue of a tracheotomy case is the relief of asphyxia, and not the cure either of croup or diphtheria. The little child who has been snatched from

a death by suffocation to die a week or fortnight hence from gradual asthenia, a sudden syncope, or an unexpected convulsion, is as real, though not so apparent an example of the benefits of the operation, as that other who ultimately survives both operation and disease. Let us not, then, be either too elated by successful statistics of recovery or too discouraged by the reverse. Provided the operation have been performed without accident and the breathing fairly re-established, there is much good fortune in the one experience and but small blame in the other. If we deal with large numbers, all statistics seem to be pretty much equalised, and recovery is found to take place about once in every three or four cases; but it is well to remember, that this leaves out of sight altogether much genuine success achieved by the operation. By the performance of it, we do nothing towards curing the disease; indeed, we are rather apt to encourage its extension. All that we can do—and, therefore, all that we should pretend to attempt—is to restore Breath, and with it its companion—Hope.

## REMARKS

ON

## THE PATHOLOGY OF CHOREA.

By H. CHARLTON BASTIAN, M.A., M.D., F.R.S.,

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### *Etiology of the Disease.*

It may, perhaps, be safely affirmed that nearly nine-tenths of the cases of ordinary chorea or St. Vitus's dance occur in individuals either—

1. In relation with rheumatic fever;
2. As a sequence of fright; or
3. In association with anæmia, chlorosis, or some other cachectic condition.

We know also that it tends to occur all the more readily in children, especially between the sixth and fifteenth years, who have been born from nervous parents, and who themselves show signs of an undue excitability of the nervous system. Occasionally it occurs in adults, or in persons who seem in other respects healthy, except it may be for some slight menstrual disorder, or for the fact of the coexistence of pregnancy, as in cases specially referred to by Dr. Barnes.

These are the known facts, and the question is how we are to deduce from them a pathogenesis for the disease which shall be broad enough to be compatible with the whole of them.

The "*Embolio Theory*" seems to me to be lamentably defective in this respect. It is (1) so narrow that, even if more were capable of being said for it than now seems possible, it could only be considered to apply to one small section of the total number of cases of chorea, and would necessitate our framing some wholly independent hypothesis in explanation of the remainder. That I am not overstating the case against the theory will be plain to those who recollect that, in the large majority of the cases of chorea supervening in individuals belonging to the second and third categories, there is no evidence of the existence of endocarditis at the time of the onset of the disease; and that this is also true of a certain number even of the cases belonging to the first category—that is, to those by no means uncommon cases in which chorea follows rheumatism where there is no heart-disease, as well as to those rare cases in which it precedes the articular affection. But other strong evidence against the "*embolic theory*" may also be cited. Thus (2), chorea is not sudden in its mode of onset, as it should be if this theory were true. In the large majority of cases, it is quite the reverse, so that it may be said to be the rule for chorea to manifest itself gradually. (3.) The valvular disease which does coexist with a large proportion of the cases of chorea, when the disease is fully established, is usually not of a kind to favour the separation of embolic particles, consisting as it does, for the most part, of a row of small bead-like elevations near the free margins of the mitral valve on its auricular surface. It is, in fact, an incipient endocarditis of low intensity, in which the elevations are in the main composed of a coherent overgrowth of the valve-substance, without the addition of those more brittle fibrinous concretions which form so large a part of

\* Concluded from page 38 of last number.



the "vegetations" produced under the influence of rheumatic fever.\* Without referring to other grounds, which might be more open to dispute, these alone seem to me to suffice for the rejection of the "embolic theory" as an explanation of any large number of the cases of chorea. It is, however, quite conceivable that, in certain accidental cases, multiple minute embolisms of the corpora striata might occur and give rise to this affection. I regard embolism, therefore, as a possible cause, but cannot consider that it frequently leads to the production of chorea.

What better explanation can, in fact, be found for such a case as this, about which I was consulted not very long since? E. P., a girl aged 14, had about twelve months previously suffered from rheumatic fever and endocarditis, which left a mitral systolic murmur, heard very distinctly when she came under observation. Four months after the rheumatic fever, she was suddenly attacked with choreal movements in the right arm and leg, and at the same time with thickness of speech. After a few days she was observed to be spiteful, and soon showed other signs of an altered mental state. The chorea preserved its unilateral character throughout. Now in this case, looking to the pre-existence of a rheumatic endocarditis, to the sudden onset of the chorea, to its limitation to the right side, as well as to the altered mental state and to the absence of any other distinct exciting cause, I think we are warranted in supposing that small embolic particles were more or less simultaneously swept away along their most frequent channels into the left middle cerebral artery, and thence distributed partly to the corpus striatum and partly to the convolutions.

The problem before us is now, from this point of view, decidedly simplified. In the cases belonging to our first category, chorea far by the most frequently supervenes as a post-rheumatic complication; and, if the causative relation between it and heart-disease may be dismissed, then we are thrown back upon the blood-state or general constitutional condition following rheumatic fever as that which favours the occurrence of chorea. This post-rheumatic state is eminently an anæmic and debilitated condition, so that, from this point of view, the cases of chorea pertaining to our first category are found to agree in their conditions of origin pretty closely with those belonging to the third category above mentioned. So far, therefore, we seem to learn that chorea is most prone to occur in individuals of a certain age whose nervous tissues are unduly irritable, partly from their inherent constitution, and partly under the influence of anæmia and other allied though more special blood-states variously induced. The degree of influence of these several factors must, of course, vary much in individual cases.

What, however, is to be said concerning those numerous cases pertaining to our second category—those in which fright seems (to Dr. Dickinson as well as to myself and others) to act as the immediate and undoubted exciting cause? To be brief, it appears to me that these cases may be ranged under two heads; viz., (a) cases in which, with an irritable nervous child, the fright causes such an enormous downrush of molecular motion from centres above to those below in the corpora striata as to set up in them more or less immediately, without the intervention of an altered blood-state, "functional disease" if not structural lesions; and (b) cases in which the disturbance of the molecular life of the lower centres occasioned by the shock was not of itself sufficient to set up the disease, but where the results of the shock have been profound, wider, and more lasting. In these cases, a state of lowered health is gradually established; and in two or three weeks, or even a much longer time after the mental shock, the symptoms of chorea may begin to manifest themselves.

The first or immediate mode of action of fright (although different authorities may have their preferences as to the exact mode of stating it) is probably that which is most commonly entertained. But, whilst admitting the difficulty of the question, I am strongly disposed to think that the second or remote mode of action of fright—that is, by its induction of an altered blood-state—also obtains in certain cases where chorea follows some severe mental shock with a short or not very prolonged interval. My reasons are these. First, I have seen several well-marked cases, and Dr. Broadbent refers to others, in which the most profound and lasting alterations in general nutrition have set in even in adults after a very severe fright or terror. Secondly, in some of the cases in which chorea follows fright, patients do, as a matter of fact, become distinctly anæmic and thinner before or whilst the chorea is developing. Thirdly, it is not difficult to understand how this altered condition of nutrition may be brought about by disturbance of the sympathetic system of nerves, either through the abdominal ramifications of the

pneumogastric or through its own connections with the cerebro-spinal system. Fourthly, even in some of the cases of chorea arising from fright, a mitral murmur becomes developed in the course of the disease; and, when such cases have chanced to be examined *post mortem*, the usual endocarditic beading of the mitral valve has been met with. These latter facts have been brought out in a very clear way by Dr. Dickinson in the valuable paper already referred to, although he interprets the mode of origin of the heart-disease (*loc. cit.*, p. 37) in a manner which I am unable to accept. But this part of the subject must be more specially referred to.

The portion of Dr. Dickinson's communication which seems to me the least convincing is this section, in which he seeks to interpret the occurrence of the slight endocarditis which has been met with in no inconsiderable number of the cases of chorea induced by fright, and in which the corresponding mitral murmur has been known to have developed with the chorea. There is to me nothing whatever peculiar in the character of the endocarditis which is associated with these cases of chorea. It occurs in the usual situation; but, as in many other cases of chorea, it is limited in extent, owing, as I believe, to peculiarities in the state of the blood usually associated with this affection. Microscopical examinations of the blood drawn from the tip of the finger in twelve average cases of chorea, as I find from notes taken in 1869, were principally remarkable for the fact of the absence of separated threads of fibrine, and for the absence of an increase in number of the white corpuscles, or of any exaltation of their amoeboid activity. To these peculiarities of the blood I ascribe the fact that the proliferation in the substance and on the surface of the valve is not reinforced by those depositions of fibrine and white corpuscles which together suffice largely to augment the endocarditic lesions occurring during the course of rheumatic fever. My notes of the examination of the blood in many of these latter cases, made also in 1869, show that in them there is always more or less of increase not only in the number, but in the amoeboid activity of the white corpuscles; and that the amount of fibrine which separates in the form of needles or threads is almost always increased, and is often excessive in amount.

If, however, there be nothing peculiar in the nature of the endocarditic lesion pertaining to these fright-engendered cases of chorea, the same may be said respecting the cause assigned by Dr. Dickinson. If irregular action of the heart could so readily induce actual disease of the mitral valve in chorea as Dr. Dickinson seems disposed to think, it may fairly be asked how it is that the much more prolonged irregular action so frequently met with in non-choreal cases of heart-disturbance does not lead to the same result? I certainly am not aware that any such sequence is either with or commonly looked for by the majority of physicians.

I prefer, indeed, to believe that here also the explanation of the endocarditis is to be found in an altered blood-state generically similar to that met with in other cachectic states with which chorea is often associated, though produced in these particular cases under the remote influence of fright. Thus, so far as we actually know at present, acute inflammation of the endocardium only arises under the coexistence of altered blood-states, though these may differ a good deal amongst themselves according as they pertain to rheumatic fever, puerperal fever, scarlet fever, measles, Bright's disease, or certain less definite cachectic states of the system—which may follow rheumatic fever, may be associated with menstrual irregularity, or with some other less appreciable cause.

In accordance with the views already set forth, I should expect that hemichorea would not unfrequently be caused by the direct action of fright, and that so long as the affection continues to be unilateral, it will be less frequently complicated by a supervening endocarditis than when the disordered movements are bilateral. Embolism, also, would seem, where it does act as a cause, to be more likely to be instrumental in producing an one-sided than a general chorea. On this account, therefore, and also because a previous endocarditis of rheumatic type existed, it would not be improbable that the hemichorea in the case detailed by Dr. Stephen Mackenzie, in his communication to the *JOURNAL* of December 23rd, may have been occasioned by embolism. On the other hand, it also seems to me, that his case is very fairly open to a different interpretation. As he himself says, the child was "of an age, sex, and temperament which specially predispose to chorea"; and she was subjected to the emotional strain and depressing influence almost necessarily resulting from her mother's death. It is further worthy of note, that the choreal symptoms did not set in immediately after the "vascular excitement" which was presumed by Dr. Mackenzie to have been the occasion of the sweeping away of embolic particles from the diseased mitral valve. They first began to show themselves ten days after this date—which is a fact of no small significance.

\* Of course, in those cases in which heart-disease has been engendered during the course of rheumatic fever, and this state is followed by chorea, a condition of the valve more favourable for the sweeping off of minute embolic particles would undoubtedly exist.



*Pathology of the Morbid States or Disordered Actions, in certain Parts of the Nervous System.*

This final problem is one not peculiar to chorea; in essence, at all events, it is similar to that which requires solution in many other cases where abnormal blood-states favour the occurrence of local lesions. There are, as we all know, seats of election—that is, particular tissues are apt to become the seats of inflammation, or some other pathological change in different diseases. In typhoid fever, the small intestine is gravely affected; in scarlet fever, the throat and tonsils suffer; in rheumatic fever and other states, the endocardium of particular parts of the heart inflames, just as in lead-poisoning, particular muscles of the body are especially implicated. It seems to me, therefore, a fact of the same order when we find that a certain altered blood state predisposes certain individuals not only to a subacute endocarditis, but to an irritation of certain specially active parts of the brain, which goes on to produce what we may call a subacute inflammation.

The intimate processes of nutrition in different tissues of the body and in different parts of the same anatomical system, must vary with the chemical composition of such tissues, and is, in all probability, subject to variation under influences which cannot be thus roughly expressed. Hence, a certain blood-state differing from that which is habitual to the individual may easily pass beyond the range of what is compatible with the continuance of an ordinary nutritive and functional activity in the elementary parts of certain tissues. Such tissue-elements become "irritated" (what other word can we use?) and begin to attract more blood. In this we have a state corresponding with what I apprehend to be the first stage of the perverted function which shows itself in the corpora striata and adjacent parts at the commencement of chorea; though, as I have already hinted, a somewhat similar condition may be brought about in different ways, and sometimes would seem to be occasioned by the direct action of fright (*Paralysis from Brain-Disease*, pp. 27-30). At other times, indeed, no distinct cause, either predisposing or exciting, can be assigned (as with other nervous diseases of the same class), though such instances are frequently ascribed to some source of "reflex irritation". But, howsoever induced, if the irritation continue, the disturbed action outside the vessels communicates itself to the tissue elements inside the vessels, as they come within the morbid area. The white corpuscles, as a consequence, begin to adhere to the walls of the small vessels, so that partial obstructions may be produced, which are, perhaps, thereafter rendered complete by separation of fibrine or allied products. And in certain exceptional cases, such as those which have been encountered by Dr. Aitken and Dr. Tuckwell, small foci of softening may be produced.

After detailing the results of his own observations, Dr. Dickinson writes (*loc. cit.*, p. 16). "Arterial repletion seems mainly concerned in the development of the disease; why, or at what bidding do these vessels thus gorge themselves?" The answer which I should be inclined to give to this question has now been briefly sketched, and I am pleased to find that, in many respects, Dr. Dickinson's interpretation does not very materially differ therefrom.

Multiple occlusions of capillaries and small vessels may easily give rise to the minute vascular injections which have now, on so many occasions, been met with in the corpora striata and adjacent parts of the brain in fatal cases of chorea (see *Pathological Transactions*, 1869, p. 15). It is, however, especially needful in an affection of this kind in which the only easily recognisable *post mortem* mark is one of hyperæmia, not to confound that which lies at the root of the disease with other hyperæmias more or less secondary in their duration and mode of origin. Certainly, this is a point which should be carefully borne in mind by future investigators.

In brief, then, my view of the etiology and pathology of chorea is this. In common with many who have spoken with greatest authority on this subject, I look (certain rare cases excepted) to an altered and often anæmic blood-state as its predisposing cause in individuals of a certain age and nervous temperament. Secondly, I look to the initiation in such individuals of a disturbed nutrition in the corpora striata and adjacent parts of the brain, tending to issue, and often actually issuing, in what, for want of any other more appropriate term, may be called a subacute inflammation of these centres—often characterised in part by the production of multiple minute thromboses. It will be seen, therefore, that I hold no simple theory which can be embodied in a single phrase, though, as regards the great majority of cases of chorea in which there are local lesions—and these are well marked—it is quite true that I would replace the embolic theory by what Dr. Hughlings Jackson has termed the "hypothesis of thrombosis".

## CONSUMPTION AND CLIMATE.

By RICHARD PAYNE COTTON, M.D., F.R.C.P.,

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DR. REEVES of Melbourne, in his recently published work on *Consumption in Australia*,\* has, I think, done us a real service. He shows what, I suppose, all of us were well prepared to hear, that phthisis is scarcely less frequent and fatal in Australia than in England; and that, however modified the disease may be at our antipodes, it is nevertheless there, ever ready to claim its victims, and to show us that there is no exception in that country to the universal presence of that dread malady. And yet how many of us are in the habit of sending certain of our phthisical patients to Australia, and of finding that, however often the result may have been unsatisfactory, yet, in many instances, our best hopes have been even more than realised.

Some years ago, I was consulted by a young medical friend, already decidedly phthisical, about his settling in Australia. He went there with my approval, and is now one of the most successful medical practitioners in the colony, and occasionally sends me a letter, saying that now he can equally well both see his patients and hunt the kangaroo. Several similar, and quite as promising cases have at various times come before me; but circumstances have not permitted me to trace for any length of time their subsequent histories.

On the other hand, and quite in accordance with Dr. Reeves's statements, our *confrères* in Australia not unfrequently send their native consumptive patients to be cured in England. Two such examples have lately fallen under my own observation; in the one, the change was productive of the happiest results; in the other, however, the disease ran on with unchecked rapidity.

How are such circumstances reconcilable? Is it not apparent that there cannot exist, either in the one locality or the other, any special or *specific* influence, and that any benefit to be derived in either instance must be due to other causes? Whether the tubercular diathesis arises here or in any foreign climate, a change from that climate and from every circumstance of life connected with it, a rest from the work and conditions under which it has arisen, a new field of occupation and thought, and especially, as in our relation to Australia, where all this is prefaced by a long sea-voyage, constitute, indeed, the real and only active influences for good.

Early cases of phthisis, more especially those of a strongly inherited origin, where the pulse is not much quickened; the breathing calm; where there has been no recent and never any active hæmoptysis; cases of the "languid" rather than the "florid" type of the disease present the conditions upon which the changes I have just enumerated would be the most likely to tell, and upon which they certainly often do tell very satisfactorily.

And here, in connection with this subject, I would make a passing remark upon the now rapidly dying out opinion, that there is anything in any one climate, wherever it may be, which is opposed to the development or even the increase of tubercular disease. Consumption exists everywhere. There is no favoured spot where it is not. There is no "promised land" for our consumptive sufferers, where they will fail to meet with native consumptive sympathizers.

It is quite true that the form of tubercular diseases, their degree, severity, and duration, may differ considerably in different parts of the world, according to the habits of the people, and the relation of the climate to such habits; but there is no favoured country where tubercle has not a birth-place. Trouble, privation, numerous sources of unhealthiness uncontrolled, and many perhaps uncontrollable, the evil habits of civilised life, the vices of individuals and of society, have, unhappily, no geographical limit, but are everywhere exercising their influence, although, of course, in differing degrees, both in originating and arousing tuberculous diseases. Consumption's old and special title of "English disease" is as undeserved as it is used to be common.

Some years ago (Fothergillian Prize Essay), I published the result of numerous inquiries on this subject. I found that, everywhere, whether in cold, temperate, or hot climates, consumption was known only too well by my professional brethren. Dr. Wilson of New Brunswick stated that "the great majority of the adult aborigines of North America died of phthisis, and that the disease is very common amongst European settlers".

In more temperate climates—take, for instance, the very health-resorts of the consumptive invalid—the shores of the Mediterranean, Italy, the South of France, Spain, and Portugal—phthisis is to be found. Dr. Burgess says (*Lancet*, July 1850): "There is no part of

\* Reviewed in *BRITISH MEDICAL JOURNAL*, December 30th, 1876.



France where consumption is so prevalent amongst the native population as at Montpellier and Marseilles." Dr. Journée's tables upon phthisis in Italy show that the same is the case in that country. Dr. Meryon (*Lancet*, July 1850) says: "Had I leisure, I could collect facts to prove that there are more natives (not strangers, but born and bred in the place) who die of consumption in Nice than in any town in England of the same amount of population." My colleague Dr. Pollock, who practised for many years in Rome, states that, "in no country is consumption so rapidly fatal as in Genoa, Florence, and Naples" (*Medical Gazette*, vol. xlv). Madeira itself, so long the "city of refuge" of our phthisical countrymen, forms no exception. Dr. Mason says that consumption and scrofula are frequent there (*Climate and Meteorology of Madeira*). The late Sir Ranald Martin, so long distinguished as a surgeon in India, once assured me that, in the East Indies, both native and European residents are often attacked with phthisis. The late Dr. Musgrave of Antigua has often told me that, in the West Indies, many of the native blacks fall victims to consumption.

And yet, as in the case of Australia, we send, and wisely so, many of our properly selected consumptive patients to the South of France, Italy, Algiers, etc. As with Australia, however, we must not promise them that they will meet there with anything *specific*. We can only hope that the rest and change, the milder air permitting more outdoor exercise than in England—the variety, in fact, offered to them in their every work and thought—may induce, according to their individual requirements, either some peaceful respite or some healthful reaction.

## NOTES OF A VISIT TO THE MILITARY HOSPITALS OF THE CONTINENT.

By ALBERT A. GORE, M.D., Surgeon-Major, Dublin.

### II.—BRUSSELS.

THE military hospital is in the Rue des Minimes, and was formerly a convent, erected in 1725. It is in an old part of the town, and not far distant from the Hôtel de Ville, in the front room of which the Emperor Charles V signed his abdication. Like most old buildings of that date, the shape is quadrangular, with a courtyard in the centre, and a garden attached. The hospital is visited at 9 A.M., and a *sur de charité* is on duty in each of the four divisions, and appears to have much to do in the nursing as well as in the looking after the wants of the sick.

The construction of this old building (in the wards of which it is not improbable that many of our wounded soldiers were received after the battle of Waterloo) does not admit of cross-ventilation, as the wards open upon corridors, in some of which were rows of beds. The walls were scrupulously clean and neat, and the walls limewashed. The hospital contains two hundred beds, and takes the sick of the garrison of Brussels, numbering between 2,500 and 3,000 men. It is divided into wards for officers, non-commissioned officers, and privates. Venereal cases, febrile diseases, psora, eye-cases, and surgical affections are treated separately. The walls of the ophthalmic ward, which, on August 26th, only contained three patients, were not coloured. The patients seemed upon the whole anæmic; especially those suffering from secondary venereal affections, which were treated in great part by mercury.

In the garden is the pharmacy, in charge of a chief chemist, who wore a decoration in his button-hole, and two assistant-chemists, with three or four subordinates, and fourteen students in pharmacy. There was also in the enclosure a wooden hut (limewashed on the inside), and intended for the reception of small-pox cases and other infectious disorders. In the same building with the pharmacy were the quarters of the two junior medical officers ("médecins-adjoints", or assistant-surgeons), and those of the administration-director, or intendant, who distributed the rooms, and looked after the diet, clothing, hospital stores, and the ventilation of the wards. Further behind is the mortuary. Each of the resident assistant-surgeons had a large sitting-room, off which were two closets; one of them was used as a bed-chamber, the other as a dressing-room.

Antwerp has the largest military garrison in Belgium; but Brussels, the capital, is the head-quarters of the medical staff of the Belgian army. Dr. Fromont is "Inspecteur-General du Service de Santé de l'Armée", and is assisted by a *médecin-principal* of the second class as assistant inspector-general, a second assistant or battalion surgeon of the second class, and a *pharmacien*. The army (including the reserve) numbers 104,000 men, 16,000 horses, and 210 guns. Upon a black board in the consulting-room of the hospital are the names, rank,

and addresses of the officers constituting the medical staff of the garrison hospital, of which M. Lelong, *médecin-principal* of the first class, is chief. There are, in addition, two assistant-surgeons, three chemists, twenty-six students in medicine, and fourteen students in pharmacy. The regimental medical staff of the garrison numbers four first class, or regimental surgeons-major; eight battalion-surgeons, and a proportion of assistant-surgeons. Each battalion of infantry is three hundred and twenty strong. The medical officers all wear the same uniform, with the distinction of rank in the képi and sleeve, as in the French service. A very large proportion of the military surgeons are in private practice in Brussels. Dr. Lelong is Physician to the Count of Flanders, and to many of the nobility; a considerable number of the senior officers are decorated.

The case of each patient is taken at his bedhead on two forms or modèles. The first of these is a "liste des médicaments" prescribed; and the other a clinical memoir (*jour par jour*). At the expiration of every half-year, a manuscript report is made of the diseases and injuries treated in the hospital; the principal record.

To the medical officer on duty I am indebted for the following interesting particulars. During the six months ending Dec. 31st, 1875, there had been admitted to hospital 846 patients, of whom 14 died. The admissions were: venereal, 143; ophthalmia, 38; wounds and injuries, 388; fevers and medical diseases, 382. Of the medical cases, 328 were acute and 54 chronic. Of 1,007 patients (846 admitted and 161 remaining on June 30th), 761 were discharged cured, 39 were sent to the dépôts of their corps with certificates of invaliding, 56 obtained convalescent leave to go home, and 5 were sent to the special ophthalmic hospital at Louvain; 14 died, and 132 remained under treatment on December 31st.

During the first six months of 1876, there were admitted to hospital 932 patients; 132 remained under treatment, 56 of the admissions were conscripts under observation.

Admissions.—Fever and other medical diseases, 455; wounds and accidents, 261; ophthalmia, 49; venereal, 167. *Varieties of venereal disease*—balanitis, 10; posthitis, 2; phimosi, 2; paraphimosi, 2; urethritis, 93; stricture, 2; cystitis, 1; orchitis, 10; chancre, 33; constitutional syphilis, 5; warts, 6; nodes, 1.

The public women are examined twice a week in Brussels.

From the total, 1,064, occurred 22 deaths, viz: typhoid fever, 13; consumption, 4; cerebro-spinal meningitis, 1; acute tuberculosis, 1; peritonitis, 1; general abscess, 1; fracture of base of skull, 1.

The troops of the line in Belgium appear to be as a rule very young lads, clothed in blue coats with red shoulder-knots, and linen trousers. The men of the guard corps are taller.

Patients in hospital are given bread and milk at 7 A.M.; soup, bread, and fresh meat at 10 A.M.; and a mess of vegetables and some bread at 4 P.M., with any extras ordered by the physicians. The hospital contains six baths, three of which were devoted to cases of psora, which were treated by the sulphur and lime method. The hospital clothing is dark blue.

[To be concluded.]

## CASE OF ŒSOPHAGEAL FISTULA OPENING THROUGH THORACIC PARIETES Laterally.

By J. G. SINCLAIR COGHILL, M.D.,

Physician to the Royal National Hospital for Consumption and Diseases of the Chest, Ventnor.

THIS morbid condition is, so far as I am aware, of such extremely rare occurrence, that a brief report of the case may be of interest.

J. B., aged 33, a printer, enjoyed good health until February 1875, when he had, to use his own words, congestion of the lungs and pleurisy. An abscess formed on the right side, pointed, and was opened in June; since then four other openings were made, the last two in November, when drainage-tubes were introduced. He had been under treatment in the Great Northern Hospital, and on the 27th of April, his schedule, as filled up by Dr. Frederick A. Carter, describes his condition as follows: "Empyema of fifteen months' duration, discharging slightly at the present time through two drainage-tubes, unconnected, one in each of two openings. By percussion there is noted some slight loss of resonance at both apices, and on auscultation air is found to enter both lungs fairly well and no râles to be heard. Height 5 feet 10 inches; pulse 108; respirations 15, and natural. There is no family history indicating hereditary proclivity."

He was admitted into the Royal National Hospital here on May 22nd, and the following notes are taken from the case-book, entered



on the date of each of my visits, by Dr. Williamson, the late, and Dr. Frazer, the present, resident physician.

"The right thorax is much contracted, and the apex-beat is displaced upwards and inwards under the left margin of the sternum. There are two fistulous openings on the anterior aspect of the right side, one three inches from the middle line of the sternum between the third and fourth ribs, the other three and a half inches from the mesial line between the fifth and sixth ribs. In each fistula there is a drainage-tube four inches in length, and from both openings there is discharged an ounce and a half of healthy pus in twenty-four hours. No respiration can be detected in the right lung, except from the area surrounding the fistula. There has been great loss of flesh; the weight being 8 st. 5½ lbs. The pulse is 84, respirations 25; and the temperature normal. The fingers are remarkably "clubbed", and the patient avers they had been even more so in the course of his illness. There is very little cough or expectoration. The appetite is good, the tongue clean, the bowels regular, and he sleeps well."

No communication was found to exist between the two fistulae; and ten inches of fresh drainage-tube were easily inserted into each, through which a greatly increased flow of matter was discharged. The surface was dressed with tenax, and a broad bandage firmly applied. He was ordered to have thirty minims of tincture of sesquichloride of iron in water three times a day, with full diet.

May 24th. The discharge is more abundant. He feels faint and weak, for which a cordial draught is ordered.

June 3rd. The discharge is decreasing. There is now no cough. He has a good appetite. Pulse 102, fuller.

June 7th. His weight is 8 st. 13½ lbs.; a gain of 8 lbs.

June 13th. He is ordered to inject the fistula daily with solution of boracic acid.

June 18th. He complains of debility. Ten minims of spirit of chloroform are ordered to be added to each dose of the iron mixture.

June 21st. His weight is 8 st. 12 lbs.

June 23rd. Much excoriation of the skin round the parietal orifices is noticed for first time. The part is to be dressed with a weak carbolic acid solution in linseed-meal poultice.

July 3rd. He is better; weight 8 st. 10¼ lbs. The medicine is now changed to half a drachm of syrup of iodide of iron three times a day.

July 11th. He is doing very well. The excoriation surrounding the fistulae has completely disappeared.

July 18th. The presence of an oesophageal fistula through the upper parietal orifice, although suspected, is for the first time demonstrated. Food, both fluid and solid, when "gulped", that is, swallowed in larger quantities than can readily pass through the cardiac orifice of the stomach, and so distending the oesophagus, pass through the breach in its wall. In this way, porter and milk, for instance, can be at once recognised, as also minute portions of solid food, which are often long delayed in transit, as is determined experimentally with the seeds of preserved fruit, and such like.

July 25th. The discharge is very profuse. A weak watery solution of iodine, in place of the solution of boracic acid, was injected. There is increased temperature with reduced discharge.

August 1st. The iodine injection was repeated with similar effect.

August 2nd. His weight was 8 st. 9¾ lbs.

August 5th. The iodine injection is repeated.

August 8th. He is not so well; complains of weakness. His appetite is bad. He is ordered De Jongh's cod-liver oil in a vinous solution of chiretta, and the following mixture:

R Acid. hydrochlorici dil. ʒiij; tinctura ferri muratis ʒvj; liquor hydrargyri perchloridi ad ʒiv. M. One drachm in a wine-glassful of water three times daily.

August 9th. He is very weak; has had an attack of vomiting.

August 19th. His general condition is now much improved. There is increased discharge from the upper fistula; both, however, are patent.

August 23rd. There has been sharp pain round the upper opening, relieved by an opiate poultice.

August 29th. The discharge is very heavy and fetid. He is ordered mixture of turpentine and senega.

September 5th. Discharge diminished. Fifteen minims of spirit of juniper were added to each dose of the turpentine mixture, on account of slight puffiness of the ankles.

September 7th. Still improving. The drainage-tube passes for the first time from the inferior to the upper opening.

September 11th. He is ordered two drachms of Parrish's syrup of phosphate of iron three times a day.

September 13th. Carbolic acid solution is ordered to be used for injection. His weight is 7 st. 11¼ lbs.

September 20th. He leaves the hospital at the urgent desire of his

friends to return home. The stomach is settled; his appetite is good; and the discharge is very much diminished in quantity and healthy in character.

We were subsequently informed that death occurred "very suddenly", probably from embolism of the pulmonary artery, on October 27th.

The remarkable variation in weight is not the least singular feature in this case, there being a gain at one period of eight pounds, and, at the date of discharge from the hospital, a total loss of sixteen and a half pounds. The general health at the same time improved, and there was only temporary elevations of the temperature after each of the injections of the pleural cavity.

## PORTABLE REGULATING ETHER-INHALER.

By J. T. CLOVER, F.R.C.S.

IN the BRITISH MEDICAL JOURNAL of July 15th, 1876, I described an apparatus for giving laughing gas and ether separately or combined. Experience in more than three thousand cases in which I have used it convinces me that the administration of ether may be made far less unpleasant to the patient, and equally effective and safe, by first giving enough gas to render the patient unconscious of its taste.

The arrangement of the apparatus enables one to cause the patient to breathe directly into and out of a bag, or partly, or entirely through a vessel containing liquid ether; and, even without gas, it is very efficient, inasmuch as it gives the power of varying and of sustaining the strength of the vapour. I have used it a great many times without gas, and find it as safe as any other way of giving ether, whilst the risk of coughing and sickness is much lessened.

The plan of excluding fresh air until insensibility has been induced, and admitting it very sparingly afterwards, has now been extensively tried in various ways, and, so far as I know, it is practically free from the danger of causing serious obstruction to the pulmonary circulation and overdistension of the right cavities of the heart. Of course, air cannot be indefinitely excluded, but the pulse and respiration give timely notice when air is required. A single artificial respiration of fresh air in these cases affords more relief than several such respirations when the apnoea has resulted from an overdose of ether or chloroform. The reason for this is, that in the former case the symptoms depend chiefly on the want of oxygen, and in the latter upon the presence of a substance which has not only entered the blood, but has penetrated the tissues of the body. If the apparatus be overheated, or if the ether be turned on too quickly, the ordinary coughing and struggling would, of course, be produced. The apparatus, however, requires a little more attention to temperature and other details, and is rather too complicated for general use. I have made several attempts to avoid the necessity of warming it. This can be effected by having the ether-vessel surrounded by a larger quantity of water at the ordinary temperature; but then the size and weight of the inhaler become objectionable. Better success attended modifications of the instrument having the ether-vessel placed close against the face-piece, so as to receive more warmth from the patient's breath and from the hand of the administrator.

I am greatly indebted to Messrs. Mayer and Meltzer for their patience and ingenuity in carrying out my ideas, and my present object is to call attention to a portable regulating inhaler made by them. Its advantages are these:—1. It has no valves; 2. It supplies the vapour so



gradually, that patients breathe quietly; 3. It produces sleep in two minutes; 4. It does not require fresh ether during the continuance of an operation; 5. The recovery from a short operation is more speedy than with most other inhalers; 6. It does not need to be warmed



before it is used ; 7. No sponge or felt is required ; 8. Ether left in the inhaler can be saved for another time.

The face-piece is edged with an air-cushion. The ether-vessel and water-chamber rotate upon the mount of the face-piece. When the instrument is first applied, the stopper should be towards the patient's forehead, and now he breathes in and out of the bag directly. As the ether-vessel is turned round, the air is obliged to enter the ether-chamber and pass through it before it reaches the bag ; and, when the vessel is turned half-round, so that the stopper is opposite the patient's chin, all the air going in and out of the bag must pass through the ether-vessel. Two ounces of ether (specific gravity 735) are enough for a long operation. Usually, an ounce and a half is the proper charge. The opening for supplying the ether is arranged to prevent an excessive quantity being supplied ; but, to guard against the possibility of a few drops escaping through the inner openings, there are two recesses made to catch them, and prevent the liquid ether from reaching the patient's lips.

The ether-vessel is spherical in shape, and one-half is surrounded by a closed water-compartment, to prevent the ether from becoming too cold. The bag need not be so much distended when in use as is shown in the woodcut, and can be kept on one side so as not to obstruct the light in operations on the eye. The instrument is intended for giving ether without gas ; but, by connecting the bag with a supply of nitrous oxide, it forms a tolerably efficient substitute for the gas- and ether-inhaler above mentioned.

## SEPTICÆMIA AFTER THE PROLONGED USE OF AN URETHRAL BOUGIE.

By THOMAS DRAPES, M.B., Enniscorthy.

As isolated instances of septic disease, occurring under apparently the most favourable external conditions (as regards health), are of more than passing interest, I venture to ask insertion for the following case, in the hope of eliciting from other readers of the JOURNAL any experience they may have had in similar or kindred cases.

Mr. A., aged 40, living in the country, a tall, well-built man, of good general health, had suffered from stricture for some years. It never occasioned him much annoyance, as he was always able to pass a fair stream of urine and the stricture readily admitted a No. 5 or 6 bougie. During the week preceding the illness about to be described, he had been practising gradual dilatation by gum-elastic bougies, under the direction of his medical attendant, Dr. Wood (with whose permission I publish the case). On more than one occasion, he passed a considerable quantity of blood *per urethram*, after the use of the bougie, and occasionally suffered from slight rigor.

On the night of December 1st, without the knowledge of Dr. Wood, he left a No. 8 bougie in all night ; and, while at stool next day, he passed some blood, and at the same time was seized with excruciating pain in the urethra, so that he could not refrain from screaming out. This lasted for some little time, and then subsided ; and he was apparently as well as usual during the rest of the day until 5 P.M., when he was attacked with a violent rigor, after which he felt extremely ill, and was obliged to retire to bed. His temperature rose rapidly to 103.5 deg., the point at which it stood when I arrived to see him in consultation, at 11 P.M., when his condition was as follows. The skin was frequently hot ; the face flushed ; the pupils rather contracted. He had very much the appearance of a patient in the commencement of typhus. The pulse was 120, extremely weak, sometimes could hardly be felt. The heart's impulse was *nil*, and its first sound very distant and feeble. The respirations were 36 in the minute, short, shallow, and noisy ; and his chief complaint was a feeling of intense oppression in the chest. No lung-trouble was discoverable on clinical examination. The urine up to this was abundant and clear. The bowels were regular. Vomiting was frequent. We remained during the night, frequently noting the temperature, which sank steadily and rapidly to 99 deg., where it stood at 5 A.M.; the fall taking place without the occurrence of sweating. At 6 A.M. (December 3rd), it commenced again to rise, when he got ten grains of quinine in one dose. His only sustenance was brandy and soda-water, as he vomited everything else—beef-tea, milk, egg-flip, etc.

The temperature during the day oscillated between 102 deg. (maximum) and 100.5 deg. (minimum). He had a good deal of troubled sleep. His intellect was always clear, but there was a disposition to lethargy. Nutritive enemata of beef-tea, egg, and brandy were given during the day, and four ten-grain doses of quinine, each of which he retained about two hours and a half. There was almost total suppression of urine, hardly

a wineglassful in twenty-four hours. In the evening, great restlessness and jactitation came on, which became extreme about 8 P.M., when he hardly remained quiet for one instant, tossing his limbs about in all directions. The breathing was very short and shallow, 48 in the minute, with frequent loud gasps, as if unable to fill his lungs satisfactorily. At the rare occasions when he would drop off asleep for five minutes or so, it assumed as well marked an "ascending and descending" character as I have ever seen in advanced cases of fatty heart. The pulse was wretched, 132. At this time, we had very great fears for his life, the prostration was so extreme. Ten minims of Battley's solution producing no effect, one-fifth of a grain of morphia was given subcutaneously. This had a very salutary effect in quieting him, and he soon fell asleep for a considerable interval, there being no return of the great restlessness.

December 4th. All his symptoms were improved. The temperature was normal from 8 A.M. Pulse 100. Respirations 28, quiet and calm. The renal secretion was re-established and abundant. The vomiting was the most distressing symptom. It occurred every two hours, and consisted chiefly of a quantity of glairy grass-green fluid. The bowels were constipated. He was taking iced soda-water and brandy, milk and lime-water, and beef-juice. The nutritive enemata were continued. Five grains of calomel were given. A sinapism was applied to the epigastrium, followed by laudanum stupes.

December 5th. He was better. The temperature continued normal. Pulse 96.88 ; respirations 28.24. The stomach was quieter. The green vomiting continued at intervals. He had three scanty stools after the calomel. The same dose was ordered to be repeated.

December 6th. He was much better. The vomiting had ceased. A profuse herpetic eruption had appeared on both ears, with considerable oedema (to this he was occasionally subject). The eruption was also at the occipital region of the scalp, and at the side of the nose. The mouth, throat, and gums were very sore, which was apparently due to a similar condition. There was no salivation ; on the contrary, there was extreme dryness of the entire buccal mucous membrane, so that he could hardly speak without first taking a sup of water to moisten it. The tongue was red and fissured. This state of things continued for two or three days ; but from this point his convalescence was uninterrupted.

REMARKS.—This case at first was somewhat puzzling. At the commencement, we were uncertain as to whether his condition did not depend on some transient but profound disturbance of his nervous system, consequent on the pain produced by the bougie. But, after a little consideration, we came to the conclusion that the continuous pressure of the bougie during the night before his illness, on a highly congested urethra (as shown by the free discharge of blood), produced some slight abrasion or ulceration of the mucous membrane, allowing the absorption of a small quantity of septic matter. That the wound (if such existed) was of a transient nature, was shown by there being not the least return of pain during micturition, after the severe seizure at stool ; and this fact had probably not a little to say to his recovery, as on it no doubt depended the smallness of the dose. The stress of the poison appeared to fall at once, and chiefly on the heart (more correctly speaking, perhaps, in the first instance, on the nervous system and through it on the heart), as shown by the rapid and extreme prostration, and the respiratory embarrassment, without any concomitant lung symptoms. His intellect was perfectly clear all through, and there was absence of delirium from beginning to end ; the higher nerve-centres not appearing to be involved in the least. Another interesting point is the total absence of sweating, with a rapid defervescence, and, after the severe initial rigor, there was no return of that symptom. The vomiting (which became more copious and persistent as the severe symptoms declined), and the herpetic eruption, look as if the stomach and skin were specially selected by the poison as routes for its elimination. The only remarks bearing on this case, which I can discover in any publication at my disposal, are to be found in the *Practitioner* of November, in a paragraph giving Dr. H. C. Wood's views "On the Nature and Mechanism of Fever".

... "Although such fevers as pyæmia may be hæmic in origin, there is no certain proof that they are not due to the action of a poison on the nervous system ; while such fevers as urethral fever must be due to changes of the nervous system, and not to the blood. In one case, which he quotes, the introduction of a catheter four days after the rupture of a stricture, was followed by rigor, high temperature, and death in less than thirty hours.....The initiative fever which follows a local irritation is probably due to reflex weakening of the inhibitory heat-centre ; but probably this is not the only method in which fever is caused. In pyæmia, the inhibitory heat-centre is only weakened, and not paralysed ; for if it were, the temperature would rise much higher than it does."

## SURGICAL MEMORANDA.

SUBCUTANEOUS DIVISION THROUGH THE SURGICAL  
NECK OF THE HUMERUS, IN A CASE OF  
OLD SUBCORACOID LUXATION.

SUBCUTANEOUS osteotomy has of late received so much attention by surgeons in this country, that I feel assured the accompanying letter, which has been sent to me by Dr. Mears of Philadelphia, recording an operation successfully performed by him for the first time, will be read with interest.

"Walnut Street, Philadelphia, December 1st, 1876.

"My dear Sir,—Knowing the deep interest you feel in subcutaneous osteotomy, I beg leave to report to you an operation which I performed six weeks since, for the relief of the pain and immobility consequent upon an old subcoracoid luxation of the shoulder-joint, in a patient thirty-eight years of age. The nature of the injury was not recognised at the time of its receipt, and the condition had existed for two years and four months before the section of the bone was made. In performing the operation, I used the saw devised by you, having made the puncture with a long handled tenotome.

"I endeavoured to divide the bone just below the tuberosities. I believe the section was made about the middle of the surgical neck. Not more than a drachm of blood was lost, and the wound was closed in three days.

"From the day of the operation, the patient has been free from pain, and he is gradually acquiring good motion in the new articulation. The result is, in every way, most satisfactory; and it gives me pleasure to present it to you as accomplished by your method of operation.

"So far as I know, it is the first time an operation of this kind has been performed for the relief of old dislocations; and I am encouraged to believe that it can be employed with benefit in such cases.—Very respectfully and truly yours,

"J. EWING MEARS.

"W. Adams, F.R.C.S."

Professor Joseph Pancoast has also written to me in reference to the above case, which he carefully examined six weeks after the operation, and observes:

"This morning, I was shown another case in which your operation was applied to the surgical neck of the humerus, near the tuberosities. It was done six weeks ago; the wound healed without suppuration. The case was one of unreduced subcoracoid dislocation, in a man thirty-eight years old. The arms hung by his side, capable of little motion. Now, he has a good deal of motion at the place of section, can move his arms readily across his chest, and bring his hand up to the top of the ear at the other side of the head."

The testimony thus borne by Professor Pancoast, as to the range of motion existing in the above case, adds greatly to its interest. When the section through the bone is made with a saw, without any breaking or splintering of the bone, and extension and passive motion are employed soon afterwards, and steadily persevered in, free motion may be obtained. In several of the cases of subcutaneous division of the neck of the thigh-bone, free motion has been preserved for some years, and will no doubt be permanently maintained.

WILLIAM ADAMS, F.R.C.S.

## AURAL THERAPEUTICS.

WITH reference to the so-called "improvement" on the ordinary ear-speculum, proposed by my friend Dr. Purves, and also to the remarks thereon by Dr. Pierce, in the JOURNAL of the 13th instant, I have to say that neither of these gentlemen has the smallest right to claim the suggested improvement, viz., "to cut a piece out of the side" of the ear-speculum, as a novelty. Long ago, before the advent of these gentlemen as specialists in aural surgery, while I was the private pupil and assistant to the late James Hinton, I used such a speculum of his devising, in examining the patients that flocked to the well-known house in Savile Row. He it was, I have good reason to know, who first devised and adopted the manœuvre, with the object "of getting a good view of the anterior segment of the membrana tympani, in cases in which the anterior wall of the meatus bulged with more than ordinary prominence", so hiding that part of the drum-head.

With regard to the use of Siegle's pneumatic speculum to raise a sunken membrane, or to break down adhesions between it and neighbouring parts, which these gentlemen laud, I may remark that neither the principle nor the means employed by them is new. On the contrary, while I was the pupil and assistant to Professor Politzer

of Vienna, in his private *clinique*, I have frequently seen this instrument used for a like purpose by him; and I have repeatedly used it there myself, without, I may add, encouraging results in any case. While writing, may I suggest a simple and clean way of hindering the condensation of vapour upon mirrors used for rhinoscopy, which obscures the image. A drop of pure water, placed on the mirror and allowed to run over its surface, effectually hinders this from taking place; it is cleaner than the French method of using a coating of glycerine, and simpler than the late suggestion of using water, after having coated the glass with the glycerine, to clear the partial dimness that the glycerine causes.

JAMES PATTERSON CASSELLS, Glasgow.

## THERAPEUTIC MEMORANDA.

TREATMENT OF RINGWORM BY LEAVES OF  
CASSIA LATA.

WHEN resident in India (Cachar) many years ago, I had numerous opportunities of observing a form of vesicular ringworm which afflicted both natives and Europeans. It commenced by a minute cluster of vesicles on the skin, soon extending in the form of a ring, or segment of a ring, the centre being left free; it was very itchy, and the scratching which this induced left the little vesicles torn, and the surface raw and weeping or else covered with scabs. Not a few of the tea-planters of the district caught the disease; and they resorted to various remedies, the favourite one being the ointment of the red iodide of mercury, applied so as to blister the skin. This gave a temporary relief at the cost of a good deal of suffering, especially if the surface affected were large. But none of the remedies in use there could at all compare for efficacy with the native remedy. This consisted in the fresh leaves of the cassia lata, called in Hindostanee the "daod patta". A few of the leaves were taken and vigorously rubbed over the diseased area until the leaves were torn to fritters; the expressed juice was left to dry on the skin, which it stained for the time of a light brown colour. The effect invariably was that the itching at once disappeared, and that in a day or two the skin was restored to its normal healthy aspect. The process of rubbing was by no means painful; on the contrary, the patients seemed rather to feel an indefinite pleasure from it. So useful did I find this remedy, that I procured some cuttings of the plant, and planted them in the vicinity of my bungalow; and many a time have I had the pleasure of relieving those suffering from this annoying disease by the gift of a handful or two of these leaves.

I may mention, by the way, that the imported coolies in the tea-gardens did not suffer so much from the ringworm as the native Cachar villagers. I remember treating one of the latter, whose whole body was covered with it; and a few applications of the leaf effected a cure, which I believe was permanent.

It would be interesting to learn whether the Goa powder, recommended by Sir J. Fayrer, contains these leaves in any form; and also, whether their active principle has any affinity with the chrysophanic acid which Mr. Squire finds so useful in psoriasis. The cassia lata belongs to the same genus as the senna plant, and experiment might reveal some analogy in their therapeutic actions; but I am not aware of any trials of the leaves having been made except as a remedy for ringworm.

DAVID FOULIS, M.D., Lecturer on Pathology, Glasgow  
Royal Infirmary School of Medicine.

PODOPHYLLIN IN THE TREATMENT OF ACUTE  
RHEUMATISM.

IN the BRITISH MEDICAL JOURNAL for September 24th, 1874, podophyllin is recommended (I do not remember by whom) as a curative agent in acute rheumatism; and, from the experience of a limited number of cases, I believe it to possess great value. As soon as free evacuations are obtained, the relief is frequently marvellous; the joint-pains disappear, the pyrexia is greatly mitigated, and refreshing sleep usually ensues. Three or four powders, each containing from a quarter to half a grain of podophyllin, should be administered at intervals of three hours on alternate days. They should be taken dry, in a little powdered sugar. The muriated tincture of iron, or nitro-muriatic acid, may be given on the intervening days. In some cases, the leucæm as a rule, disappears within a week. I believe it seems to answer best in the most acute cases. I have found it also very useful in rheumatic gout.

HERBERT L. SNOW, M.D. Lond., Bayswater.



## REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN  
THE HOSPITALS AND ASYLUMS  
OF GREAT BRITAIN.

## BETHLEHEM HOSPITAL.

A CASE OF LONG-STANDING DEMENTIA, WITH ANÆMIA, IN WHICH  
TRANSFUSION WAS PERFORMED BY DR. ROUSSEL.

(Under charge of Dr. RHYS WILLIAMS, Physician to the Hospital.)

X., AGED 20, clerk, was admitted into Bethlehem Hospital, on April 22nd, 1876, having suffered from symptoms of mental disease (melancholia with delusions) for about seven months. There was no history of neurosis or intemperance, and reverse of fortune was given as the cause of the attack. According to the statement of his medical attendant, he had practised onanism to a great extent.

When admitted, he was in a state of dementia, would stand in one position with his chin upon his breast, and his eyes shut; he would not readily answer questions, and then in a very low tone of voice. He was dirty in his habits, probably in consequence of his mental condition rather than of any loss of power over the sphincters. His appetite was good, but he required to be fed with a spoon.

December 21st. There was no mental improvement. He could with difficulty be made to speak, but, when roused, would answer questions correctly, though in hardly an audible tone. He was somewhat cataleptic, standing or sitting in one position for hours with his eyes closed. His mouth was half open, and saliva dribbled. He took food fairly well, but required feeding with a spoon. He was dirty in his habits. His general health was bad; he was thin and very anæmic. His weight was six stone twelve ounces. There were suspicion of lung-mischief, but, as is usual in such cases, the symptoms were masked. There was slight flattening under the right clavicle. Temperature 101 degs.; respirations 29; pulse 90.

December 22nd. After consultation with Dr. Bucknill and Dr. Hack Tuke, the case appeared to Dr. Williams a fair one on which to try the experiment of transfusion, as it resembled in many points the one operated on successfully by Dr. Roussel at Vienna. The operation was very skilfully performed by Dr. Roussel, and blood to the amount of ten ounces was transfused, Mr. Cockell of St. Thomas's Hospital generously supplying it. During the insertion, the patient, at first pale, showed some colour in his face, and had a frequent short cough; he also gave some evidence of being roused from his habitual torpor. Immediately after the operation, he was placed in a warm bed, tea and brandy administered to lessen the rigors, which Dr. Roussel expected to be more marked than usual.—5.30 P.M. Pulse, 106 full; temperature 103 degs.; respirations 30. He was sweating very profusely. He took food freely when fed with a spoon. He could be roused to answer questions in a low tone of voice; could put out his tongue, and endeavoured to open his eyes when told to do so.—10 P.M. Pulse 104; temperature 104 degs.; respirations 40. There had been slight hæmoptysis, which only lasted a short time. He was breathing fairly. Some moist sounds were audible. There had been three attacks of rigors, but he was now sweating profusely. He took food well when fed.

December 23rd. He had taken plenty of beef-tea, milk, etc.; he was perspiring freely; temperature, 100 deg.; pulse, 96; respiration, 29. He passed a good stool; and the urine, though high coloured, was clear, without albumen or blood. His mental condition was much the same as yesterday; he could be roused to answer questions perhaps rather more freely than before the operation.

December 24. Pulse, 94; temperature, 99 deg.; respiration, 30; nourishment administered very freely.

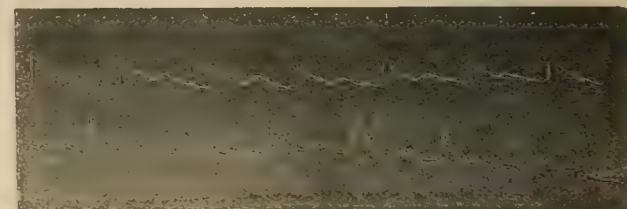
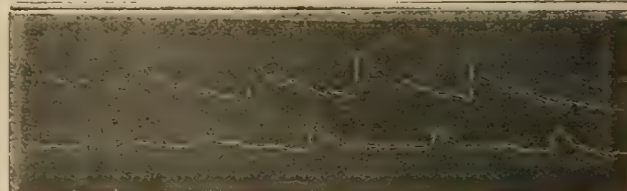
December 25th. Respirations were clear; there was no dulness or moist sounds; no mental change.

December 27th. He had been got up to-day; there was no special mental change. Temperature, 99 deg.; pulse, 80; respirations, 28.

January 8th, 1877. No change was apparent in his mental condition. His general health had slightly improved; he had increased six pounds in weight.

OBSERVATIONS.—Dr. Rhys Williams observes: I have no reason to regret the result of this experiment; but whether transfusion is clearly indicated in cases of long-standing anæmia is in my opinion an open question. Dr. Roussel has added one more link to his chain of proofs,

that, when performed with his most admirable instrument, the operation is a safe one. I cannot deny that for the first few days the patient, to a certain extent, did respond more readily to external impressions, but the constant rousings, and the incessant attention paid him, may fairly claim some share of the credit in the result.



I append two pulse tracings taken by my colleague Dr. Savage, the first shortly after admission, the second on January 15th. It will be seen that the difference is very slight, both indicating an anæmic condition.

## PAISLEY INFIRMARY.

WOUND OF PALMAR ARCH: REPEATED HÆMORRHAGES: LIGATURE  
OF BRACHIAL ARTERY: FAILURE: LIGATURE OF RADIAL AND  
ULNAR ARTERIES.

(Under the care of Dr. DONALD.)

FOR the report of the following case we are indebted to John Alexander, M.B., House-Surgeon.

J. M., aged 59, was admitted into the infirmary, under the care of Dr. Donald, the acting surgeon, on February 8th, 1875. Three weeks before this, he had received a wound of the palm about half an inch long and of almost the same depth. This wound was over the palmar arch and parallel to the long axis of the hand. He had had several attacks of hæmorrhage before he applied for admission. The wound looked healthy, with no appearance of sloughing. The ends of the arteries could not be found, so a pad and bandage were applied.

February 20th. There had been little or no hæmorrhage since the patient was admitted, two weeks ago, till to day, when it began again. Ligature of the brachial artery was proposed, but, as the hæmorrhage ceased of itself, the pressure was continued.

February 25th. There was another sharp attack of hæmorrhage to day, and, when the pad and bandage were removed, the hand was found to be swollen and inflamed. The brachial artery was tied in the middle of the arm, when the bleeding immediately ceased, as did the pulsation in the arteries at the wrist. The hand was dressed with carbolic oil, and the arm was wrapped in cotton-wool to keep up its temperature, which it did very well.

March 3rd. The hand was doing well, and the patient was looking better, having been blanched by the repeated hæmorrhages. I noticed, however, this morning, that the pulsation had returned in the radial artery at the wrist.

March 4th. I was called up during the night, there having been a return of the bleeding. The radial and ulnar arteries were now tied at the wrist, when the hæmorrhage immediately ceased and did not again recur. The hand has greatly improved since the brachial artery was tied a week ago.

March 12th. The wound of the palm was now quite whole.

March 13th. All the ligatures came away.

March 15th. There remained now only some swelling of the forearm, and the wrist and elbow were stiff.

March 30th. The patient was dismissed cured. He showed himself six weeks afterwards, when the stiffness had left the joints, and the arm had returned to its natural size.

REMARKS.—To complicate the case still more, the patient was labouring the whole time under a pretty severe attack of bronchitis. Notwithstanding this, he took chloroform two or three times very well. The rapidity with which the collateral circulation was esta-

bled, after the ligature of the brachial artery, may in some degree be accounted for by the fact, that previously to this the patient had a tourniquet applied for a short time to control the hæmorrhage.

## REVIEWS AND NOTICES.

TRAITÉ PRATIQUE DES MALADIES DU LARYNX; PRÉCÉDÉ D'UN TRAITÉ COMPLET DE LARYNGOSCOPE. Par le Dr. CHARLES FAUVEL. Avec 144 figures dans le texte, et 20 planches, dont 7 en chromo-lithographie.

PRACTICAL TREATISE ON DISEASES OF THE LARYNX; PRECEDED BY A COMPLETE TREATISE ON LARYNGOSCOPE. By Dr. CHARLES FAUVEL. With 144 engravings in the text, 7 chromo-lithographs, and 13 other plates. Paris: 1876.

THE fruits of the invention of the laryngoscope are beginning to appear, and we have now before us a work of nine hundred pages, which, however, is only the first instalment of the "practical treatise" which will ultimately appear. This volume is mainly devoted to growths—benign and malignant—of the larynx, but commences with a history of the invention of the laryngoscope, an excellent description of the instrument and its various accessory apparatus, a clear description as to its mode of use, and a complete and perspicuous description of the whole arsenal of laryngoscopic surgery. This portion of the work forms, perhaps, the most complete guide to laryngoscopy which has yet been published, and we venture to hope that Dr. FAUVEL may see his way to publishing it separately. The value of the laryngoscope, not only in treating laryngeal complaints, but also in many thoracic diseases, is so great, that none can afford to neglect its use; on the other hand, the number of persons who wish to operate on laryngeal growths is very limited, and few except the downright specialists will care to peruse the details of three hundred cases of polypi. It is, however, this portion of the work which will, no doubt, prove the most attractive to the laryngologists, and, indeed, it leaves nothing to be desired. The pathology, seat, frequency, etiology, symptoms, diagnosis, prognosis, and treatment are discussed in the most exhaustive manner.

In speaking of the seat of laryngeal growths, the author's observations are particularly valuable. He points out how the presence of papillæ on the free borders of the vocal cords—especially in the anterior half of the larynx—as discovered by Coyne, explains the great frequency of growths, particularly papillæ, in that situation. Fibromata he has always found on the surface of the cords, and benign epithelomata in the same situation. Sarcomata are seldom found in the anterior part of the larynx; they are frequently met with in the ventricles, at the posterior part of the vocal cords, and on the ventricular bands. The author indicates the danger of leaving untreated growths apparently stationary, remarking, "whatever may be the cause, I have often seen laryngeal papillomata existing for a long time in the larynx suddenly lead to attacks of suffocation from their rapid development".

It is thus that the author answers those few practitioners who still recommend that polypi should not be interfered with unless there be immediate danger to life. There was a time when a large number of diseases were left uncured, and the patients told that it was not safe to interfere with them. Hebra has well pointed out how this was the case with regard to skin-affections, the doctors being unable to cure many complaints, and the patients being assured that their discharges relieved the system and purified the blood. Now, however, that we have discovered the means of quickly curing nearly every form of eczema, we no longer hear of its being "better out than in", and there will probably soon be few laryngoscopists who have not the skill or perseverance to remove a laryngeal growth.

The author strongly condemns thyrotomy, remarking, "I am extremely astonished to see even yet surgeons, and still more so specialists in laryngoscopy, when it is a question of a simple polypus not menacing the life of the patient, have recourse to this barbarous method, which consists in making an opening in the neck for extracting, by this dangerous and often too narrow way, tumours of a greater or lesser volume and consistence. . . . The laryngoscope shows the polyp as plainly as possible; its seat, form, and size. It is therefore, useless, not to speak more strongly, to establish, at the cost of a severe and bloody operation, an artificial opening into the larynx. This opening has no other result, I repeat, than to expose the polyp and permit an

operation—two conditions which are completely fulfilled by the laryngoscope." He further proceeds to point out the danger of the operation from hæmorrhage, and remarks that, "in one case of thyrotomy he was obliged to apply tracheotomy, tracheotomy having been performed a month previously, and the patient wearing the cannula during the time the thyrotomy was being performed".

After fully discussing the different methods of operating, and deciding in favour of evulsion with large strong forceps, the author proceeds to give in detail his three hundred cases, in two hundred and thirty-three of which operations were performed. The result of the treatment corresponds most closely with that of Mackenzie, as published in his monograph on *Growths in the Larynx*, both authors having effected a cure in 77 per cent. of the cases, whilst Fauvel has 20 per cent. of amelioration and Mackenzie 18 per cent.

The work concludes with a valuable article on cancer of the larynx, which we can recommend with confidence to the notice of all those who take an interest in clinical medicine or pathological investigation. The woodcuts throughout the work are excellent, and the chromo-lithographs have been got up with great pains. If they do not attain perfection, it is probably because it is impossible to give the delicate shades of colour which the laryngeal mirror reflects so vividly.

The precision and clearness of the whole work are remarkable; it reflects great credit on the distinguished author—long recognised as one of the most expert laryngoscopists of the day—and makes a valuable addition to the surgical literature of his country.

INHALATION IN THE TREATMENT OF DISEASE, ITS THERAPEUTICS, AND PRACTICE: A TREATISE ON THE INHALATION OF GASES, VAPOURS, FUMES, COMPRESSED AND RAREFIED AIR, NEBULISED FLUIDS, AND POWDERS. By J. SOLIS COHEN, M.D., etc. Second Edition. Philadelphia: Lea. 1876.

THE comprehensive title of this book does no more than justice to its contents. Beginning with an allusion to the excellent inhaler of Hippocrates, it carries us down to the latest remedy—salicylic acid—which, in the form of powder, has lately been recommended for insufflation. Every kind of inhaler, nebuliser, and insufflator of any value is figured in the book; and the uses of every drug which can be employed are clearly set forth. The subject of the inhalation of condensed and rarefied air is given with a fulness and lucidity which will recommend it to all readers; and we trust that this important method of treatment which has received so much elucidation at the hands of Waldenburg, Störk, Bödert, and others in Germany, will excite more interest than it has hitherto done in England. The sections on the treatment of disease—especially phthisis—by chlorine and iodine are particularly interesting, the diverse experience of different physicians being very remarkable. Thus, we find Sir Charles Scudamore an enthusiastic advocate of the inhalation of iodine in phthisis, and Dr. Stokes expressing his reprobation of the practice in the strongest language; Pereira speaking unfavourably, and Piorry lauding it to the skies. The author's observations on the balsamic and resinous vapours are very complete. He speaks favourably of the use of tar; and remarks that, in simple chronic bronchitis and in the torpid bronchitis of phthisis, as well as in chronic laryngitis, he has had considerable satisfactory experience from the inhalation of the oil of pine. Dr. COHEN gives an excellent account of the uses of creasote, carbolic acid, opium, and other narcotics. The experience of a very large number of practitioners who have used various inhalants is given with sufficient detail to make the book easy reading; whilst in many cases the result of the author's own extensive practical experience is added. Passing from vapours to rarefied fluids, the author gives an excellent historical account of the introduction of this class of remedies, commencing with the first efforts of Auphan and Sales-Girons, and gradually tracing its development in the hands of Lewin, Bergson, and Siegle. The work contains a clear account of the various experiments performed by de Pietra Santa, Brian, Rey, Fournié, and Poggiale to prove or disprove the question of the penetration of atomised liquids into the air-passages. The proportion of the nebula inhaled is treated in a very exact and philosophical manner, whilst the mode of conducting inhalations, their number, strength, and duration, and the *materia medica* suitable for inhalation, are all discussed in the most complete and logical way. The work concludes with an exhaustive article on the inhalation of powders, and an excellent *résumé* of all that is known on the subject of medicated atmospheres. Space will not permit us to do justice to this useful volume. It shows a large amount of historical research, is well arranged and clearly written; and the very sensible remarks on the treatment of disease which pervade its pages show that it is the work of a practical physician.



BRITISH MEDICAL ASSOCIATION:  
SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JANUARY 20TH, 1877.

THE MILK OF SULPHUR QUESTION: WHAT IS  
ADULTERATION?

1.

IN a recent number, we had occasion to notice the cases of three druggists at Runcorn, each of whom had been convicted and fined one pound and costs for selling "adulterated" milk of sulphur. We should not have considered the subject worthy of any further notice, but for the strange defence which has been set up for the three defendants. The Chemists and Druggists' Trade Association took up the defence, and they have treated the milk of sulphur question as one in which the character and reputation, as well as the pecuniary profits of retail druggists generally, are seriously involved. We cannot be surprised, therefore, that a professor of pharmacy and a hospital surgeon were called to support the cause of the Runcorn druggists.

According to the evidence given for the prosecution (*Pharmaceutical Journal*, December 30th, pp. 539-545), the article sold as milk of sulphur actually contained 58½ per cent., and in one case so much as 65 per cent., of plaster of Paris—sulphate of lime, or, in learned language, "hydrated calcium sulphate". In this case, therefore, the druggist was selling as sulphur, a mixture containing two-thirds of its weight of a useless mineral compound.

The editor of the *Pharmaceutical Journal* complains of these convictions, because, in order to justify them, the magistrate must have tacitly assumed that the term "milk of sulphur" ought to be interpreted as signifying a preparation consisting entirely of sulphur in a fine state of division—in fact, the preparation which is comprised in the *British Pharmacopœia* under the name of *sulphur precipitatum*. Upon this assumption, he says, the decision of the magistrates cannot be objected to; but at the same time it is an assumption which altogether begs the question, whether the sale of the familiar and popularly approved preparation containing hydrated calcium sulphate, is an offence punishable under the provisions of the Sale of Food and Drugs Act.

Some wholesale druggists who were called for the defence stated, as a proof of the popularity of the milk of sulphur, that they sold thirteen times as much of this impure article as they did of the precipitated or pure sulphur; and a remarkable piece of evidence was given in favour of the defendants, to the effect that the sulphur was rendered much more beneficial by the presence of sulphate of lime! Further, we are told that among the class of persons using milk of sulphur there is not only a decided preference for the older preparation (*i. e.*, the milk), but a decided objection to the modern one (*i. e.*, precipitated sulphur). If this reasoning is to prevail, the Adulteration Act may as well be set aside altogether. A grocer is not allowed to sell to his neighbour the druggist coffee, which contains two-thirds of its weight of chicory, without labelling the packet to indicate the nature of the mixture, and thus informing the purchaser of the real quality of the article which he is buying. It will be of no use to plead, in defence, that the so-called coffee is a popular and highly approved preparation: to show by the evidence of wholesale coffee-dealers that the demand for chicoried is thirteen times as great as that for unchicoried coffee; or, lastly, to bring forward eminent scientific men to prove that the coffee was rendered much more beneficial by the presence of chicory! All these

matters are beside the real question at issue; and, *mutatis mutandis*, if the grocer is liable to a penalty for selling his sham coffee to a druggist without due notice, the druggist should be equally liable for selling milk of sulphur to the grocer, without giving him due information of the imposition which was being practised upon him.

Who can doubt that, when a non-medical person applies for milk of sulphur, he supposes he is purchasing and paying for sulphur only, and not for plaster of Paris mixed with that substance? We think the magistrates have taken a very proper view of the matter in deciding that the milk of sulphur should consist of that which its name implies, and not of plaster of Paris mixed with sulphur.\*

We need scarcely inform our medical readers that the difference between these two preparations depends simply on the nature of the acids added to the sulphur and lime-compound from which they are made. If hydrochloric acid be used, pure precipitated sulphur is obtained, free from acid or lime; if sulphuric acid be employed, the sulphur is precipitated in mixture with a large proportion of sulphate of lime. In the former case, the druggist loses his acid and lime; in the latter, he utilises them and sells them as sulphur! Hence profit and loss largely enter into the selection of the compound for sale; and we are, therefore, not surprised that the Chemists and Druggists' Trade Association should take up the defence with such zeal and earnestness.

On the question of adulteration, it appears to us there can be little room for doubt. It matters not whether a druggist mixes plaster of Paris directly with sulphur after precipitation, or whether he so arranges his chemicals that he precipitates and thus perfectly incorporates the plaster of Paris with the sulphur: the effect is the same. Instead of having a greyish yellow colour like the precipitated sulphur, the false compound is almost white, the plaster covering and concealing the yellow colour of the sulphur. Hence the term "milk" is given to it, from the milky whiteness which it acquires from the adulteration. Such a term is quite inappropriate and misleading. If sulphur be prescribed in drachm-doses, and the "milk" be served to a customer, he is really taking in a dose only twenty grains of sulphur and forty of plaster. There is a deterioration of the article for medicinal purposes, as in mixing chalk with scammony, or, to take a more domestic illustration, mixing water with milk. These acts surely fall under the meaning of adulteration, or the Act of Parliament is useless for the purpose of suppressing fraudulent dealing.

It should be sufficient for honest and fair-dealing druggists to sell and dispense only the preparation enjoined by our pharmacopœias. Plastered sulphur, or milk of sulphur, has been excluded from them for more than a century. In Phillips's translation of 1824, it is condemned as "an impure preparation". In Pereira's *Materia Medica*, 1854, we find the following statement. "The precipitated sulphur of commerce is most extensively adulterated with sulphate of lime." The author makes no assumption and begs no question, but states the plain fact. He then gives the analysis of a sample which contained only thirty-seven parts of sulphur to sixty-three of sulphate of lime. We must express our astonishment that any professor of pharmaceutical chemistry could be found to uphold this admixture as beneficial. In what sense is this statement to be taken, and by what sort of experience can it be justified? Sulphate of lime is not, it is true, a noxious ingredient; it has no medicinal properties, and does not find a place as a beneficial compound in any work on pharmacy or materia medica with which we are acquainted. We believe that it might be as truly said that red ochre mixed with anchovy paste was beneficial. It is a novelty to find a trade adulteration sustained by such pseudo-scientific evidence as this. Sulphate of lime is a large ingredient in some kinds of hard waters, and the use of such waters for drinking purposes has been found to cause constipation and other unpleasant symptoms. We are inclined to lay but little stress upon this point; for, whether the substance used for adulteration be useful or useless, it is a fraud upon the purchaser if the article be secretly sold or ignorantly purchased for what it is not.

\* The more correct name expressing its quality should be "plastered sulphur".

Our contemporary informs us that fourteen thousand chemists and druggists are waiting for an authoritative decision on the milk of sulphur question. This numerous army of possible martyrs to the Adulteration Act are, it seems, in the daily habit of selling the preparation of sulphur which contains *hydrated calcium sulphate*; and "any one of them is thus liable to be brought before a police-court upon the charge of selling an adulterated article, if it be admissible to adopt the assumption upon which the Runcorn magistrates appear to have arrived at their decision". The credit of the greater number of chemists and druggists throughout the country is said to be at stake and in peril with regard to it. There is, however, one simple rule for them to follow in order to avoid this peril. Let them sell sulphur as sulphur, and hydrated calcium sulphate or plaster of Paris as such, and not sell a mixture of the two for sulphur. Let them also apply their common sense to the words of the Act of Parliament, and not be misled by the subtleties of the defence made in the Runcorn case. We quote, for their information and instruction, Clause 6 of the Act.

"No person shall sell, to the prejudice of the purchaser, any article of food or any drug which is not of the nature, substance, and quality of the article demanded by such purchaser, under a penalty not exceeding twenty pounds: provided that an offence shall not be deemed to be committed under this section in the following cases; that is to say:

"1. Where any matter or ingredient not injurious to health has been added to the food or drug because the same is required for the production or preparation thereof as an article of commerce in a state fit for carriage or consumption, and not fraudulently to increase the bulk, weight, or measure of the food or drug, or conceal the inferior quality thereof.

"4. When the food or drug is unavoidably mixed with some extraneous matter in the process of collection or preparation."

Bearing in mind that the article here in question has been and is excluded from all pharmacopoeias on account of its impurity, and that a proper preparation has been substituted for it, let them, as honest traders, consider these points.

1. The sale of plastered sulphur as milk of sulphur is to the prejudice of the purchaser. He receives only one-third of that which he asks for and believes that he has purchased. In order to produce the proper medicinal effect of sulphur, he must take three times the quantity and load his stomach with an indigestible mineral.

2. It is not of the nature, substance, and quality of the article demanded and intended to be purchased. It contains no milk, as both vendor and purchaser well know; and it contains only one-third part by weight of the article demanded.

The sale of this substance does not fall under the exceptions to the clause. The plaster of Paris is not a necessary product in the preparation of sulphur; it increases the bulk and weight of the sulphur, and thereby lowers its quality.

The term "precipitated", as applied to sulphur, is probably not even known to a large number of the poor who are purchasers of this article. They are more familiar with the old name of "milk" of sulphur, and thus ask for this preparation. If, in supplying it, the druggist charges the price of sulphur, he should, in common honesty, inform the purchaser that it is not really what he requires, but a mixture in which plaster of Paris preponderates. We trust that, on appeal, the conviction of the Runcorn magistrates will be confirmed, and that the sale of the so-called milk of sulphur will be suppressed.

#### THE PATHOLOGICAL SOCIETY OF LONDON.

THE meeting of the Pathological Society on Tuesday augurs well for the success of the plan that has been adopted, of setting aside special evenings for the exhibition of specimens illustrating the different kinds of diseased tissues. We pointed out a year ago that the adoption of certain changes in the mode of carrying out the objects of the Society might be desirable, and we are glad to observe that the suggestions we then made have been acted upon on this occasion. When the order

of the discussion is already laid down by the exhibition of specimens which all bear more or less on one or two cardinal points, the possibility of the time of the Society being wasted by desultory or irrelevant remarks is reduced to a minimum. At the same time, the opportunity for comparing a number of examples of the same morbid process not only adds to the interest of the meetings, but is likely to be a very valuable means of pathological instruction.

An experiment of this kind promises doubly well under the presidency of Dr. Murchison, whose opening address was very warmly received. No President of the Pathological Society has ever more fairly earned the honour of directing its proceedings. As one of its oldest and most zealous members and officers, Dr. Murchison is thoroughly conversant with the best manner of making profitable use of the unexampled wealth of material which the Society can command. As a centre for all that is important in the *post mortem* rooms of the largest city in the world, it enjoys opportunities for observation and research that are unequalled. It is on account of the very largeness of the field in which it works, that the operations of the Society require especially to be controlled by a pathologist like Dr. Murchison; and we observe with no small pleasure that he repeats and enforces every one of the suggestions which we made last year.

Dr. Murchison has indicated a much neglected field of observation, in remarking on the deficiency of medical literature in the records of cases which illustrate the possible duration of various anatomical lesions and their compatibility with life and a fair amount of health. The expectancy of life in the diseased, a not inconsiderable proportion of the community among those who have passed middle life, is a problem that has hitherto been left to the guesses of Life-Insurance Societies, the best of which acknowledge their ignorance by declining to have anything to do with it. Questions of this kind, which seem to lie on the surface, are most apt to be overlooked, and we hope that Dr. Murchison's appeal for information will be the means of furnishing a sufficient number of well attested facts to permit of the establishment of some general laws which regulate the duration of disease in the various organs.

The advocacy of special research in the departments of experimental pathology is well timed. Of the many vital problems in pathology which are still unanswered, there are some which in the light of contemporaneous biological research probably only await a patient and thorough inquiry, and Dr. Murchison renews our appeal to the Society to enter on this field of labour.

The problems which an examination of the histology of syphilitic growths have to solve were well illustrated by a number of microscopic specimens shown by Dr. Greenfield, Dr. Barlow, and Dr. Gowers. It is well known that the cellular elements found in these growths do not differ from those found in other forms of disease in which inflammatory change is present. The peculiarity of syphilis must be sought rather in the changes which the intercellular substance undergoes. This point was well brought out by Dr. Gowers, in his remarks on the resemblance of some of the appearances observed by him to those found in tubercle. He traced in an instructive manner the products of the syphilitic change along the pia mater into its continuations in the brain-tissue. The progress of the disease in the coats of the arteries was well shown in several specimens. It is worthy of remark, that Dr. Greenfield lays special stress on changes which take place first in the inner coat. Dr. Barlow also pointed out, in a case of congenital syphilis of the choroid, that the inner coat of an artery was a seat of new growth. The difference that is found between the rapid exudation from the vessels in tubercular disease and the slow progress of congenital syphilis as seen in the choroid, was also pointed out by Dr. Barlow, and illustrated by a microscopic preparation by Mr. Nettleship. In this case the cells were not found accumulated round the vascular wall, but distributed throughout the tissue.



We are glad that another night is to be given for the further exhibition of specimens and for further discussion of some of the interesting questions opened up by Dr. Greenfield.

#### THE PRESERVATION OF INFANT LIFE.

PUBLIC attention has been again called to a distressing failure in a well meant attempt to rear infants apart from their mothers in an institution. We have on previous occasions clearly shown the impracticability of such attempts and the certainty of their failure; but, in spite of all experience in this and other countries, there are still found those who will take upon themselves the responsibility of gathering infants into a home regardless of the heavy mortality which it entails. It appears that the sisters of St. Vincent de Paul have a home in Carlisle Place, Westminster, and into this institution destitute children under the age of 14 years are received. From a report by Dr. Ballard to the Local Government Board, we find that, since the opening of the establishment in 1859, 489 infants under one year of age have been received, and of these 402 have died under that age; but the report does not state how many of the remaining 87 died subsequently. It is probable that it would be found on investigation that nearly every child died before reaching the fifth year of its existence. It further appears that, during the two years 1875-76, there were fifty-three infants admitted; of these, one only of those admitted in 1875 is living in the house, and four of those admitted last year during the months of September and October; four were removed, of whom it is known that one has died, and forty-four died in the establishment after an interval varying from six days to three months. The chance of death of the four admitted in September and October last living is as three to one, seeing that all those admitted in the previous nine months of the year have died after an existence in the home of less than three months. Thus we see that about 97 per cent. of the infants admitted into this institution have died, a higher rate of mortality than obtained in the foundling hospitals of France during the worst period of their administration.

We would direct the attention of the well meaning ladies who have been instrumental to this heavy infant-mortality to the system now in practice at the French foundling hospitals, whereby they have reduced the rate of mortality from 90 per cent. to 20 per cent., the normal rate of the country. Our own Foundling Hospital has a mortality of only about 14 per cent. under the same system. This system is to place the infants immediately in the care of wet nurses. The nurse comes from the country to the hospital and takes the infant back with her, and is subject to frequent medical inspection. If such a system can be carried out successfully in France, so as to reduce the rate of mortality from 90 per cent. to 20 per cent., surely money can be found in this land of charities to try the same experiment here. The French nurses get about three shillings a week, and the infants of our foundling hospital cost the institution about £13 a year each, including clothing. The orphans of the Irish Protestant Orphan Society, placed out in a similar manner with foster nurses, cost the Society only from £6 to £8 a year each. Lady Georgiana Fullerton, in her letter to the *Times* in defence of the sisters of St. Vincent de Paul, says: "I still more readily admit that good wet-nurses and pure country air might have saved the lives of many of them; but where are wet-nurses to be found for the children of the destitute poor, and where are the funds wherewith to provide them with homes in the country?"

We maintain that wet-nurses and country air would have saved the lives of 80 per cent. instead of 3 per cent.; and surely, if it be possible for wet-nurses to be found to take charge of all the *enfants assistés* in France, we imagine that the like may be found in the villages of England, where the addition of a foster babe to a poor woman's family would be gladly welcomed for the moderate remuneration of five shillings a week, an outlay which would be less costly to any institution than the aggregate expenses for rent, nurses, etc.

A CHILDREN'S hospital has just been opened in Madrid. It is on the English model, and is the first established in Spain.

THE publication in our columns of the third letter of "A member of the Charity Organisation Society" on the Abuse of Hospital Out-patient Relief is, from considerations of space, deferred till next week.

DR. ALFRED WILTSHIRE will deliver, on Monday next, the second Lettsomian Lecture "On Periodical Hæmorrhage", at the Medical Society of London.

WE regret to hear of the death of Dr. Murphy, formerly the well-known Professor of Midwifery at University College. Dr. Murphy was seventy-four years of age, and had for some years been in ill health. We shall give next week some further details of his work and life.

DURING the fifty-two weeks of 1876, the deaths registered in London were 77,411. In 71,024, or 91.8 per cent. of these cases, the cause of death was entered in the death-register on the authority of medical certificates furnished by registered medical practitioners. In 5,279 cases, equal to 6.8 per cent., inquests were held, and the cause of death was entered from the coroner's certificate. In the remaining 1,108, or 1.4 per cent. of the cases, no medical certificate was forthcoming.

THE medical officer for the St. Saviour's Board of Works last week applied to the Southwark police magistrate for an order for the instant removal to a hospital of a young man who had been attacked with small-pox in a very virulent form, and stated that two other persons who occupied the room in which the sick man was lying were found busy at tailoring. The instance is only one of many; and until better arrangements are made for procuring information for medical officers of health, the vast majority of such cases are sure to escape their notice.

IN replying to a deputation respecting the small-pox hospital accommodation in the metropolis, Mr. Sclater-Booth, M.P., pointed out that the establishments of the Metropolitan Asylums Board were essentially intended for the pauper class. The obligation, however, of a vestry to provide accommodation did not rest upon the authority of the Local Government Board, and he could hardly hold out hopes that the additional room being provided by the Asylums Board would be so extensive as to do away with the necessity for efforts on the part of the vestries.

THE *Indian Medical Gazette*, referring to the great disfavour with which the Army Medical Service is regarded at present, says: "We venture to state with confidence that no candidates will be obtained for the Army Medical Department—till (1) its officers are released from the painful situation of playing the rôle of strolling doctors, and are replaced in their regiments; (2) till some concessions are made about sick leave, placing medical and combatant officers in this respect more on the same footing; and (3) till a just retiring allowance after twenty or twenty-five years' service is granted."

THE Arctic Inquiry Committee has commenced, we believe, the medical part of its inquiry into the cause of the outbreak of scurvy in the recent expedition. Dr. Donnet, an experienced and successful Arctic medical officer, and Dr. Fraser, who are the medical members of the committee, will have the advantage of evidence from Dr. Pavy, Mr. Busk, Dr. Guy, and, also we believe, Dr. Harry Leach and Dr. Buzzard. We believe that experiments have been conducted at Netley on frozen lime juice, and Dr. McDonald, and Dr. De Chaumont, the professor of Hygiene at Netley, will be called. We do not know in what way the views of Sir A. Armstrong, the Director-General of the Medical Department of the Navy, will come before the committee; but, of course, this necessary information will not be withheld.

THE Queen has forwarded a donation of £50 to the funds of the All Saints' Convalescent Hospital at Eastbourne.

#### ST. GEORGE'S HOSPITAL.

WE understand that Dr. Watney was elected on Friday last assistant-physician to St. George's Hospital by a large majority. It appears to us, that a candidate who has the unanimous support of the staff must always have the first claim on the support of the governors. We hope that the circumstances connected with this election may induce the governors to adopt a more reasonable and less inconvenient method of appointing their medical officers when vacancies occur than that of canvassing a thousand or two of subscribers, who have imperfect means of forming a judgment, and are averse to this sort of costly and undignified canvassing for an unpaid appointment.

#### DR. BALTHAZAR FOSTER.

AT the ordinary meeting of the Birmingham and Midland Counties Branch of the Association held on Thursday, January 11th, 1877, a letter was received from Dr. Balthazar Foster announcing his resignation of the office of Honorary Secretary to the Branch. Dr. Foster has held the office of Secretary for four years, and previously he was for four years Secretary to the Pathological and Clinical Section. During these eight years of office, he has so industriously and so efficiently fulfilled the duties, and has at the same time, by his politeness and conciliatory bearing, made himself so agreeable to the members in all transactions and communications between himself and them, that he has fairly won their respect and esteem. There is but one universal expression of regret in the Branch at the loss of Dr. Foster's services; and the meeting on Thursday—a very large one—passed with much enthusiasm the following resolution, which was moved by the President, Dr. Bodington, and seconded by the President-elect, Mr. Gamgee; viz.: "That this Branch deeply regrets that Dr. Foster is compelled by his numerous engagements to withdraw from the office of Honorary Secretary, which he has filled with so much credit to himself and such signal advantage to the Branch; and that, in accepting Dr. Foster's resignation, the Branch begs to express to him its warm appreciation of his devotion to its best interests; and that the cordial thanks of the Branch be and are hereby tendered to Dr. Foster for his invaluable services in the office of Honorary Secretary."

#### MUNIFICENT BEQUEST.

M. EMMANUEL MOIANA, recently deceased, has bequeathed to the hospitals of Paris a sum of one million of *francs*, of which 500,000 *francs* (£20,000) are for the construction of a hospital, and 500,000 *francs* for the purchase of *rentes* to endow the hospital with the revenue necessary for its organisation and annual expenses.

#### UNATTACHED STUDENTS AT OXFORD.

THE attention of the educated and professional classes can hardly be too often drawn to the system by which the University of Oxford has thrown open its educational advantages to students who are not attached to any College or Hall. An University education is thus brought within the reach of persons of very moderate income; and we allude to it, because it may often meet the wants of our professional brethren. From the latest report, which is before us, we learn that the system is developing itself in the most satisfactory manner. There are now three hundred and five names on the roll, and, of this number, two hundred and forty-nine are undergraduates. This indicates that the *scholares non ascripti* are an important element in the University; and a table which is given in the report shows that their number has been steadily increasing during the eight years that the plan has been in operation. The Censors report that the conduct of those under their charge has been good, and that they "are well pleased with the profitable industry of the students, and with their general rate of progress through their University career". Tables are furnished showing the examinations which each student has passed, and the honours that have been obtained. In order to promote the

development of the system, the Grocers' Company has offered two exhibitions of £25 a year, tenable for three years, and the Cloth-workers' Company three exhibitions of £50 a year, tenable for the same period. "The Censors have collected fresh statistics as to the cost of living. They received forty-six estimates of weekly expenses. . . . Taking the larger average as the sum per week for which a careful student can get respectable board and lodging in Oxford, we arrive at the following figures for a year's expenses.

Board and lodging for three terms of eight weeks, at 28s. 6d. ... ..				£34	4	0
University dues ... ..	...	...	...	4	10	0
Examination fees ... ..	...	...	...	1	10	0
Tuition expenses (about) ... ..	...	...	...	10	10	0
Total ... ..	...	...	...	£50	14	0

It will, of course, be observed, that these figures do not include outlay on travelling, books, clothes, pocket-money, or the cost of living in the vacations. Still, they prove conclusively, that the necessary Oxford expenses of a careful student need not exceed £50 a year."

#### LIVERPOOL ROYAL INFIRMARY.

IT is proposed to alter at the ensuing annual meeting of this institution, on the 29th instant, the laws relating to the election of the honorary medical officers, and to place their appointment in the hands of the Committee, a body which now appoints the salaried officers, and the house-physicians and house-surgeons. Thus, should this change be made, the honorary and the paid staff will be placed as regards their appointment on the same footing. We understand that this proposed change of laws is altogether disapproved of by the medical board, and that they have drawn up a statement of their views, urging on the trustees the desirability of not making the alteration, as being, in the opinion of the board, injurious to the interests of the charity, and likely to cause the appointments at the Infirmary, to be less eagerly sought for than heretofore. The following is the proposed law.

"It will be proposed at this meeting to annul or alter (as the case may be) the laws now regulating the election of honorary medical officers to the Royal Infirmary and Lock Hospital, and to substitute in lieu thereof laws giving power to the officers and trustees forming the committee (twenty-nine in number) to fill up any vacancy hereafter occurring in any of the offices of physician or surgeon to the Royal Infirmary and Lock Hospital, or either of them."

As a rule, we believe that such appointments are best made by a limited body, but this body should include a fixed number of the representatives of the medical staff. None are so well informed as to the medical status and personal character of the candidates, or as to the requirements of the particular office to be filled. None are more deeply interested that the person selected should be calculated to do honour to his position, and to promote the efficiency and reputation of the institution. It has been found in practice to work very well, either to leave the nomination of candidates to the Medical Committee, who should report a list to the Managing Committee for ultimate selection, indicating their views; or to leave the whole question in the hands of a mixed representative Committee, nominated by the Board and the Medical Committee.

#### A MEDICAL OFFICER FOR KABUL.

IT is rumoured that the Amir of Kabul, who is suffering from some illness which has confined him to his bed, has applied for treatment to Assistant-Surgeon Chetan Shah of Peshawur, but it is not known, according to the *Indian Medical Gazette*, whether that officer will be allowed to go to Kabul. We hope that the Government has granted the necessary permission, for both politically and professionally, a resident medical officer at Kabul would be a great gain to us, and this requisition might be the beginning of the insertion of the "thin edge of the wedge". Before now, in India, medical men have been the pioneers of the political agents, and the obtainers of concessions from powerful nobles. *Medicine has always had, and we hope always will have, a civilising influence in the East.*



## FALSIFICATION OF WINES.

OUR Paris correspondent writes: Notwithstanding the heavy penalties inflicted on wine-merchants and other convicted of adulterating wine for fraudulent purposes, the artificial colouring of this popular liquor is still carried on to a great extent in France. The colouring matter most commonly employed is "fuchsine", a substance extracted from aniline, which produces a beautiful purple colour. To the fuchsine arsenic is often added in order to intensify the colour, but this is done at the risk of poisoning those who make use of the liquor thus coloured. Many tests have been proposed for detecting the fuchsine in wine which are more or less tedious and complicated; but M. A. Boillot proposes two methods, which are very simple. One is this: pour into a glass tube three or four *grammes* of wine, as much water, and half the quantity of chloroform. The whole is to be shaken together and then allowed to stand. The chloroform is precipitated, drawing with it a portion of the colouring matter. If the wine be pure, the precipitate is of a light grey colour, slightly pinkish, semi-transparent, and separating into two layers. After a rest of a few hours, the lower portion becomes limpid. With the stronger wines of the South of France the chloroform produces a deposit of a pinkish hue, not transparent, separating with difficulty. The addition of one *centigramme* of fuchsine to the wine produces with chloroform a purple deposit, which is more or less of a deep hue, according to the quantity of fuchsine employed. After having stood for a few hours, the deposit separates, and the lower portion becomes clear. The other method proposed by M. Boillot is to treat the wine with benzine in the same way as with the chloroform, and in the same proportions. The results are almost identical, but those from the benzine are still more marked. Benzine being lighter than wine, rises to the surface and draws with it the colouring matter, which forms with it a thick jelly-like substance.

## THE FRENCH HEALTH-RESORTS.

MR. J. A. GOODCHILD writes to us from Cannes:—In the midst of the floods at home, the members of the British Medical Association may be glad to know that we have had a sample of English rainy weather upon the French Riviera, the rainfall being the heaviest known for some years past; still the weather, if not quite equal to that of San Remo and Alassio, beyond the Italian frontier, has been on the whole warm and enjoyable, and many very serious cases have been greatly benefited by the climate since their arrival. Nice has, I believe, been freer than usual from typhoid fever this year, and I have only heard of one case amongst the English residents; but there has been a good deal of wind there, and, on one occasion, the sea rose so high as to wash away the seats and shrubs upon the Promenade des Anglais. Hotels are full and villas empty at Cannes this year, the number of visitors being large; but they are not so inclined to throw away money as last winter. Probably these French health-resorts will present a very altered appearance next year, if the present Bill for excluding English practitioners be brought forward; for English consultants will naturally resent the insult, and send their patients on to San Remo, Bordighiera, and Alassio, a proceeding they can indulge in with easy consciences, as the climate is better, and the *mistral* less deadly upon the Italian Riviera.

## PATENT MEDICINES.

IN the matter of patent medicines, the Japanese Government seem very quickly to have taken a more intelligent view of their responsibilities than our own Government takes; for Sir H. Parkes reports that, within a month after he had made a complaint, certain "Regulations for the Issue of Licences for Medicine" were published by the Japanese authorities, containing *provisions for the analysis of all prepared medicines* manufactured in Japan, prior to the issue of licence-stamps to be attached to them. In the case of British patent medicines, the Government issues fifteen million stamps annually, which serve to give an apparent authenticity to medicines of which the composition is unknown, and on which the printed labels habitually make the falsest and

most dangerous allegations. Thus, under the sanction of a government stamp, medicines containing opium as their chief ingredient are largely sold for administration to children, with the statement that they contain no narcotic or noxious ingredient; and infantile poisoning is thus not only rendered easy and seductive to the million, but is actually largely practised.

## HOSPITAL SUNDAY IN LIVERPOOL.

THE second Sunday in the year was fixed upon, seven years ago, by the majority of Liverpool clergy and ministers, as the most suitable for "Hospital Sunday". It fell, therefore, on Sunday last; and, in spite of very inclement weather, promises fairly well, many collections showing that munificence for which Liverpool has been distinguished since the first Hospital Sunday in 1871. Hospital Saturday will take place two months later; this plan, which was tried for the first time last year, having been found successful. The annual meetings of all the medical charities are being now held, and the value of this means of increasing their incomes is acknowledged by all.

## THE WORCESTER DISPENSARY COMMITTEE.

THE Committee to whom is confided the control of the Worcester Dispensary has just given a fresh illustration (in their summary dismissal of Dr. Woodward) of the truth of the old adage unfavourable to the public bodies. Dr. Woodward, as we understand, was for seven years the house-surgeon of this institution, and persistently advocated also the self-supporting principle. When this system (mainly through his advocacy) was introduced, he offered himself as a candidate for office. The Committee, however, declined to appoint him. At a general meeting, which took place in January 1874, this decision was reversed, and he was unanimously elected. Since that time, he has held 2,849 consultations at home, 5,298 at the dispensary, and has made 3,602 domiciliary visits. As one of the fundamental rules of the dispensary is that the patients should choose their own medical attendant, the above figures show that the doctor is popular with the patients; and yet, in spite of this, the Committee has summarily dismissed him, transferring his patients *en bloc* to another medical man. Fortunately for Dr. Woodward, the annual meeting of the subscribers will be held on January 30th, when we trust a successful effort will be made to extract from the Committee their grounds for this step; and, if no sufficient reason can be shown, that Dr. Woodward will be restored to the position which, so far as the apparent facts go, he has hitherto filled so creditably.

## A DISPUTED CASE OF HYSTERIA.

AN interesting medico-legal case is reported from the Sheriffs' Court at Glasgow, in which Catherine McLaren, a farm servant, sued Donald Black, a farmer, for wages and maintenance. Briefly, the facts are that Catherine fell from a ladder while in her master's service, and after lying in a state of seeming unconsciousness for some hours she was removed to her home, where she was attended four or five times by Dr. Reed, who gave her a certificate that she had been injured on the left side and chest. For the defence, Dr. Crawford deposed that he saw the girl soon after the accident, and that he thought her merely pretending to be unconscious. Her eyes were unnaturally contracted as if in hysteria, which was a well recognised condition in which many females sham injuries or any diseases under the sun. The pursuer was shamming, being in a condition of hysteria brought on by the accident. Dr. Taylor also deposed that pursuer was in an hysterical state just after the accident, and that witness could not ascertain that she was injured. In an hysterical subject, hysteria is caused by a sudden mental emotion. The sheriff founded his judgment for the pursuer upon the evidence of Dr. Crawford and Dr. Taylor, the witnesses for the defence, on the ground that they admitted that any sudden shock would induce a violent attack of hysteria in a predisposed person; that this fall from the ladder was a sudden shock, and that it had taken place in the defendant's service. He, therefore, dismissed from consideration the suspicion that the girl had deliberately and wickedly planned a plot,

and gave judgment in her favour for £4 10s., as loss and damage. The sheriff's reasoning seems logical enough. A master is responsible for the consequences of any accident and risk in his service. The pursuer met with such an accident, the consequences of which were an attack of hysteria with the symptom of sham injury. The master, therefore, was as responsible for an unreal injury in his hysterical subject as he would have been for a real injury in a servant not hysterical. The reasoning seems sound, but it is also a reasonable corollary that masters should be wary and not employ hysterical servants.

MR. ALFRED SMEE, F.R.S.

MR. ALFRED SMEE, F.R.S., surgeon to the Bank of England, has lately died at the age of fifty-eight. Mr. Smeë was well known for his practical knowledge of electricity, and had given his name to a galvanic battery; he was also the author of many works connected with electricity and professional subjects. He was the inventor of the present mode of printing Bank of England notes, was the chairman of several public companies, and was an unsuccessful candidate in the Conservative interest for Rochester at the general election of July, 1865.

#### HEALTH OF THE METROPOLIS.

DURING last week, 2,516 births and 1,358 deaths were registered. Allowing for increase of population, the births were 26 and the deaths so many as 397 below the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the two previous weeks had been equal to 22.5 and 22.3, declined last week to 20.1—the lowest weekly rate in January since 1873. The deaths included 100 from small-pox, 24 from measles, 23 from scarlet fever, 4 from diphtheria, 25 from whooping-cough, and 16 from diarrhoea. The mortality from these diseases, small-pox excepted, was less than half the average. The deaths from small-pox, which had been 97, 75, and 116 in the three preceding weeks, were 100 last week, of which 34 were certified as unvaccinated, 31 as vaccinated, and, in the remaining 35 cases, the medical certificates did not furnish any details as to vaccination. Medical practitioners are requested to add this information in all their future certificates relating to small-pox deaths. In comparing, however, the number of deaths occurring among vaccinated and unvaccinated persons, it should be remembered that there are probably now in the London population fully nine times as many vaccinated as unvaccinated persons.

#### SMALL-POX AND VACCINATION.

IN his last week's report, the Registrar-General goes on to ask—To what extent has vaccination, as it is usually performed, protected the population of London against death by small-pox? The returns of the year, 1876, answer this question to a certain extent—735 persons of all ages died of the dire disease; 325 were returned in the medical certificates as unvaccinated, 219 as vaccinated, while of 191 the fact is not spoken to. Thus, in 544 deaths, the proportion in every 100 were found to be, 60 of persons unvaccinated, and 40 of persons vaccinated. The proportions of the unvaccinated were greater in the hospitals, where every case was classified, so that out of 735, including the due proportion of the uncertified, 439 or more were unvaccinated, and 296 were vaccinated at some time, and in some way or other. If the numbers unvaccinated and vaccinated among the living were known, it would be easy to determine the mortality of the two classes; but, in the absence of an actual enumeration of the vaccinated, all that can be asserted is, that out of a comparatively small number of persons unvaccinated, 439 died; while, out of the great mass of the vaccinated population, 296 died. For the earlier age of one to five, the proportions of vaccinated children living can be calculated from the numbers returned as successfully vaccinated in recent years by the medical officer of the Local Government Board; in a recent weekly return these numbers were shown to be 317,081 vaccinated, and 31,360 unvaccinated children out of 348,441 children living in the year 1876 of that age. In the fifty-two weeks of that year, 6 vaccinated children,

aged one to five years, died out of 317,081 living, and 81 unvaccinated children died out of 31,360 unvaccinated. But the numbers of deaths have to be raised, for in 38 cases it was not stated whether the children had or had not been vaccinated; after distributing these 38 cases proportionally, the deaths after vaccination are 9 in 317,081 living, while the deaths are 116 in 31,360 poor children unprotected by Jenner's beneficent discovery. It may thus be calculated that, if all the living children at these ages had been unvaccinated, and had suffered from small-pox in the same proportion as those estimated to be unvaccinated, the deaths occurring among them from this disease would have been 1,789.

#### OPHTHALMIA IN PAUPER SCHOOLS.

THE workhouse school of the parish of Liverpool, at Kirkdale, has lately come in for at least its full share of official censure on account of the condition of its inmates' eyes. A report lately made on the ophthalmic state of the school by the inspectors of the Local Government Board (Dr. Mouat and Mr. P. G. Smith) was so extremely unfavourable, and recommended such sweeping alterations, that the select vestry determined, before deciding to adopt any of Dr. Mouat's suggestions, to take another skilled medical opinion. We understand that Mr. Nettleship, who made this examination, while recommending some important alterations, thinks the school capable of being put on a good footing without radical changes in the premises or administration. The immediate cause of the inquiry was the occurrence of a number of cases of acute ophthalmia last summer, following an outbreak of measles in the spring. The disease was not of a severe type, and no eyes were damaged, but the prevalence of granular lids among the children has had its usual effect in prolonging and aggravating what would probably have otherwise been a brief and trivial affair.

#### SUCCESSFUL GASTROSTOMY.

THE *Medical Journal of Bordeaux* reports that a man entered a few days since the wards of Dr. Lannelongue, suffering from a stricture of the œsophagus seated at the cardiac extremity, and probably due to an organic affection of the canal. The stricture was impassable to ordinary bougies; even liquids could not pass it. The patient, exhausted and emaciated, was not yet cachectic. In presence of these facts, Dr. Lannelongue decided to perform gastrostomy. The operation was performed on December 31st, according to the method followed by Dr. Verneuil in the successful operation which we recently reported at length. Five days after the operation, the patient was taking food well by the gastric fistula; there were no bad symptoms; he was in good condition, and there was reason to anticipate a successful result. We shall watch the future reports of this interesting case.

#### MR. COOKE'S SCHOOL OF ANATOMY.

MR. THOMAS COOKE, the proprietor of the school of anatomy in Bridge Street, Blackfriars, was summoned before Sir Thomas Gabriel, at the Guildhall, on Monday, for causing a nuisance injurious to the health of the neighbours. A certificate was produced showing that the place was licensed by the Home Secretary, and it was stated that Mr. Cooke was a surgeon at the Westminster Hospital, a demonstrator of anatomy, and the author of many scientific works. His counsel stated that the Anatomy Amendment Act of 1832 gave power to schools of anatomy to keep a body for six weeks, but the Anatomy Act of 1871 extended that time to six months, subject to the certificate of the medical officer of health. The defendant had received the extension of time from the sanitary inspector before the period specified in the Act had expired, but when the report of this case appeared in the newspapers the sanitary inspector had required him to bury the body immediately. Mr. Cooke consulted counsel about it, and was advised that he was bound to obey the order of the sanitary inspector. A policeman who visited the house on Friday stated that he did not notice any very strong smell in the dissecting-room, but when he went on to the lead flats of No. 32, which overlook the skylight of the dis-



secting-room, the smell there was much stronger. A policeman, who acted as housekeeper at No. 34, said that for some time he had smelt a faint, disagreeable smell, which had made him and his wife feel sick. Two clerks who were on the third floor had frequently to go downstairs to avoid the smell. The case was adjourned.

#### WESTMINSTER HOSPITAL.

ON January 16th, 1877, Mr. Richard Davy performed, for the third time, his operation of chiselling through the entire tarsal arch, and removing a wedge-shaped block, for exaggerated talipes varus. An ordinary portable vice was again used with great advantage for firmly fixing the leg. On the same day, prior to amputating through the hip-joint, Mr. R. Davy demonstrated that the right common iliac artery could be effectually compressed by a straight lever introduced *per rectum*. During the operation, his colleague, Mr. Bond, manipulated the lever, and amputation was performed with the total loss of a fluid ounce of blood.

#### DEATH FROM CHLOROFORM.

WE regret to have to record a death from chloroform, which occurred last week at University College Hospital, and, as has been frequently noticed in other instances, it occurred during only a trifling operation. We are indebted for the details to one of the house-physicians. The man was sent up to the ward from the out-patient room about four P.M., for the removal of a piece of carious bone from the stump of an arm. He was placed lying on a bed, with loosened dress, and as he felt pain very acutely, chloroform was ordered; it was not measured, but from one to two drachms were poured on lint, and afterwards the administration was continued *guttatim*. After a good deal of struggling he became suddenly under the influence, and the operation was commenced. He breathed equably for a few seconds, but when Mr. Heath grasped the bone, the breathing suddenly stopped. The pulse seems to have ceased about the same time. He is said to have been of rather dark complexion, and the administrator did not notice any marked change of colour, though others thought it became bluish. Artificial respiration by Silvester's method was the principal remedy adopted, and energetically applied about half an hour, but to no purpose; brandy was not given. On the supposition that possibly some substance was fixed in the larynx, Mr. Heath performed laryngotomy as a last resource. At the *post mortem* examination, the heart-substance was found in a state of marked fatty degeneration. We may say that the man's age was thirty-seven, and not twenty-eight, as stated in the newspaper reports. We have no clear history of his habits. He had taken ether safely at a previous operation. At the inquest, Dr. Crocker stated that the death occurred from misadventure, and the jury returned a verdict to that effect.

#### TOO MUCH CHLORAL.

AN inquest was held at Henllan, Denbigh, recently, respecting the death of John Roberts, who, although unqualified, enjoyed a good practice. He had for some time been drinking heavily, and was accustomed to take chloral to produce sleep and counteract nervousness and mental depression produced by drink. While at a public-house one morning, he said he had taken too much chloral during the night. Directly afterwards he was discovered on his back in the stable, and died immediately. The jury found a verdict of death from an overdose of chloral taken for the purpose of producing sleep.

#### THE PRACTICE OF VACCINATION.

MR. JOHN PRIOR PURVIS, in a Report on Statistics of Vaccination at the Greenwich Vaccination Station, which we find quoted by Dr. Cameron in the *Dublin Journal of Medicine*, states that the operation is often insufficiently performed by private practitioners. His conclusions in relation to this and some other points are as follows.

"Firstly, it would seem desirable that a clause should be inserted in the next amendment to the Vaccination Acts legally defining the number of vesicles necessary to constitute vaccination, and fixing four

as the minimum number that a medical man should, at all events, attempt to produce. Secondly, that revaccination at puberty, say at about fifteen years of age, should be made as compulsory as the present primary vaccination is. Were it possible to enforce by legal enactment or otherwise these two all-important points, we might hope that the next wave of epidemic small-pox would find a population all but insusceptible of its influence. Lastly, there are four points in my practice to which I wish to direct especial attention. 1. The picking up the lymph from the opened vesicles of the vaccinifer by means of a capillary tube. 2. The registration of the character of the vesicle on the eighth day, by means of a letter. 3. The keeping of charged tubes in little bottles in a case, instead of on slips of card. 4. The mixing of an equal quantity of glycerine with lymph for revaccinations.

#### ACCIDENTAL POISONING.

MADAME LISA PETIT, a well-known French actress, has been nearly poisoned through the carelessness of her servant. The lady was unwell, and immediately after taking her medicine she was seized with violent pains. On the doctor arriving, it was discovered that the servant, mistaking the bottles on the mantelpiece, had administered to her a dose of corrosive sublimate instead of the homœopathic potion prescribed. Fortunately, her mother gave her a cup of milk before the arrival of the medical gentleman, and that is believed to have saved her life. She is now out of danger.

#### SCOTLAND.

A CASE of small-pox, imported, it is said, from Calcutta, has occurred at Dundee. The Police Commissioners have recommended the revaccination of adults in the town.

WE understand that the Chair of Botany in the University of Aberdeen will be vacant shortly, in consequence of the retirement of Professor Dickie. The present emolument of the chair is about £550 *per annum*, of which £300 is derived from endowment. The appointment is in the gift of the Crown.

SOME time ago, a movement was instituted in St. Andrew's for the purpose of raising an hospital to the memory of the late Dr. Adamson and Professor Oswald Bell. Sufficient funds have now been obtained, and the committee entrusted with the arrangements have purchased a villa in the city for the purpose.

#### GLASGOW ROYAL ASYLUM.

FROM the annual report of this institution, we gather that the number of patients under treatment during the past year was 794. Of that number, 88 had been discharged recovered, 122 relieved, 52 had died; and there remained, on December 30th, 532 patients. The admissions had been 228, against 334 in 1875. Legacies to the amount of £400 had been received during the year. Of the patients, 185 were private, and 347 chargeable to parishes. The Inspector of Lunacy had made a very favourable report of the institution.

#### SCOTTISH NATIONAL INSTITUTION FOR IMBECILE CHILDREN.

THE annual new year treat was given on January 5th to the inmates of the Edinburgh National Institution for the Education of Imbecile Children at Larbert. In this institution, there are at present twenty-four children. There is now, however, on the eve of completion, an addition to the former building which, besides providing means for the entire separation of the sexes, will enable the directors to find room for 170 to 180 more inmates. The cost of erecting and fitting up this new wing is estimated at £12,000. After the festivities, Dr. Ireland, the medical superintendent, in an address to the visitors, remarked that it was impossible to tell really how many children there were in the country who required the kind of education provided in that institution. In the census of 1871, imbeciles were returned as numbering 4,200; but he had no doubt, from what he knew, that there were double this number. They had been recently obliged to part with a good many

of their pupils, on account of certain action taken by the Board of Lunacy. Where these young people were to go to he did not very well know; but their legal advisers assured them that all above eighteen years of age did not fall to be considered as children, so that such inmates had to leave. The French had recently established an agricultural colony or institution for backward children, which seemed to him a wise method of solving the difficulty with reference to these children. He might also add that he had just heard, from a German correspondent, that in Saxony a law had now been passed which gave to children of every kind a title to instruction from the State. He believed this was the first instance in Europe in which the class of children to whom he alluded had been recognised as deserving and requiring education.

#### UNIVERSITY OF GLASGOW: LOCAL EXAMINATIONS.

THE University of Glasgow has just adopted a scheme with regard to local examinations similar to those which have been for some years in operation in connection with the Universities of Oxford, Cambridge, and Edinburgh. The scheme provides for the examination of boys and girls, and the granting of certificates of two grades, which are called ordinary and honour certificates. The General Medical Council has accepted these certificates as equivalent *pro tanto* to the preliminary examinations to be passed by medical students before registration. The examinations are to be held in the various counties in the West of Scotland, but only in connection with local committees.

#### RAINFALL IN SCOTLAND.

As showing the difference in point of rainfall in different parts of Scotland, it is reported that at East Linton, Haddingtonshire, ninety feet above sea level, the total rainfall during last year was 38.70 inches, the average being only 26.4; while at Tyndrum, Perthshire, 571 feet above the sea, 81.51 inches fell during the same period. The only year, since 1856, in which the rainfall at East Linton was greater than last year, was in 1874, when it reached 40.43 inches.

#### ANATOMY IN EDINBURGH.

THE present session of the University of Edinburgh is an unusually successful one, especially in the department of anatomy. The supply of bodies is this year ample, notwithstanding that there are upwards of four hundred students dissecting. Over sixty bodies have been brought into the rooms already this session, and we understand that the further supply is more than sufficient to meet the requirements of the students until the end of the session.

#### THE HEALTH OF SCOTLAND.

THE Registrar-General's returns for December show that, in the eight chief towns of Scotland, the number of marriages registered during the month was the largest since the Registration Act came into force. The number of deaths was greatly below the average, and the mortality from zymotic diseases was the lowest ever recorded in December. With reference to the weather of the month, it has been remarkable, says the Registrar-General, "for low barometric pressure, unexampled depth of rain, and unexampled persistence of east wind; the mean temperature being at the same time rather above the average, and the wind unusually strong".

## IRELAND.

#### COLLEGE OF PHYSICIANS.

MISS DUNBAR, who was last week under examination for the Licence in Medicine, was successful, and obtained the diploma of the College.

#### THE ARCTIC EXPEDITION.

DR. MOSS, R.N., late of the *Alert*, read a paper at the Royal Dublin Society last Monday on the Recent Arctic Expedition. The Arctic specimens collected by Dr. Moss, and presented by him to the Society, consisting of implements, articles of dress, etc., were exhibited.

#### FEVER AT NEWTOWNARDS.

THERE is a good deal of enteric fever in this town at present, and, in consequence, the question of providing a disinfecting chamber for the union has lately been brought before the Town Commissioners, the urban sanitary authority. The members of this Board, however, consider that the guardians should provide the chamber, and, pending the dispute, no action has been taken in the matter.

#### SCIENTIFIC LECTURES AT THE COLLEGE OF PHYSICIANS.

THE first of the series of six lectures for 1877, will be delivered in the College Hall, on Monday, the 22nd instant, by Dr. James E. Reynolds, Professor of Chemistry in the University of Dublin, who has chosen for his subject the Influence of Chemical Constitution on Physiological and Therapeutical Action. These lectures are free to all licentiates in medicine of the College; and registered practitioners, who are not licentiates, are admitted on payment of two shillings for each lecture.

#### SANITARY CONDITION OF DUBLIN.

THE Recorder of Dublin, in opening the City Quarter Sessions last week, spoke at considerable length, entering into minute details, concerning the Artisans' Dwellings Act for Dublin. He believed that the problem this statute aims at solving is the gravest social question of the day. Thousands live and die in places where a humane sportsman would be ashamed to keep his dogs; and it is vain, steeped in squalor and besieged by disease, joyless, hopeless, godless, to keep them from the light and warmth of the gin-palace, and the oblivion, however temporary and baneful, they can purchase there. To cleanse Dublin of these fever-nests, the powers of the Artisans' Dwellings Act are essentially necessary; and, acting under it, Dr. Mapother, medical officer of health, has reported twelve areas which he has condemned as incapable of being made sanitary except by a comprehensive reconstruction such as the Act contemplates. Two of these "unhealthy areas" have been selected by the corporation to commence with; but, moderate as the proposal is, unless they are supported in carrying it out, as it is their first, so it must be their last effort in our generation to cope with this giant evil.

#### ROYAL COLLEGE OF SURGEONS.

A DEPUTATION, consisting of the President, Vice-President, Council, and Fellows of this College, waited by appointment on His Excellency the Lord Lieutenant, on last Saturday, the 13th instant, and presented him with an address, in which they assured him that they would always be ready to further by every means within their reach the objects for which the College was originally founded—viz., the improvement of the profession of surgery, and the providing of a number of properly educated surgeons, as well as for the service of the public in general, as for that of the army and navy. The address further proceeded to state, that so far back as 1844, the College had established a Chair of State Medicine, the first of the kind in these kingdoms, which to the present day diffuses amongst the public sound sanitary knowledge; and, in conclusion, they trusted that His Grace would extend to their profession that consideration and support to which it was so justly entitled. His Excellency, in reply to the deputation, said that their College had year after year sent forth men highly qualified to assuage the sufferings of humanity, and to alleviate the miseries of war, both on land and on sea. The interests of the institution which they represented would ever command his sympathies, and he would gladly recur to their advice and assistance with regard to every sanitary measure which might be beneficial to the country.

#### HEALTH OF DUBLIN: QUARTERLY REPORT.

DURING the quarter ending December 30th last, there were registered in the Dublin district 2,076 births, being equal to an annual ratio of 1 in 37.9, or 26.4 in every 1,000 of the population; and 1,759 deaths, affording an annual ratio of 1 in 44.7, or 22.4 per 1,000. Omitting



the deaths (55) of persons admitted into public institutions from localities outside the district, the rate was 21.7 in every 1,000. The number of deaths from zymotic diseases during the quarter amounted to 345, or 19.6 per cent. of the total deaths, and equal to an annual rate of 4.4 per 1,000; the number during the corresponding quarter of 1875 was 426. Diarrhoea proved fatal in 48 cases, fever caused 94 deaths, scarlet fever 46, measles 39, croup 19, whooping-cough 26, and erysipelas 10. Eight deaths resulted from small-pox, 2 of which were registered during the seventh week of the quarter, 2 during the ninth, 3 in the twelfth, and 1 in the last week of the quarter. To convulsions, 131 deaths were ascribed; bronchitis caused 253 deaths, pneumonia proved fatal in 43 instances, apoplexy in 26, and disease of the liver in 31. Phthisis was the cause of 188 deaths, cancer of 46, hydrocephalus of 27, mesenteric disease of 14, and of gout 3. The average temperature for the quarter was 47 degs., and the rainfall measured 13.388 inches.

#### DUBLIN HOSPITAL SUNDAY FUND.

THE Committee of this fund, having ascertained that the available balance to the credit of this fund is £4,000, and that a sum of about £250 will be required to meet the current expenses for 1877, have resolved to divide the sum of £3,600 amongst the participating hospitals, the following being the sums awarded to the various institutions: Sir Patrick Dun's, £249:15:4; City of Dublin, £577:8:3; Steevens's, £138:6:5; Meath, £479:9:4; Mercer's, £287:11:3; Whitworth, £54:9:3; Coombe (Lying-in), £99:7:7; Rotunda (Lying-in), £131:11:3; St. Mark's (Ophthalmic), £139:0:7; National Eye and Ear Infirmary, £58:9:10; Convalescent Home, £348:9:0; Cork Street (Fever), £122:6:1; Adelaide, £765:4:4; and Rathdown, £148:11:6. In 1875, £3,450 was distributed, and £3,000 the previous year, showing a gradual and steady increase in the sums collected for this charitable purpose. The Adelaide Hospital, which participates in the fund for the first time, receives the largest amount of any.

#### CONJOINT MEDICAL EXAMINATIONS.

WE are glad to be able to state that, at the conference of medical authorities engaged in the revision of the scheme for an examining board for England, held at the College of Surgeons, Lincoln's Inn Fields, on Tuesday last, the scheme as amended was accepted by all the bodies in all its main features. The representative of the University of Cambridge presented, on behalf of the distinguished body which he represents, a memorandum embodying and accepting the scheme, but making one suggestion which requires some consideration. It is, that the scheme terminate at the end of five years from the date of its sanction by the General Medical Council, and do then cease unless renewed. On this head it will, however, be necessary to consider that the scheme cannot be made compulsory on the students who have entered prior to its adoption; and that, therefore, it cannot come into complete operation for four years. The present suggestion is hardly, therefore—if all things be considered—an improvement on the original proposition, that at the end of five years each body should have the right of withdrawing if it see fit. All individual rights are safeguarded by that provision; and it can hardly be necessary to require that the whole conjoint scheme shall cease to be operative within a year after it has come into effective operation. Cambridge has the advantage of the guidance of Dr. Paget, who presided for some years over the General Medical Council with the highest efficiency and intelligence, as well as of Dr. Humphry, at present an active and able member of the General Medical Council. They know well how much importance the Council justly attaches to the completion of the scheme, and how urgently the public interests require that the present imperfection and confusion of English medical qualifications shall be remedied. We feel no small confidence, therefore, that they will hold these important interests in due estimation, and will advise their University, which is called upon to take an honourable part in this public duty, to lay no undue stress upon matters of secondary importance and doubtful value. The scheme is one of which the value is great, both for itself and as an example: it has been too long delayed; and persistent differences on minor points, obstructing the performance of a great public duty, are of course not likely to accord with the view of what is due to and from the Universities and Colleges of this country, in the effort to put an end to an acknowledged public grievance.

#### THE INTERESTS OF GENERAL PRACTITIONERS.

THE report of the proceedings of the Birmingham and Midland Counties Branch, which we publish under the head of Association Intelligence, refers to two subjects of more than local interest. One was a proposition made at a recent meeting of another Branch, that the consulting surgeon should, in cases of operation, interest himself to fix the family practitioner's fee. It was, we think, very wisely resolved that the practitioner should be left to fix his own fee, and that the surgeon should not step out of his sphere to take up a position pregnant with doubtful interpretations.

Mr. Furneaux Jordan writes to us on this subject:

"In your notice of the last meeting of our Birmingham Branch, I am, by an oversight of one of our respected secretaries, put down as the owner of a proposal recently brought forward by Mr. Maunder. Kindly permit me to say that Mr. Maunder (to whom I am indebted for much courtesy shown to me in my occasional visits to the London Hospital) desired me to bring his resolution before our Branch for the purpose of discussion, and that it was my wish that these facts should have appeared in the notice referred to."

We are extremely glad to see that the Birmingham and Midland Counties Branch has resolved to appoint a Committee to consider the best means for the promotion of the defence of legally qualified practitioners, and to report to the Branch. Several months have passed since this subject was brought forward at Sheffield last August, at the instance of the East York and North Lincoln Branch; and it seems to us very desirable that the powerful and wide-spreading organisation of the Branches should be utilised for this highly legitimate purpose.

#### UNIVERSITY OF LONDON.

A MEETING of convocation of the University of London was held on Tuesday last; Dr. STORR, Chairman of Convocation, presiding. Mr. A. P. HENSMAN moved: "That the House do now proceed to appoint a special committee in conformity with the resolution passed on May 9th, 1876, 'That a special committee of fifteen members of Convocation be appointed for the purpose of considering what changes in the constitution of the University are desirable, and the best means of obtaining such changes, and whether any, and if any what, change in the mode of electing the annual committee of Convocation is desirable'." The Rev. J. MILLER seconded the resolution.

Mr. W. SHAEN moved: "That the House pass to the next resolution." Upon a show of hands, the amendment was carried by a large majority; and the result of a division which was demanded was—for the amendment, 57; against it, 15. The resolution was, therefore, lost.

Mr. T. TYLER moved: "That, in the opinion of Convocation, candidates for degrees in arts should be examined in animal physiology; and that it is desirable that this subject should be, if possible, included in the matriculation examination, in order to encourage the teaching of biology in secondary schools." Dr. J. C. BUCKNILL seconded the resolution; which was, however, withdrawn, the Chairman remarking that the results of the examination in animal physiology had been found to be superficial, scanty, and insufficient as a representation of real knowledge.

The Rev. S. BUSS moved: "That it be referred to the annual committee to consider and report upon the best means of carrying into effect the desire of Convocation that the degrees of the University should be open to women." Mr. NESBITT seconded the resolution, which was supported by Mr. Hensman, opposed by Dr. Graily Hewitt and Dr. J. C. Bucknill, and adopted by 22 to 16.

Mr. H. K. MOORE moved: "That the Chairman of Convocation be requested to express to the Senate the desire of this House that the regulations concerning degrees in music may be decided on at the earliest convenience of the Senate, and published without further delay; and that the examinations for those degrees may be arranged for the earliest suitable date." Dr. CARPENTER, at the beginning of the meeting, said that he did not think any good would come from pressing forward this matter at present. The resolution came to nothing, there not being a House when the members present were counted.—The CHAIRMAN then made some remarks upon the subject, in which he said he did not think there need be any fear of dilatoriness concerning the question of musical degrees on the part of the Senate.



## REPORTS OF SOCIETIES.

## PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, JANUARY 16TH, 1877.

CHARLES MURCHISON, M.D., F.R.S., President, in the Chair.

## PRESIDENT'S ADDRESS.

THE PRESIDENT, on taking the Chair for the first time, said: The remarks which I have to make in taking the chair for the first time will be so brief as not, I hope, materially to interfere with the success of the experiment to be made to-night of a new mode of conducting our business. My first duty is to return my thanks for the great honour which I feel you have conferred upon me by electing me President of the Pathological Society. I am deeply sensible of the responsibility which is involved in the endeavour to tread in the steps of the distinguished men who have preceded me, and to discharge satisfactorily the duties of this office at the present stage of the Society's history. This feeling of responsibility is enhanced by knowing the ability and urbanity with which my immediate predecessor has presided over you, and by the conviction that many others might have filled this chair with greater distinction and advantage to the Society than myself. More than thirty years have elapsed since the first meeting of this Society was held on October 13th, 1846, at 21, Regent Street, under the presidency of one of the foremost pathologists of the day, Dr. C. J. B. Williams. Since its foundation, its career has been one of continued prosperity. You have only to read the account of the first meeting to see that the founders of this Society who survive are now leaders of the profession; and, from the first, it may be said that this Society has been the nursery of our rising physicians and surgeons. It is here that they have imbibed that love for pathology which must be the foundation of successful diagnosis in practice, and to the prosecution of which we mainly look for progress in our art. It is not only true that an experienced pathologist can rarely attend the meetings of the Society without learning something new to him; but the very existence of the Society has indirectly contributed to stimulate, outside its precincts, a line of investigation which, before its foundation, was disregarded to an extent that few of our younger members would readily believe. The fashion of treating symptoms, rather than in the first place of endeavouring to discover their cause, has been exploded in a great measure by the labours of the Pathological Society, which has thus been the means of effecting a great revolution in therapeutics. *Nec sinit mors* was the expressive motto adopted by our founders, and for thirty years the dead body has been invoked to reveal every fact bearing upon the pathological process which has terminated life. It has been a characteristic feature of this Society that its labours have been restricted to the rigid investigation and record of facts, and that no communication has been received unaccompanied by drawings, microscopic preparations, casts or models of the morbid appearance, or by the actual specimens themselves; while the statements of exhibitors have constantly been subjected to confirmation or correction by duly qualified committees. The result of our labours has been twenty-seven volumes of *Transactions*, which embody the most important facts observed in the dead-houses of our metropolitan schools, and which have obtained a world-wide reputation. Our present danger is that of an embarrassment of riches, and a multiplication of specimens differing little, if at all, from those already exhibited and recorded. The result is that, in order to get through the list in the short time allotted to our meetings, the discussion on really interesting and important specimens is often choked; and there is thus a want of life in our meetings. To obviate this inconvenience, the Society has more than once been advised to make a selection from the specimens offered for exhibition. This, however, would not only be a very invidious duty for the Council or the Secretaries to undertake, but, after some experience of the practical working of the Society, I have no hesitation in saying that I believe such a plan would be fatal to its popularity and its best interests. The remedy rests with the members rather than with the office-bearers. Our junior members more especially ought to bear in mind that specimens which are interesting to them may not be calculated to advance pathological science at its present stage, and, if so, are not fitted for exhibition to this Society, or for being recorded in its *Transactions*. On the other hand, a specimen which is a very ordinary one from a purely anatomical point of view, may acquire great importance from the history, or from observations made during the life of the patient, or may be of great interest in reference to prognosis. The clinical features of the cases, so far as they bear upon the speci-

mens exhibited, come strictly within the province of this Society, but are sometimes lost sight of. It has also often struck me as remarkable, how deficient medical literature still is in a careful record of well authenticated cases illustrating the possible duration of various anatomical lesions, and how far they are compatible with life and a fair amount of health; and, yet, a large number of cases of this sort are necessary for the foundation of the still neglected department of prognosis. This is a want which the Pathological Society might well supply, by a record of specimens exhibited in this room where the history has left no doubt as to the duration of the lesion before death. It is to those of our members engaged in family practice that we mainly look for assistance in this matter. But what I especially wish to call attention to, is the desirability of each member, before he brings forward the specimen, asking himself whether it is calculated to advance our knowledge of pathology. In the event of his being satisfied on this point, he ought in the next place to keep in view the main object that he has in bringing it forward—what, in fact, it illustrates—what previous statement it confirms or refutes, and that object he ought to state to the meeting clearly and prominently, and yet concisely; avoiding, as far as possible, newly coined German words, and using language which will be intelligible to his seniors. Long anatomical and microscopical descriptions are better reserved for publication in the *Transactions*. In endeavouring to follow them at the meeting, the audience often loses the point of the case, and consequently there is no discussion. If each exhibitor would prepare himself beforehand to give the pith of his case, he would save the time of the meeting, and he would be repaid by the greater attention bestowed on his communication. With the object of promoting discussion, the Council has of late years set apart certain evenings for debates on special pathological subjects; and that they did not misinterpret the feeling of the Society is shown by the great success which attended the debates on tubercle, cancer, and bacteria, and that the contagion of syphilis, introduced respectively by Dr. Wilson Fox, the late Mr. Campbell De Morgan (whose recent loss we deeply deplore), Dr. Bastian, and Mr. Jona than Hutchinson. They are now making an attempt to classify certain specimens, by setting apart special meetings for the purpose of bringing up from different sources, a number of specimens of the same class of pathological lesions, so as to facilitate comparison and to elicit remarks from those who have paid particular attention to the subject in question. The first experiment will be made to-night by exhibiting a series of specimens illustrative of visceral syphilis, a subject, the knowledge of which (thanks to the labours of Dr. Wilks and others) may be said to have originated and grown in this Society. From the list before us, the experiment bids fair to be a great success. Due notice will be given of other subjects to be treated in a similar manner. While this improvement in the mode of conducting our business must, in a great measure depend upon individual members, the Council have not been unmindful of their duty in the matter. From the remarks I have made, it must not be inferred that the work for which the Pathological Society was founded is well nigh completed. On the contrary, notwithstanding all that has been done, we are but on the threshold of Pathological knowledge. The volumes of our *Transactions* contain the replies which death has made in thousands of instances to the inquiries put to her; but in the large majority of diseases she has been hitherto silent as to the cause. Indeed, very often the morbid appearances which we do find in a dead body, and which are exhibited to this Society, are merely the coarse anatomical results, and not the intimate course of the morbid process which has terminated life. We are still in the dark as to the mode and the origin of these morbid processes, as to the beginnings of the disease. In a still larger number of cases, as for example, in the whole class of the acute infective diseases, death also has not yet revealed either the origin or the mode of operation of the pathological process which has led to the fatal result. Students of our *Transactions* will see that the microscope, to which we are so much indebted for our knowledge of the minute structure of the coarser pathological lesions, has of late years greatly assisted us in unravelling the mysterious changes by which healthy is converted into diseased tissue. Nevertheless, for disclosing to us the intimate pathology of most diseases, we must look for assistance to chemistry and experimental pathology, and it must be confessed that in this direction our Society has as yet done little. Some years ago, the Council appointed a Chemical Committee, for analysing and reporting on such specimens as might be submitted to it. Various reasons may be assigned for the fact that its labours have been hitherto few; but the chief has been the difficulty of obtaining material in a condition fit for successful investigation. With death, the chemical processes of disease end and those of dead matter begin; and hence, before the morbid tissues are brought to this Society, they are too often useless for chemical investigation. It may, therefore, be worthy of the consideration of the Coun-



cil how far it would be possible to assist members, either by a grant of money, or by the assistance of the Chemical Committee, in determining the chemical nature of secretions or morbid tissues in certain cases of importance before they are submitted to the Society. The chemical or some special committee might also be requested by the Council, from time to time, to undertake certain pathological investigations involving chemical research, which it would be difficult for individuals to carry out. It is, however, to experimental pathology that we mainly look for progress in our knowledge of many of those diseases respecting which death has hitherto been silent. It is certainly a matter of regret that few of those brilliant researches in experimental pathology, which of late years have been made in this country by Dr. Burdon Sanderson, Dr. Klein, Professor Lister, Dr. Bastian, Dr. Richardson, Dr. Kirkwood, and others, have been communicated to this Society. In fact, if we except the valuable communications on artificial tuberculosis, made by Mr. Simon, Dr. Burdon Sanderson, and Dr. Wilson Fox; that of Dr. Burdon Sanderson, on infective agents in pyæmia; those of Dr. Bastian, on the migration of blood-corpuscles through the walls of the blood-vessels; those by Dr. Cobbold, on the production by experiment of cystic entozoa; and those by Mr. William Adams, on the reparative process in the tendons of rabbits after division by subcutaneous or open wounds—if, I say, we except these, our Society has contributed little towards the advancement of what, without fear of contradiction, I may call the most important branch of modern pathology. It might possibly promote researches of this nature among its members, were the Society to institute a medal, to be awarded once in two or three years, to the gentleman who in the interval had communicated the most valuable results obtained from such researches. I throw this out as a suggestion, without any authority from the Council; but it seems to me that the very existence of such a medal would be a standing evidence of the desire of this Society to encourage investigations of the description I have referred to. At all events, of this I am sure, that many of our members are thoroughly competent to undertake and carry to a successful issue such investigations. And now that laboratories for practical chemistry and physiology exist in most of our medical schools, I trust that the Society will no longer incur the reproach of lagging in the rear in this matter; and that, before long, we shall have communications before us which will reflect lasting honour on the contributors, and redound to the credit of the Society. Meanwhile, I am glad to be able to inform you that a commencement has already been made in the direction I have indicated. The Council have to-night decided to apply to the Government Scientific Grant Committee for a grant of money, to enable the Council of this Society to undertake and organise investigations into the intimate pathology of the morbid processes commonly designated pyæmia, septicæmia, and purulent infection, having special reference to their various causes. Should the scheme be carried out, we have reason to anticipate results of the highest practical importance. After reading the list of the papers to be brought before the Society during the present session, the President said: In conclusion, I feel confident that this Society, which in the past has done so much to advance our knowledge of pathology, will continue to do so in the future; that it will maintain its claim to be, not merely a Society for the prosecution of morbid anatomy, but to be truly, as its name implies, The Pathological Society; and, more especially, that it will not be unmindful of its mission to promote the elucidation of those important problems, which are not only the most important and interesting in modern pathology, but the solution of which is of surpassing importance as fraught with incalculable benefit to the human race; so that, in time to come, when most of us have perhaps passed away, it may truly be said of all diseases, *Nec sinit mors*.

**Intussusception.**—Mr. H. MORRIS gave the following particulars of a case of intussusception under his care. A boy aged 12 was admitted into the Middlesex Hospital with well marked signs of acute intussusception of the bowel. On Tuesday (the sixth day of the symptoms), as injections both with and without chloroform had failed, and as there was nothing to indicate strangulation of the bowel, abdominal section was performed. While he was under chloroform, and before commencing the operation, an obscure elongated hardness was felt towards the left side of the abdomen, and intussuscepted bowel, which had been previously felt *per rectum*, was seen to be red and living through a speculum. After making an incision about four inches long in the linea alba, and downwards from the umbilicus, Mr. Morris passed his whole hand into the peritoneal cavity in the direction of the hardness felt through the abdominal parietes. He then felt a sausage-like tumour, which he drew out upon the surface after gently trying to unravel it while within the cavity. Further slight efforts were made by gentle traction and kneading; but, as fecal matter was oozing from two points at some distance apart, and as elsewhere the unsheathing bowel was very thin

and discoloured, and almost perforated, they were not persisted in. It was now evident that the only thing to be done which gave any chance to the patient was to cut away the whole of the affected part, and either to stitch the ends of the gut together or each end to the abdominal wall. The latter was preferred, because of the relief which would be likely to follow the discharge of the intestinal contents, and because also it was certain that another intussuscepted part existed lower down in the large bowel. On examining the portion removed, it was seen to be about seventeen inches of ileum: the intussuscepted portion was quite black and sphacelated, and the containing portion had several deep sloughs upon it. From the condition of the latter, it was quite impossible, even if no obstruction had existed further on, that the intussuscepted part could have been successfully passed off by natural processes.—Wednesday. The little fellow is still living and is more comfortable; he is less sick and has less pain than before the operation; a quantity of fecal matter has escaped during the night.

#### DISCUSSION ON VISCERAL SYPHILIS.

**Enlarged Spleen in Congenital Syphilis.**—Dr. BARLOW, in bringing forward a case of enlarged spleen in congenital syphilis, said: I will not trouble the Society with any long clinical details about this case. Harriet M., a child four months old, was brought to the out-patients' department at Great Ormond Street, on November 30th, 1876, with very severe congenital syphilis. In addition to the ordinary lesions, she had considerable enlargement of the spleen. It is to illustrate affections of the spleen in the early stages of congenital syphilis that I have brought this patient; I am quite certain that it is often ignored and quite as often misrepresented. It is only in some recent books that any notice is taken of it. Dr. Gee was the first person to draw attention to this condition. In a paper read before the Royal Medical and Chirurgical Society in 1867, Dr. Gee established the following propositions. In about half the cases of congenital syphilis, the spleen is enlarged, so that in can be felt during life. In about one-quarter, the enlargement is really great; sometimes, in addition to enlargement of the spleen, there is enlargement of the liver or lymphatics; the majority of cases of great enlargement die. The degree of the splenic enlargement may be taken as an index of the severity of the cachexia, with this qualification: that the spleen does not diminish *pari passu*, but remains, it may be for years, more or less enlarged, a monument of what the cachexia has been. Sometimes an enlarged spleen is the only sign of an active syphilitic cachexia. At the same time, I have found that, in the cases of slight enlargement, the diminishing size of the spleen goes *pari passu*, or, at all events, only lays a little behind the subsidence of the other symptoms. I should like to lay special stress upon the fact which this child illustrates: that the diminution in the size of the liver (when that organ has been enlarged) begins to take place before the diminution in the size of the spleen. What is the nature of the splenic enlargement? It certainly is not amyloid. I have only seen one case *post mortem*. In that case, there was simply slight enlargement with hardness, as Bright would style it. There was no reaction with iodine, and there were no gummata. Dr. Gee has seen two *post mortem* specimens, and in each of them there was simply firm enlargement with, in one case, considerable thickening of the capsule. If one regard, with Mr. Hutchinson, congenital syphilis as one of the exanthemata, this enlargement might at first seem to have some affinity with the enlargement of the spleen in typhoid. But the spleen in typhoid is generally, not always, an enlargement with softness; and, moreover, so far as I know, it does not remain permanently after the subsidence of the fever. If, however, we look upon congenital syphilis as a fever *thinned out*, so to speak, then it is not difficult to appreciate the difference between the two forms of enlargement. There is one other fact that I may mention, but I do not lay much stress upon it. There is evidence in this case of congenital heart-disease. There was a systolic murmur heard all over the region of the heart, best at the apex and continued out to the angle of the scapula.

**Syphilitic Disease of Arteries, Lungs, etc.**—Dr. GREENFIELD, in exhibiting various specimens illustrative of syphilitic new growth, especially with reference to the diseases of arteries and lungs, said: I was anxious to bring forward a number of cases illustrating certain points in the pathology of syphilitic new growth, and certain observations which, I believe, are not generally accepted in this country, though they are to a large extent accepted by German pathologists. Though I have brought a number of specimens with reference to disease of the arteries and disease of the brain, I have a number of other specimens illustrative of certain other points; and, with the permission of the Society, I will give a brief statement of the cases from which the specimens were taken. The number of cases from which the observations were drawn is twenty-two, of whom twelve were females and ten males. The ages varied between twenty-three and fifty. Of the females, four were from



twenty-three to twenty-five years of age; one was thirty-five, another thirty-eight, and the rest between forty and fifty. Of the ten males, four were between thirty and forty, and the rest between forty and fifty years of age. But it must be stated that by no means all of those who presented syphilitic lesions died from the effects of them; and, on analysing the cases, I find that, of those who died directly from the effects of the disease, by far the larger number were comparatively young. Of the four females under twenty-five years of age, one died from fracture of the cervical spine, two of the effects of thrombosis in the cerebral arteries, and one from syphilitic disease of the larynx. Of the six males under forty years of age, one died of renal disease consequent on stricture of the urethra, one from syphilitic disease of the cerebral arteries, one from gummata in the brain and dura mater, another from pneumonia due to syphilitic disease of the larynx and trachea, and the sixth committed suicide. Of the females over thirty, the causes of death were: thrombosis of cerebral arteries, two; thrombosis of pulmonary artery, one; lardaceous degeneration of kidneys, two; peritonitis after colotomy for relief of syphilitic stricture of rectum, one; hæmoptysis in slight phthisis, one; pyæmia from abscess in thigh, one. It was doubtful whether one was due to embolism after thrombosis from gumma in the heart-wall, or to thrombosis in the cerebral arteries. Of the males over forty, one died from perforation of the dura mater by a gumma and consequent meningitis, one from gangrenous pneumonia resulting from syphilitic disease of the larynx, one of acute pneumonia occurring in the course of lardaceous disease of the kidneys, and one from cardiac disease of a peculiar character. Thus, of the twenty-one cases, no fewer than fifteen died of the effects, direct and indirect, of syphilis; and in the remaining six, only three can be considered to be entirely divested of a suspicion that syphilis accelerated death. It is remarkable, that in no fewer than five cases thrombosis of the cerebral arteries occurred, and in one of the pulmonary artery. I should add that mitral stenosis existed in three cases, and in one was associated with a gummatous tumour in the heart-wall adjacent to the valve. As regards the occurrence of lardaceous degeneration, it was not observed in nearly so large a proportion of cases as might have been expected. In eighteen cases, it was entirely absent in the liver, spleen, kidneys, and mucous membranes. In one, a male thirty-eight years of age, there was very slight degeneration of the kidneys only, though extensive disease of the palatal bones and of the larynx was present. In one other, the kidneys alone were affected, the degeneration in them being very advanced and indirectly the cause of death. This was the case of a man forty-two years of age, who had rupial scars and ulcers. In two cases, however, it was extremely advanced, affecting the liver, spleen, kidneys, gastric and intestinal mucous membrane; and in one case, also the bladder and the vagina. Both of these cases had also extensive lesions of old date in the form of gummata and fibroid patches in the liver; and one had suffered from wide-spread ulceration of the pharynx, which had led to much cicatricial contraction; but in neither was there any sign of skin-eruption or of bone-disease. The condition of the skin is not noted in some of the cases; but, where it is carefully observed, in ten cases no marks of ulceration or of eruption, old or recent, could be found; in three, there were numerous cicatrices and some more recent rupial eruption; and in one there were deeply pigmented cicatrices and two ulcers of obviously syphilitic nature on the legs. I may now mention briefly the relative frequency of the disease of different organs, and the association in various cases. The liver was affected in twelve cases out of twenty-three. In one case, there were numerous recent gummata; in three, extensive infiltration and also gummata; in three, only a few gummata, and in some cicatricial patches; and in the remaining five, only cicatrices and fibrous bands were observed. The spleen contained gummata in three; in one, recent; in the others, old and caseous. The kidneys were found to contain undoubted gummata in only one case. The testes were not examined in every case. In only one was a small gumma found in the epididymis. The dura mater was affected in four cases; in one, by the invasion of growth on its outer surface; in three, mainly on its arachnoid surface. The cerebral arteries were very markedly affected in four cases, and in one other were probably diseased. A large gumma existed in the brain in one case, and a small one in another. In the other cases of cerebral disease the pia mater alone was locally infiltrated, or the lesions were due to vascular change. Disease of the larynx and trachea occurred in four cases. The condition of the aorta as regards atheroma is a matter of unquestionable importance in relation to the occurrence of aneurism. I will not detail the condition in all the cases, but simply mention that very marked atheroma was present in the three females aged respectively twenty-three and twenty-five (2). In one of these, aged twenty-three, atheroma was general; in another, aged twenty-five, also general and very marked at the commencement of the vessel. In

a female, thirty-five years of age, there were large patches of endarteritis deformans in the abdominal aorta, but none in the thoracic. In several other cases there was very marked atheroma, and it had the character in most cases, when not associated with renal disease, that the patches were much raised, sometimes almost hemispherical, gelatinous, or of pearly lustre, with very little fatty degeneration or calcification. Indeed, in some cases, the term "atheroma" is scarcely applicable to the change. I thought that these few facts might be interesting because, although they are drawn from a comparatively small number of cases, yet they show in a marked manner how frequent syphilitic disease of the cerebral arteries is, in how comparatively small a number of cases lardaceous change occurs. And I would remark with regard to the condition of the skin, that in none of the cases where there was extensive disease of the cerebral vessels or the dura mater, was there any affection of the skin. In one case of Dr. Bristowe's, of which I show the artery, I made a *post mortem* examination last week, and there was not the slightest trace of scar or eruption of any kind to be found on any part of the skin. I should say that the lesions were entirely limited to the head and brain and its membranes, the cerebral arteries, and the larynx. I will now show specimens of the diseases of the cerebral arteries to which I have referred. I have brought forward only two cases of disease of the cerebral arteries, because they are the two cases that I have examined most thoroughly, and in which the lesions were most marked. The first case is that of which I showed the dura mater with numerous gummata. It was the case of a man, about forty years of age, who, in addition to osteosclerosis of the skull, had numerous gummata in the dura mater, both in its substance and on the arachnoid surface; there was also a large gumma occupying the greater part of the right occipital lobe of the brain. On the convexity there was some local infiltration of the pia mater. On examining carefully, it was found that not only was there infiltration of the pia mater, but that certain small superficial arteries of the brain in the neighbourhood of the gumma were transformed into white cords. The condition was different from that in atheroma. The vessels were tolerably uniformly infiltrated, to a certain extent they were nodular. The disease was entirely localised, and, instead of being in small nodular patches, ran a considerable distance along the walls of the vessel. I have here some drawings, showing the general appearance of one of the arteries, and showing also the nature of the new growth. Looking at the artery, it is seen that its inner coat is enormously thickened, and only a small channel remains in the vessel; one sees at once that it is the inner coat which is affected, because one can clearly distinguish the internal elastic lamina of the middle coat; the growth is obviously a somewhat small cell-growth with new vessels running through it. The outer coat of the vessel was also thickened, infiltrated with a small cell-growth, which is especially marked round the small branches of the vessels in the outer coat. On examining with a higher power, it is found that the inner coat is converted into a tolerably uniform mass of cell-growth closely resembling granulation-tissue; numerous small vessels can be seen running through this new growth in the inner coat. On examining with a still higher power, it is found that there were layers which one can distinguish in the growth in the inner coat. Superficially, there is endothelium; then comes a layer of cells somewhat flattened on the surface of the growth; then there is quite a loose texture, which I have endeavoured to represent in one of the drawings. Then, deeper, there come layers of stratified cells. This is the change which it appears to me has been well described by Heubner in a monograph published two years ago on Syphilitic Disease of the Cerebral Arteries. I do not go more into detail with regard to these changes, because they will be seen from the drawings and specimens. I am not aware that they have been worked out in England. I find, too, that Heubner's researches are contradicted in Germany, and that so good a pathologist as Koster says that the changes are undistinguishable from those in ordinary atheroma. The second specimen is a section from one of the small cerebral arteries in another case. There is a drawing representing the whole section seen under a lower power, and another showing the inner coat of the artery. There is here a striking difference in the character of the disease of the inner coat from that seen in the other vessel; instead of being a loose cellular growth, it is distinctly laminated, and the cells run in a circular direction round the vessel. But, here it will be seen that the growth is almost entirely limited to the inner coat, the outer and the middle coats being also somewhat affected. The calibre of the vessel is almost completely obliterated and occupied by a thrombus. It is undesirable to go more into detail with regard to the cerebral arteries, because I believe Dr. Gowers and others have specimens which illustrate a similar condition. With regard to the second specimen, there is a gumma on the upper surface of the tentorium, on its right half, near its anterior margin, and the pia



matter corresponding to that on the under surface of the brain is infiltrated. In this case, there was the most extensive arterial disease with consequent softening that I have ever seen or read of. The anterior half of the left hemisphere was completely riddled with patches of softening; a great part also of the right hemisphere exhibited patches of softening, and adhesion of the dura mater to the under surface of the right frontal lobe. Now, this arterial disease, though referred to by Dr. Wilks and Dr. Hughlings Jackson, had not been worked out to any great extent until the appearance of Heubner's monograph; but he seems to regard the change as limited entirely to the cerebral arteries. I have here one or two specimens showing what I believe to be a similar growth in the arteries in other organs. I have here drawings and sections of a very minute gumma occurring in the subcutaneous tissue adjacent to a gummatous ulcer of the leg. It will be seen in the early stage of the growth of the gumma that it consists almost entirely of small round cells almost undistinguishable from white blood-corpuscles; and mixed up with them are a certain number of spindle-cells. On examination with a higher power, one finds that, in addition to these mere rounded cells apparently clustered together, there is a certain amount of protoplasm, which is distinctly nucleated, in which these cells are imbedded. I have examined syphilitic new growths in the brain, in the pia mater, the lungs, the liver, the spleen, the kidneys, in subcutaneous tissue, and in the larynx, and in all these cases the growth appears to originate, where the tissues are vascular, round these small vessels. The earliest change is seen better in the brain than elsewhere, because the vessels are more distinctly marked out. I have here a drawing of a very early infiltration in the brain in the same case as that in which there was a large gumma, which shows the growth in the sheaths surrounding the vessels. This tissue unquestionably undergoes organisation, an organisation very much in the same direction as that of ordinary granulation-tissue. When one examines it at a later stage, one finds that it is a somewhat highly organised growth, consisting of spindle-cells and rounded cells, and some large cells with considerable protoplasm, and a number of capillaries. This is a point to which I wish to direct attention. It is so in all the cases that I have examined; it is stated to be so by Ranvier, although it is contrary to the statement of some other pathologists. The growth undergoes in some cases a complete organisation; in the lung, for instance, one finds that it is organised into a very complete fibrous tissue. In examining the gumma in the brain, I was struck on finding that at a certain point there was a small patch, about the size of a sweet pea, which appeared quite distinctly in the sections as a more translucent patch; on tracing it towards the circumference, I found that the patch became hollowed out into a channel; and, on following it further, I observed that it became distinctly continuous with the vessel. I have brought forward this case because it seems to illustrate very well the mode of development of the syphilitic new growth. This is unquestionably an artery running into a gumma in the brain in which the growth has occurred from without inwards; and one finds that in the central part of the vessel there is the earliest stage of growth, and towards the peripheral part there are the later stage and the more degenerated parts. The point to which I wish especially to call attention is, that this tissue, instead of becoming, as simple inflammatory growths become, caseous, or instead of becoming only slightly organised, becomes organised to a somewhat high degree, and then appears to pass suddenly into a stage of degeneration. In examining various syphilitic growths, and endeavouring to ascertain the cause, I found that there appeared to be an obstruction of certain vessels towards the periphery, at any rate towards the part where the gumma was degenerating. I also found a curious condition, that there were some parts of the gummata which did not stain with carmine or logwood, but remained white, and appeared to be caseating; yet on microscopical examination, it was seen that this structure, apparently dead, possessed a high degree of organisation. On examining the capillaries, I found what appeared to me to be an explanation of this change, that is, that in nearly all the organs I have examined, there is in the neighbourhood of the degeneration apparently a proliferation of endothelium in the smaller vessels, apparently cutting off a certain part of their nutriment. How far this is really true—how far it may in some cases be the effect of thrombosis, I am not at present in a condition to affirm positively. I have here a drawing from a small vessel in the larynx which was infiltrated with syphilitic new growth; and another from a gumma in the brain. I would point out, particularly with regard to the gumma in the brain, the large size of the cells. I am not sure whether this condition of the cells is a condition of the high degree of organisation, or whether it is indicative of a colloid or mucoid change of the cell; but, so far as one can judge, these cells are in a high degree of organisation. The condition to which I have referred is allowed to be due to syphilis in the cerebral arteries; and it would be interesting to find, as we might

reasonably expect to find, the same change occurring in the vessels of other parts. I have here a drawing showing thickening of the vessels in the kidney; also sections showing proliferation and endothelium in the small arteries, likewise in the kidney. I will not detain the Society longer than to show a specimen (I had hoped to show two, but the other is not here) of what I believe to be syphilitic disease of the lungs. It was taken from the body of a woman, 25 years of age, who died from fracture of the cervical spine. She was living with a bargee, to whom she was not married, and had had a child. The most reliable evidence as to syphilis was found in the fact that on the left leg, about its centre, were two rounded ulcers and scars of others, which had all the characters of syphilitic ulcers. The left pleura was entirely free from adhesions, and there was no appearance of disease on the surface. The upper lobe was healthy, but about the middle of the lower lobe there were some large irregular patches formed by radiating bands of fibrous tissue, and in addition to these larger tracts were a few smaller scattered patches of similar character. The bands were whitish, entirely free from pigmentation, and quite different in appearance from those seen in ordinary fibroid phthisis. One smaller calcified nodule was found embedded in a fibrous band. There were some adhesions over the lower lobe of the right lung, but these were not firm. The upper and middle lobes were entirely free from disease, quite crepitant. Over the lower lobe were some irregular whitish fibroid patches, puckered and depressed, and at the lower part considerable irregular thickening of the pleura. On cutting into the lobe, there is, as seen in the specimen, extensive fibroid infiltration; bands of fibrous tissue running into the lungs, and here and there small roundish caseous masses being seen. In the other case (of which the specimen is not here), the whole of the left lung and the upper and middle lobes of the right were free from signs of old disease. There were no adhesions of the pleura, nor any signs of thickening in either; but, on the surface of the lower lobe of the right lung were several deeply depressed and puckered areas, as if the under-surface of the pleura were drawn in at the point by contraction of the lung-tissue. There was no sign of local disease of the pleura at these points. On cutting into these patches, bands of pigmented fibroid tissue were found to run inwards from them, in an irregular manner, for some distance, one nearly two inches. They contained cretaceous masses, but differed in their appearance from those of ordinary phthisis. With the microscope, they appear to be due mainly to a thickening of the walls of vessels and bronchi. It is remarkable that this condition of the lungs should have been found only twice in between six hundred and seven hundred *post mortem* examinations, that in both it should present very similar characters; and in both, the antecedents and other existing lesions confirm the belief in the presence of syphilis. I should add that, in a case that was shown three or four years ago by Dr. Payne, he described the change, both with the naked eye and the microscope, as precisely similar. He described it as a change unknown to him; but it was considered highly probable that it was of a syphilitic character. I have brought forward these specimens, not because they have any special interest in themselves, but because I thought they might serve to direct attention to a change in the vessels, which I think of considerable interest, and which certainly requires further observation.

Dr. GOWERS, in bringing forward various specimens, said: The section of cerebral syphiloma under the microscope, and of which a sketch is exhibited, is intended to illustrate the mode in which such growth invades the brain-tissue. The growth sprang from the dura mater, and so invaded the tissue and the convolutions beneath to the depth of about a third of an inch. On examination, however, it was found that there was no continuous direct invasion of the brain-tissue by the growth, but when it came into contact with the surface of the brain, it appeared to send out a number of processes into the convolutions, which, ramifying, widening, and increasing in size, gradually effected an extension of the growth into the substance of the convolution. From the extremity of each of these processes a vessel can be traced almost without exception, and it is evident that the processes of the growth are extending along the vessels. There is nothing new in this invasion of the substance of the brain by means of vessels; it was long ago pointed out by Virchow, but the fact is of considerable interest in connection with the common seat and character of cerebral syphilomata, and especially in connection with the extreme rarity with which these growths appear to commence in the cerebral substance itself. Virchow speaks of them as occasionally beginning in the neuroglia; but, in the cases I have examined, however isolated these growths appeared to be from all connection with the membranes, they could be traced to some fold of the pia mater, from which they appeared to have sprung. We know, from recent researches into the structure of the pia mater, that the perivascular sheaths and the canal-system of the



pia mater are continuous—the continuity pointing to an identity of function, and possibly, to a large extent, of structure; it is easy to understand that a growth which commences only or chiefly in one should invade the brain by extending along the other. Another specimen shown consists of a tumour which sprang from the dura mater in a child the subject of congenital syphilis, a patient of Dr. Hughlings Jackson. Such growths are of great rarity in congenital syphilis, and hence its structure deserves notice. The dura mater is considerably thickened. The growth apparently consisted, when it was fresh, of a number of nodules which coalesced; in some points caseation was commencing. Under the microscope, it seemed to be composed of cells for the most part rounded, varying in size from the 3000th to the 3000th of an inch. In the softest portion, these cells constituted the only tissue-elements; in others, delicate fibrillæ lay between them, and in others they were mingled with a considerable number of fusiform cells about the same diameter; and these in some parts formed bands extending through the tumour. I have also placed under the microscope a section of syphilitic disease of the middle cerebral artery; and I think that the points which it shows are of considerable interest in connection with the observations of Dr. Greenfield. It is from a man who had primary syphilis between fourteen and fifteen years before his death, and had suffered in the meantime from several symptoms of secondary syphilis. He died in consequence of the presence of a large and characteristic gumma in the left frontal lobe of the brain. There were disease of the cerebral arteries at several points, thickening at the outside of the basilar artery, a nodule about the size of a pin at the posterior cerebral, another nodule of the size of a large pea on one of the middle cerebrals; this was found to consist of two nodules, each of which surrounded the artery; one of these arteries was still pervious, although much reduced in size; the other was obliterated. The diameter of each nodule was about a line and a half. On microscopic examination, it was found to consist entirely of a small-celled growth similar to that described by Dr. Greenfield, here and there mingled with some fusiform cells. The greater part consisted of rounded cells only, with a delicate fibrillary stroma. Where growth was commencing, it appeared to begin on the outside, in the outer coat of the vessel; and where the artery was but a little enlarged, the growth was entirely outside the middle coat, partly between the middle and outer coats, but mainly outside the latter, and covered only by loose connective tissue bundles. The muscular tissue of the middle coat seemed to be scarcely invaded, and, where it was invaded, it was simply from the outside. Within the muscular coat, the inner coat appeared somewhat thickened, but rather from its contraction than from any change in its structure. The lumen of the vessel was occupied by a rounded mass, which looked, at first sight, like a clot; but it was connected with one side of the vessel, and, on examination, it was evidently infiltrated with cells such as those which constituted the thickening outside the wall of the vessel. The growth contained many vessels, and was at one spot degenerating. I also exhibit a sketch, representing a portion of what appeared to be a syphilitic nodule in the lung. It was from a patient of Dr. Wilson Fox, who died in University College Hospital with cerebral symptoms. There were found two gummata in the cerebellum, which appeared perfectly characteristic in their naked eye features. The only other lesion was a small nodule in the lung, about a third of an inch in one diameter, half an inch in another, and three-quarters of an inch in another. This was not sharply defined, and in it were several points of caseation. Under the microscope, it had a very peculiar and interesting appearance. There was a quantity of small-cell growth in it, almost identical with that which I have described as existing in the cerebral artery. This growth, however, did not form a nodule in the centre, as might have been expected, but was scattered throughout the area so changed. In some parts, it formed small masses; and from these masses it distinctly extended along the walls of the vessel. In the sketch shown, there is a continuity of the growth from a nodule of some size along an artery, and at one spot there is what appeared to be a sort of bud from the vessel, which consisted entirely of this growth exactly similar to that nodule at which the artery had emerged. Within the growth, the outlines of the alveolar walls could in some instances be traced. This growth not only formed these nodular masses within the area changed, but it was evidently in some parts infiltrating the alveolar walls. With it there was a considerable amount of products of inflammation, epithelial products such as are met with in catarrhal pneumonia, and also a considerable number of blood-corpuscles. One or two points of commencing degeneration can be noticed in some parts of the new growth. I think the histology of the specimen is of considerable interest, because the structure of the new growth resembles closely that of ordinary tubercle; but its resemblance to tubercle, if we compare it with the thickening of the cerebral artery to which I have alluded, is no reason

for regarding it as tubercle, because its structure is identical with that of the arterial growth, which we must allow to be syphilitic. This shows that the mere histology, the mere tissue-elements of the structure in the lung, cannot be considered as deciding the point as to whether the change is syphilitic or not. Next, the mixture of inflammation and growth which this nodule presented is of considerable importance, because it is just such as we are accustomed to regard as characteristic of the tubercular process; and it seems to show that a more widely diffused change of a similar character might produce changes in the lung corresponding closely to those which we are accustomed to regard as tubercular phthisis.

Mr. JONATHAN HUTCHINSON said the specimen of disease of the dura mater was very unusual, if not unique, because coming from a patient the subject of inherited syphilis. He wished, however, to ask Dr. Gowers what was the evidence on which the opinion that the patient had inherited syphilis was based, and also the age of the patient.

Dr. GOWERS said that the patient was twelve years of age. He could not state the details of the symptoms of inherited syphilis, but they were conclusive to Dr. Hughlings Jackson.

Dr. BARLOW: I am specially glad that Mr. Jonathan Hutchinson has raised a question about nervous disease in congenital syphilis. It was one of the propositions in Mr. Hutchinson's address last year which did not receive a great deal of attention. If increased attention be given to it, I have a strong conviction that more cases of nervous disease in congenital syphilis will be found. I have now to bring before the Society the case of Elizabeth W., who was brought to me when about one month old, in June 1875. As I subsequently learned, there were specific antecedents on the father's side. The child had snuffles, but at that time no rash. She was only brought for one week, because her parents removed out of London, and she was without treatment until the 1st of October, when she was brought to me again, when she was four months old. During the interval she had had eleven fits; but that is all that I could learn about her condition. When I saw her at this time, she had some symmetrical rather serpiginous ulcers on her nates, and was wasted to the last degree; with mercurial inunction, cod-liver oil, and raw beef, she vastly improved, and became a well-nourished child. She had no nervous symptoms at all. However, in January 1876, she began to flag again, chiefly, as I then believed, owing to her mother's stupidity in feeding her. She had some laryngismus, and some carpopedal contractions. These, however, did not lead me to expect any meningeal disease, and it was only when I examined the child's eyes with the ophthalmoscope, that I became alive to this possibility. In the fundus of each eye I saw, sparingly distributed, little flecks of exudation of brownish colour, apparently situated in the choroid. There was scarcely any disturbance of pigment, and no atrophy. It seemed to me commencing choroiditis disseminata. The optic discs were natural. When I saw these spots, I felt the strongest belief that there must be some inflammatory condition of the membranes of the brain. The child died without any further nervous symptoms, apparently from exhaustion and marasmus. At the necropsy, which Mr. Nettleship and I made together, there was nothing pathological about the thoracic and abdominal viscera, but the condition of things inside the skull was very remarkable. The changes were considerable in extent of area, but not in depth or thickness. The bone was healthy. First, there were several spots where there was slight adhesion of the dura mater, arachnoid, and pia mater. At the base, near the optic commissure, there was one small thin patch of greenish lymph. The Sylvian fissures were glued by thin exudations. In many places, both on the vertex and on the under surface of the temporo-sphenoidal lobes, the pia mater was extremely thickened, and fibrous in fact. On the upper surface of the left parietal lobe there was a very small thin patch of calcification. The most interesting changes were very obvious ones in some of the small vessels. They could be traced in one or two places for some distance, and then became dirty white in colour, without either dilatation or narrowing, so far as one could see with a lens. The appearance was, in fact, as Dr. Greenfield has just described it, like a white thread. Nowhere could the most careful examination detect any granulations in the pia mater. There were a few spots of thin superficial softening in the cortex—mere flakes. The lateral ventricles were a little larger than natural, but the fluid was clear. The ganglia were natural. The areas of fibrous thickening of the pia mater, the little patch of calcification, the changes in the small vessels, the presence of only one minute patch of greenish lymph—all these things pointed to old standing chronic smouldering disease. The child was only ten months old when she died. These changes must have dated, therefore, from very early. Reference to the history, imperfect as it is, shows that, after the child was five weeks old, she was without



any mercurial treatment for three months, and had several fits. I believe that it is to that period that the starting of the meningeal disease must be referred. The choroid was examined microscopically by Mr. Nettleship, and this is his report. "The changes in the choroid consist in the presence of small isolated collections of corpuscles in the chorio-capillaris. Sections of several of these were found in the part of the choroid, which had shown during life little flecks of exudation, and none were found elsewhere. The corpuscles are about as large as pus-corpuscles, and stain deeply with logwood. They stand in no evident relation to the blood-vessels, and none of them occur in the deeper part of the choroid. In all these particulars, they differ from tubercle. The elastic lamina over these deposits is slightly raised, and sometimes a little puckered. In several instances at the seat of the deposits, a thin layer of flattish cells is present on its inner (retinal) surface immediately beneath the pigment-epithelium, but in no sections could any perforation of the lamina be detected. It may be mentioned that these changes, circumscribed deposits in the chorio-capillaris, with a thin layer of flattish cells on the arterial surface of the elastic lamina, are precisely similar to what I found in a case of choroiditis from acquired syphilis, in which the eye was excised during the progress of the disease." I should be sorry to express any dissent from the careful observations of my friend Dr. Greenfield, but I do think that these syphilitic growths, compared with tubercular growths, are certainly not perivascular. In tubercle of the choroid and this syphilitic growth in the choroid, the difference is very striking. In the tubercle of the choroid, you see a vessel, and round that vessel a number of lymphoid cells, the outer portion perfectly well defined, the inner part breaking down and losing their distinctness. On the other hand, these syphilitic growths in the choroid do not seem to have any relation to the vessels whatever, being merely a diffused growth of lymphoid cells without any special arrangement. Again, in all the tubercles of the choroid that I have seen, you find them breaking down in the centre, a sort of microscopic caseation; but in the syphilitic growths, you do not find any caseation at all, the cells remaining perfectly distinct. There is a fair distance between them, and they do not appear to interfere with one another's growth as tubercle cells do. The pia mater showed in the thickened portions, as might have been expected, excess of fibrous-tissue, with cells, not mere nuclei, but well formed lymphoid cells, containing each a nucleus, and in some cases nucleoli. The cells were arranged in a diffuse way, as far as I could see, without any definite arrangement round vessels, and without any aggregation or caseation anywhere. In these respects, they were quite different from tubercular meningitis. But the most interesting changes were those in the vessels. I believe the characteristic changes were intravascular rather than perivascular. Many vessels were examined which showed nothing special; but the one to which I referred as looking like a white thread, quoting Dr. Greenfield's simile, showed very remarkable changes indeed. There was new growth from the inner coat of the artery, narrowing for a considerable distance, and ultimately occluding the vessel. This growth was made up of large nucleated cells which stained very deeply with logwood. Where the vessel was quite occluded, the appearance presented was very remarkable. The transverse section looked a little like an epithelioma nest. At another spot, further on, in the vessel shown in the second section under the microscope, there is an appearance very like the organisation of a thrombus; that is to say, there are fine capillaries running into the mass which occludes the vessel; but whether it be really a thrombus or organisation of the new growth, it is difficult to say. These changes, as will be seen, are quite like those shown in Dr. Greenfield's specimens, though the different coats of the artery are not shown in my sections as they are in his, neither am I able to make out the endothelial lining. They are obviously the kind of growth described by Heubner, and everybody must admit that they are as different as anything could well be from ordinary atheroma.

The PRESIDENT said that, notwithstanding the long list of specimens, he did not think any had been offered such as Mr. Hutchinson specially called for in the discussion last session, illustrating visceral syphilis in the early stages. If any member had such specimens, they would perhaps bring them forward at the next meeting.

The meeting was then adjourned to February 6th.

A GENERAL order issued from the Horse Guards directs that medical officers of the army are not in future to be called on to contribute or subscribe to regimental messes or bands. The order is to take effect from the 1st instant, and any subscription or contribution paid in advance beyond the 31st ultimo is to be refunded. Medical officers will in future receive staff allowances, but, when quartered in barracks, will be entitled only to regimental quarters.

## BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

JANUARY 11TH, 1877.

G. F. BODINGTON, M.D., President, in the Chair.

*Atheroma of Cerebral Arteries.*—Mr. WHITCOMBE exhibited a specimen of atheroma of the arteries of the brain, removed from a man aged 65, who died of general paralysis. The patient had been a drunkard, and suffered from general paralysis for upwards of three years. He was attacked with right hemiplegia six days before death. In addition to the diseased vessels, a portion of the left side of the cerebrum was found to be the seat of yellow softening. Mr. Whitcombe alluded to the frequency of arterial disease in cases of insanity, and especially in general paralysis.

*Intracranial False Membrane.*—Mr. WHITCOMBE showed a well-organised false membrane, attached to the dura mater and covering both hemispheres of the cerebrum. The subject from which the specimen was removed was a typical case of general paralysis of four years' duration. He had been a commercial traveller, and had long given way to excesses in drink and sensualism. This patient was admitted into the Birmingham Asylum in August 1872, and discharged in June 1873, from which time until April 1875, when he was readmitted, he was so far recovered as to be able to travel with marked success for an eminent London firm. He died in June last, at the age of 57.

*Tapping Hepatic Abscess.*—Dr. HICKINBOTHAM showed a patient in whom he had treated successfully a case of hepatic abscess by tapping.

*Dry Dressing of Wounds.*—Mr. SAMPSON GAMAGE presented two patients: one whose right arm he had amputated for direct violence, and whose stump had healed in three weeks, only having been dressed three times altogether. The other case was one of recovery after compound fracture of the thigh just above the knee-joint; a railway-truck full of coal, weighing ten tons, having passed over the limb. In both cases, dry dressings and drainage-tubes were employed, perfect rest being secured by pasteboard splints and compression.

*Pathological Specimens.*—Dr. SAUNDY exhibited a specimen of Pulmonary Stenosis, with patency of the foramen ovale and without cyanosis, in a boy aged 11 years. He also brought forward an example of Cystic Carcinoma of the Fundus of the Uterus, with secondary disease of both ovaries.

Dr. SAWYER showed an example of Stenosis of the Tricuspid Orifice of the Heart.

Mr. WESLEY THOMPSON showed a specimen of Typhoid Ulceration of the Ileum.

*Retention of Pessary in Vagina.*—Mr. KETTLE exhibited a large wooden pessary which had remained in the vagina for upwards of fifteen years, in the case of an old lady aged 78. He had great difficulty in removing the pessary, which was encrusted with a phosphatic deposit. It was removed by cutting out a portion with bone-forceps, so as to permit its passage over the perineum.

## SPECIAL CORRESPONDENCE.

### MANCHESTER.

[FROM AN OCCASIONAL CORRESPONDENT.]

#### *The Infirmary Question.*

THE article which recently appeared in the *Times* upon the infirmary question fairly summarised the facts of the case, and there can be little doubt that the citizens of Manchester, or at least that portion of them who happen to be trustees of the infirmary, will, by their final decision, govern the fate not only of this charity, but of many others; for in some measure the question has resolved itself into this: Can an old-fashioned hospital, built on the corridor principle, be so altered and patched as to bring it up to the sanitary knowledge of the day, or must it be razed to the ground in order that another and a nobler building may arise from its ashes?

To a certain extent, it may be alleged against the party of removal that they have already proved too much; for, if the drainage be so utterly bad, if the building be so saturated with poison-germs, if the foul gases be wandering so freely about the corridors and wards as affirmed, how comes it that neither typhus nor typhoid is known, nor (in spite of vague statements) that erysipelas prevails to any great extent? The insanitary condition of the building is unquestionably more distinctly proved by the poor health and constant hospital throats of the residents than by any virulent epidemic traceable to septic agents; and this flaw in the argument, coupled with former reports of the Medical Committee of quite an uniformly rose-colour on the con-



dition of the hospital, has been laid hold of by the opposition and used with considerable force. Dr. Renaud has constituted himself in a measure the spokesman of the opposition, and has not failed to show up the inconsistency between this the present, and that the past, language of the Medical Committee. To the fair judging mind, however, this does not go for much. Dr. Renaud ever allied himself with the extreme conservative party of *quidam non mores*, and never during his active connection with the hospital showed any interest in the welfare of the student, or in sanitary progress in the hospital; no reform was ever instituted by him; and it is quite in accordance with precedent to find him violently opposed to the counsels of the resident medical superintendent, to whose wise suggestions much of such sweetness and light as the hospital possesses are due.

It seems most probable that a compromise will be for the present arrived at; that it will be decided to rectify the faults in the drainage and in the ventilation of the present building as far as possible, and to erect, in place of the present unsightly sheds, perhaps one pavilion for about a hundred patients. It should not be overlooked that, if this be done, the *sequitur* necessarily follows, that in time the present building will come down, and the whole of the existing area will be covered with pavilions. It is a great matter for regret that selfishness and prejudice have so far gained the day as to render this issue probable; but so it is, nor does it seem likely that any adverse decision will be arrived at when a general poll of the whole body of trustees is taken.

In a word, in spite of the inordinate cost of the present building, in spite of its insufficient accommodation, in spite of its faulty construction and of its disgraceful drainage, it is most probable that it will be decided to keep it much as it stands and where it stands, although there are twenty sites close at hand equally accessible to all concerned, patients, public, and staff, and which might be purchased for a fractional portion of the sum which the sale of the present site would realise.

Among the more rational suggestions of a temporising nature is one made by Dr. Crompton, to the effect that earth-closets should be forthwith introduced, and that all pipes leading down to the existing drains should be cut off, after being thoroughly flushed with disinfectants. His second suggestion, that the whole basement-area should be asphalted over in order to seal up and close over the foul drains, is, perhaps, neither so easy of execution or so desirable as the first. This introduction of the dry-earth system with Tobin's ventilating-tubes, would probably be of real value as a temporary measure; and all measures short of complete destruction of the present building, with re-erection of a larger and more suitable hospital, must certainly be regarded in this light. Too much heat, probably, exists at present to render cohesion on one plan anything but short lived; but, doubtless, the time will come, when calmer counsels will prevail, and when the man who argues that the interests of Owens College and the Infirmary are one and the same, that the nearer they are brought together the better for both, and that this may be done without injury to any single party, will not be looked upon as a suborned and interested casuist.

Mr. Fox Turner states that he can conceive a man inheriting the kingdom of heaven who has never subscribed to a pavilion hospital, and it may be so, for the mercy of heaven is great, and the blackest offender may hope for forgiveness; but it is a consummation devoutly to be wished, that not many needing forgiveness on this score will be found among the people of Manchester in the course of a year or two. In the meanwhile, we must congratulate ourselves upon the fact that, by means of unceasing vigilance as to cleanliness, and by the erection of the existing wooden sheds, we are able in a fairly satisfactory manner to carry on the work of the institution.

## ASSOCIATION INTELLIGENCE.

### BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

THE fourth ordinary meeting of the session 1876-7 was held on Thursday, January 11th, 1877, at the Queen's College, Birmingham; present, Dr. G. F. BODINGTON, President, in the chair, and seventy members and two visitors.

*New Members.*—The following gentlemen were elected members of the Branch: W. Clibborn, M.B.; H. J. Faussett, M.B.; C. E. Gosling, M.R.C.S.; and J. J. Luce, M.D.

*Communications* were made by Mr. Whitcombe, Dr. Hickinbotham, Mr. Gamgee, Dr. Saundby, Dr. Sawyer, Mr. Wesley Thompson, and Mr. Kettle.

*Resignation of Dr. Foster as Secretary.*—A letter was read from Dr. Foster, resigning the office of honorary secretary. It was resolved: "That this Branch deeply regrets that Dr. Foster is compelled, by his numerous engagements, to withdraw from the office of honorary secretary, which he has filled with so much credit to himself and such signal advantage to the Branch; and that, in accepting Dr. Foster's resignation, the Branch begs to express to him its warm appreciation of his devotion to its best interests; and that the cordial thanks be and are hereby tendered to Dr. Foster for his invaluable services in the office of honorary secretary."

*Operation Fee to General Practitioners.*—Mr. FURNEAUX JORDAN having brought forward Mr. Maunders' resolution concerning the payment of an operation-fee for general practitioners, it was resolved that family medical practitioners can be safely left to arrange with patients for their own fees.

*Medical Defence.*—Mr. OAKES having urged the Branch to adopt steps for the promotion of medical defence, a discussion followed, in which Mr. Tait, Dr. Harrison, Mr. Solomon, Mr. Manby, Mr. Williams, Mr. Kettle, Mr. Ker, and Dr. Hickinbotham took part.

Dr. HICKINBOTHAM moved, Mr. LAWSON TAIT seconded, and it was carried *nem. con.*:—"That a Committee of five, with power to add to their number, be appointed to consider the best means for the promotion and defence of legally qualified practitioners, and to report to this Branch."

## CORRESPONDENCE.

### MEDICAL DEFENCE.

SIR,—At a meeting of the Sub-Branch of the Staffordshire Branch, held at Stoke, on the 11th instant, to discuss "The desirability, or otherwise, of joining the Medical Defence Association", it was unanimously resolved, on the motion of Mr. Spanton (in the absence of Mr. Folker), "That the Council of the Staffordshire Branch be requested to represent to the Council of the Association the desirability of the Association undertaking the work of prosecuting unqualified persons, who represent themselves as members of the profession".

We shall be glad if you will insert this in the JOURNAL, that the opinions of members of the Association may be elicited.—I am, Sir, your obedient servant,  
J. G. U. WEST.

### VACCINATION.

SIR,—Under this heading, Dr. F. J. Brown of Rochester writes a short letter to the JOURNAL, in which he taxes the public vaccinators with either deceit or ignorance. If the former, had he not better have made inquiries first before running to his mighty pen, and then talked the matter over with his offending brother practitioner and tried to divert him from his evil road? or, failing in this, might he not have written himself to the Privy Council, where no doubt his letter would receive the attention it deserved? If the latter, would it not have been better for him to write a paper on vaccination, and thus teach the public vaccinator how to vaccinate?

I trust that, should the Privy Council trouble their heads in the matter, Dr. F. J. Brown will give up his authority, in order that a body of medical men may not have to suffer from the stigma laid upon them for the sake of one erring sinner.

Trusting that you will give publicity to this, I am, sir, your obedient servant,  
A PUBLIC VACCINATOR.  
January 13th, 1877.

SIR,—The assumption of Dr. Brown, in your last number, p. 58, that vaccine lymph taken from a re-vaccinated person is useless, wants further proof. I fail to see why lymph taken from a *perfect vesicle* on a re-vaccinated subject may not be quite as efficacious as that taken from a primary vesicle; but perhaps Dr. Brown can give us proof to the contrary; the question, at any rate, is well worth ventilating.

There is another practical question that I should like to ask those of your readers who have had great experience in the matter. Assuming, and I think about this there is no doubt, that re-vaccination induces to a great extent immunity from small-pox; at what period is it safe to allow a re-vaccinated person to enter the room of a small-pox patient?—Yours obediently,  
EDWARDS CRISP, M.D.

THE appointment of Head of the Statistical Branch of the Army Medical Department, Whitehall Yard, has been filled by Deputy Surgeon-General J. Irvine, M.D.



## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### THE GUARDIANS OF ST. GEORGE'S, HANOVER SQUARE, AND MR. FENTON.

ON November 27th, 1876, an inquest was held by Mr. Bedford, subsequently adjourned to the 30th, on a woman named Sullivan, aged 76, who for several years had been in receipt of outdoor relief, which had been stopped for fifteen months by the guardians, the Board having offered her the house, which she had declined to accept. On August 28th, an order was given to Mr. Fenton to visit her. On seeing her, he found that she was not ill, but that she stated she was in want of food. He suggested that she should go into the house, and, on her refusal to do so, gave her a recommendation for outdoor relief. Next day, he learned that the relieving officer had visited her and offered her an order for the house, and, as she would not accept this, had declined to grant any relief. Mr. Fenton did not see her again until November 23rd, when he found that she was dead. On inquiring why no application had been made to him, he was told by the daughter that the mother would not allow her to send for him, fearing he would again order her into the house; she also told him that her mother had suffered from want of food. No medical gentleman having seen her for many weeks, an inquest became necessary. The *post mortem* examination was made by Mr. A. Price, and revealed that the lungs were congested and the kidneys diseased, the immediate cause of death being alleged to be disease of the lungs. Mr. Bloxam, the workhouse medical officer, stated "that the body was fairly nourished; that he thought that she had been ill for a long time previously, and that she had not died of starvation". For Dr. Bloxam's attendance at the *post mortem* examination, and for his subsequent evidence at the inquest, the Board voted £5 5s. On December 6th, 1876, the clerk (Mr. Warlock) brought up his report of the case, when he stated that the inquest had been held in consequence of Mr. Fenton having alleged that it was a case of starvation; he also complained that Mr. Fenton had neglected to acquaint the Board that an inquest was to be held. A lengthened discussion then took place, some of the guardians condemning the unauthorised action of the clerk, while others approved of it. Ultimately, a majority of the Board decided to forward the report of the clerk to the Local Government Board. We further learn that, on reading the report of the Board meeting in the local press, Mr. Fenton wrote to the guardians, complaining of the *ex parte* statement made by the clerk, and has since forwarded the correspondence to the Local Government Board, and has requested an official inquiry. Pending the decision of the Local Government Board, we reserve our comments.

### POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE following circular has been issued by the honorary secretary, Mr. Wickham Barnes.

"In again soliciting your co-operation, allow me to state that, though no substantial advance of our interests has been made by the efforts of the Association during the past year, yet we hope that what we have done will tend to future good. The greatest barrier to success has been want of combination and of unanimity amongst our brethren of the service, which is to be attributed partly to want of time, apathy on the part of some, especially those who have personally nothing to gain, and the fear of offending authorities. If all these difficulties to union could be surmounted, and our Association became strong *per se*, or as a branch of the British Medical Association, any reform within reason could be effected. For the information of non-members, I may mention that the objects we are now especially striving for are the adoption of the dispensary system in all large towns and rural districts, where practicable; compulsory superannuation after twenty-five years' continuous service; and increased remuneration for services where clearly called for. The Association, through its Council, forms a Board of Reference in all cases of oppression on the part of authorities and in matters of professional etiquette; and, although it has no special organ of its own, the medical press is always ready to second our efforts, and to expose any abuse which may be brought under our notice. For the convenience of our provincial members, we have secured a central position of old medical repute—3, Bolt Court, Fleet Street (the rooms of the first medical society of London), where members can meet each other, as a club, from twelve to five, and where council and general meetings will be held at stated intervals. Our

President, Dr. Lush, M.P., has kindly consented to fill the office for another year; and Dr. Rogers continues to occupy the position of Chairman of Council with his usual energy, combined as it is with his intimate knowledge of all Local Government Board matters. The Council have also added to their number the names of several gentlemen, who will be provincial members of their body, and hope, by infusing fresh blood, to stimulate the better working of the Association. In conclusion, I must add that my own efforts have fallen very short of what I could have wished, or may have been expected of me; but pressure of engagements must be my excuse, having been, up to the present time, unassisted by any paid secretary."

**VACCINATION.**—Mr. Sydney Haynes of Stansted, Essex, has received £13 2, the first-class government award for successful vaccination. This is the third time Mr. Haynes has received this gratuity.

### UNSALARIED UNION APPOINTMENTS.

SIR,—May I occupy your valuable space with a brief statement illustrative of the working of the new system which is to do away with outdoor relief in the unions? My case is as follows. I was appointed to an union district last February. This was my first appointment of the kind, and I knew little or nothing of the ins-and-outs of such practice. I was given to understand by one of the guardians that the appointment was worth from £75 to £80 *per annum* (paid by case principally); and I understood that vaccination fees (equal to about £7 10 *per annum*) were not included in this. Now, my salary at the end of the year will be about £45, in place of £77. The latter sum is published in Churchill's *Directory* as the average value of the appointment. Could you inform me if the edition of the above *Directory* for this year is yet published? And if so, and if I find that a misstatement with reference to the value of the appointment is placed after my name, can I have any redress? H. M. M.

January 8th, 1877.

\*. The *Medical Directory* for 1877 is published. Our correspondent should communicate with the Editor of that work, if he find anything of which to complain.

## MILITARY AND NAVAL MEDICAL SERVICES.

THE following is the allotment of annuities for 1877, under the Bombay Medical Retiring Fund: £252 to Surgeon-Major G. F. Forbes, £210 to Surgeon-General G. G. W. Maitland, F.R.C.S.L.; £210 to Surgeon-General T. B. Johnstone, M.D.; £169 to Deputy-Surgeon-General T. Murray.

THE *Army and Navy Gazette* states that, notwithstanding the indignation with which the recent Royal Warrant was received, the majority of militia medical officers are expressing themselves desirous of joining the department into which it is the intention to pass those who are willing to continue their services. In some few instances, we are sorry to hear that the new arrangements mean utter ruin. This is in the case of officers who have devoted themselves entirely to their military duties, and who are now too old to compete for private practice. In theory, the new system is defensible enough; most reforms are. We doubt, though, whether the new system will work as smoothly as it is hoped it may do.

THE MILITIA BARRACKS IN BETHNAL GREEN.—Mr. Bushby had before him, at the Worship Street Police Court, the adjourned summons taken out by the sanitary authorities of Bethnal Green, against the owner of the Militia Barracks in Bethnal Green, this being really a prosecution of the Government. It was urged that the buildings, and especially the sleeping and dwelling rooms, were in a very bad condition, owing to defective drainage. On the other hand, it was contended that the Crown was not bound by an Act of Parliament unless special provision were taken for it. The magistrate decided that he had no jurisdiction, and the summons was dismissed.

**SURGEON McDERMOTT.**—As some surprise has been expressed at the selection of Surgeon Brien P. S. McDermott, R.N., for promotion to the rank of staff-surgeon over the heads of ninety-one of his seniors on the list, we may, says the *Broad Arrow*, state that Staff-Surgeon McDermott owes his good fortune to services rendered by him in the late Ashantee war, having been present as assistant-surgeon of the *Rattlesnake* in the first phase of the campaign, including the action of Elmina, June 18th, 1873, when he was mentioned in the despatches of Col. Sir Francis Festing, "as having been most indefatigable in giving help to those in need". Mr. McDermott was appointed to the Naval Medical Department as surgeon, in March 1872, and has been doing duty with the Portsmouth Division of Royal Marines since the close of the Ashantee War.

## WAR-OFFICE SURGEONS.

SIR,—In the *London Gazette* of December 29th, 1876, is the announcement: "The undermentioned senior apothecaries of the Bombay medical establishment to have the honorary and local rank of surgeon: J. Lawrence and W. Waite." To the generality of readers, unacquainted with the significance of such terms, in official phraseology, as "honorary rank", "relative rank", etc., this will convey little distinct meaning. But, to those accustomed to the use and efficacy of such terms, it means that, in consequence of long service, or some other merit in the two gentlemen named, the War Office, whence this announcement issues, has conferred on them the rank and title of surgeon; this title to be adopted by these gentlemen on all occasions they please, and to be used to them by others on all occasions of official intercourse; limiting only the exercise of such title to the geographical boundaries of the local service in India.

The object of my writing these remarks is to point out that the War Office, in here conferring the "honorary rank", even though only "local", is conferring the title and standing of surgeon: a title and standing which is only lawfully conferable by recognised professional licensing bodies. It is quite within the province of the War Office to confer any honorary rank of a purely military nature; to give to a paymaster the honorary rank of major, enabling him to be styled major henceforth; or to give to a medical officer (who was a qualified surgeon before he ever tendered his services to the War Office) the "honorary rank" of deputy surgeon-general on his retirement; and so on. But it cannot be that the War Office can make a "professional man" out of one who is not already in the ranks of the profession, or can, in the first instance, confer on any one the title of surgeon, or any title entailing a professional qualification.

I write this without any knowledge whatever of the two gentlemen named in the *Gazette*; and I have no doubt that they have deserved well to be rewarded with any honour that the War Office can rightly confer. Only I desire to observe that the War Office has not the right to confer the title here sought to be conferred; and that, in issuing this announcement in the *Gazette*, it is trenching unlawfully on the peculiar powers of professional licensing bodies. Thinking that it is only loyal to the views and objects of the British Medical Association to point this out,

I am, sir, yours obediently,

A REGISTERED SURGEON.

## MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on January 15th; and, when eligible, will be admitted to the pass-examination.

Messrs. Alexander M. Eason, James C. Baxter, Samuel McC. Higgins, John H. C. Ward, and James Pimpton, students of the Liverpool School; Edwin Godson, James W. Riley, Joseph W. Moore, and Thomas H. Callaghan, of the Birmingham School; Henry C. Shann and Richard B. Morley, of the Leeds School; Richard J. Dearden and Samuel Hampson, of the Manchester School; Dominic A. Gomes, of Bombay; John C. Saunders, of the Sheffield School; William A. Norman, of the Cambridge School; Alfred N. G. Gibbs, of the Bristol School; and Patrick M. Poett, of the Dublin School.

The following gentlemen passed on January 16th.

Messrs. John Wishart, M.B. Toronto, Adam H. Wright, M.B. Toronto, Duncan Fraser, M.B. Toronto, Robert R. Davies, M.D. Toronto, and Francis C. C. students of St. Thomas's Hospital; Herbert W. Sisson, Francis D. W. Whiston, and Louis C. N. N. of St. Mary's Hospital; Louis W. Capron, John Hartley, and Frank Smith, of the Mid-Derby Hospital; William McGeagh, M.D. Queen's University of Ireland, and Richard D. R. Sweeting, of the London Hospital; George H. W. Henry and John J. Lloyd, of University College Hospital; John H. H. and Matthew J. E. Anderson, of St. Bartholomew's Hospital; William Forrest, of the Liverpool School; George H. Russell, of Guy's Hospital; and Horace H. C. Murray, of the Charing Cross Hospital.

The following gentlemen passed on January 17th.

Messrs. G. N. Stathers, L. E. Williams, Thomas Buxton, A. S. Norman, H. J. Barnes, A. L. Evans, D. C. Embleton, and Wm. Saunders, students of University College; T. G. Claburn, R. C. Stewart, W. H. Addison, W. H. Norman, J. W. Jerome, J. M. Martin, and F. F. Clarke, of King's College; J. H. Hensley, G. A. Rogers, Oswald Roberts, and S. C. E. Roberts, of St. Thomas's Hospital; J. M. L. Jones, J. P. Dewar, and C. J. W. of the Middlesex Hospital; H. B. Mott, Ronald Ross, and W. A. Sykes, of St. Bartholomew's Hospital; C. J. Fooks, George Pilkington, and Howard Hawkins, of Guy's Hospital; H. B. Carl, of St. Mary's Hospital; and Alfred Fordham, of the London Hospital.

## MEDICAL VACANCIES.

The following vacancies are announced:—

LIVERPOOL AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN.—Extra Acting Physician. Salary, £50 per annum. Applications to be made on or before February 1st.

DENTAL HOSPITAL OF LONDON, Leicester Square.—Dental House-Surgeon. Applications to be made on or before the 14th February.

EAST RIDING LUNATIC ASYLUM.—Medical Superintendent. Salary, £350 per annum, with furnished house, coals, and gas. Applications to be made on or before February 1st.

GENERAL HOSPITAL, Nottingham.—Assistant House-Surgeon. Salary, £80 per annum, with board and residence. Applications to be made on or before the 20th instant.

GLANFORD BRIGG UNION.—Medical Officer for the Scunthorpe District.

GREAT NORTHERN HOSPITAL, Caledonian Road.—House-Surgeon. Salary, 60 guineas per annum, with board and lodging. Applications on or before the 25th instant.—Aural Surgeon. Applications to be sent in on or before the 25th instant.

HOLBEACH UNION.—Medical Officer for the Holbeach North District and the Workhouse.

HOSPITAL FOR DISEASES OF THE THROAT, Golden Square.—Surgeon. Also, an Emergency Surgeon, at a salary of £50 per annum. Applications to be made on or before the 29th instant.

INVERNESS DISTRICT ASYLUM.—Assistant Medical Officer. Salary to commence at £80 per annum, with bed, board, and washing. Applications to be made on or before the 29th instant.

KING'S LYNN UNION.—Medical Officer for the Workhouse.

LIVERPOOL DISPENSARIES.—Resident Assistant House-Surgeon. Salary to commence at £108 per annum, with furnished apartments, coals, gas, and attendance. Applications to be made on or before the 22nd instant.

MANCHESTER PROVIDENT DISPENSARIES.—Resident Medical Officer. Salary, £100 per annum, and private practice allowed.

NATIONAL DENTAL HOSPITAL.—Assistant Dental Surgeon. Applications to the Treasurer, 149, Great Portland Street.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.—Resident Medical Officer and Registrar. Salary, £100 per annum, with board and lodging.

NEWCASTLE-UPON-TYNE DISPENSARY.—Resident Medical Officer. Salary, £50 per annum, and residence. Applications to be made on or before the 31st instant.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney.—Assistant-Physician.

ROYAL SOUTH LONDON DISPENSARY, St. George's Cross, S.E.—Two Honorary District Surgeons. Applications to be made on or before the 31st instant.

ST. GEORGE'S (Hanover Square) PROVIDENT DISPENSARY.—Second Surgeon. Applications to be made on or before February 10th.

SALFORD AND PENDLETON ROYAL HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 20th instant.

WANTAGE UNION.—Medical Officer for the Ilsley District. Salary, £75 per annum, and fees. Applications on or before February 5th.

## MEDICAL APPOINTMENTS.

*Name marked with an asterisk is that of a Member of the Association.*  
GIBBINGS, Ashley, M.R.C.S., L.D.S., appointed Assistant-Surgeon to the Dental Hospital of London.

HUTCHINSON, S. J., M.R.C.S., appointed Assistant-Surgeon to the Dental Hospital of London.

JONES, Arthur H., M.B., appointed House-Surgeon to the Northampton Infirmary, *vice* G. F. K. Smith, F.R.C.S., resigned.

MATHEWSON, F., M.B., appointed Assistant-Surgeon to the Royal Dispensary for Diseases of the Ear.

\*FRITCHARD, Urban, M.D., appointed Senior Surgeon to the Royal Dispensary for Diseases of the Ear, *vice* Wm. Harvey, F.R.C.S., deceased.

## BIRTHS, MARRIAGES, AND DEATHS.

*The clergy for naming persons in the Parish Registers and Deaths, as given in the London Gazette, are as follows:—*

## MARRIAGES.

DOWN—FRANCIS.—On January 10th, at Christ Church, Wolverhampton, by the Rev. C. H. V. Pixell, assisted by the Rev. C. Bodington, Frederick Dunn, Surgeon, of Wolverhampton, to Mary Joule, daughter of the late Richard Fallows, of the Pere Hill, Stone.

GODSON—TRITTON.—On January 11th, at St. George's, Hanover Square, by the Rev. Canon Lindsay, Rector of Kettering, assisted by the Rev. J. W. Bliss, Rector of Betteshanger, and the Rev. John Wreford, \*Clement Godson, M.D., M.R.C.P. Lond., of 8, Upper Brook Street, Grosvenor Square, to Alice Maria, daughter of the Rev. R. Biscoe Tritton, Vicar of Oxford, Kent.

HAYNES—MAUND.—On January 1st, at St. Luke's, Southampton, by the Rev. E. Illingworth, uncle of the bride, assisted by the Vicar, the Rev. F. Bowden Smith, \*Stanley L. Haynes, M.D., of Eastnor House, Malvern, to Caroline H. Maund, second daughter of the late W. H. Maund, Esq., of Portswood, Southampton.

MIDDLESEX HOSPITAL.—Lady Louisa Percy has given a donation of £500 to this hospital for a hydraulic lift.

TESTIMONIAL.—Dr. J. H. Gray, having resigned his appointment as house-surgeon to the Bristol Hospital for Women and Children, after a tenure of over three years, the honorary medical staff were anxious to give some substantial mark of their appreciation of the courteous and satisfactory manner in which he has discharged the duties of his office, and, at a meeting held at the hospital on the 12th instant (Dr. Beddoe in the chair), presented him with a handsome timepiece, accompanied with a testimonial, signed by the physicians and surgeons, expressive of their feelings and good wishes for his future success in life. An inkstand was also presented by the nurses, and various gifts by other officers and patients of the institution, as tokens of their respect and esteem.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	M. T. N. S. P. M. — Royal London Ophthalmic, 9 A.M. and 2 P.M. — Westminster Ophthalmic, 1.30 P.M.
TUESDAY.....	Guy's, 11 A.M. — Westminster Ophthalmic, 1.30 P.M. — Royal London Ophthalmic, 11 A.M. — Royal Westminster Ophthalmic, 1.30 P.M. — West London, 3 P.M. — National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M. — St. Mary's, 1.30 P.M. — Middlesex, 1 P.M. — University College, 2 P.M. — St. Thomas's, 1.30 P.M. — London, 2 P.M. — Royal London Ophthalmic, 11 A.M. — Great Northern, 2 P.M. — Samaritan Free Hospital for Women and Children, 2.30 P.M. — Cancer Hospital,rompton, 3 P.M. — King's College, 2 P.M. — Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAY...	St. George's, 1 P.M. — Central London Ophthalmic, 1 P.M. — Royal Orthopaedic, 2 P.M. — Royal London Ophthalmic, 11 A.M. — Hospital for Diseases of the Throat, 2 P.M. — Royal Westminster Ophthalmic, 1.30 P.M. — Hospital for Women, 2 P.M. — St. Thomas's (Ophthalmic Department), 3 P.M. — Charing Cross, 2 P.M.
FRIDAY.....	Royal Westminster Ophthalmic, 1.30 P.M. — Royal London Ophthalmic, 11 A.M. — Central London Ophthalmic, 2 P.M. — Royal South London Ophthalmic, 2 P.M. — Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M. — King's College, 1.30 P.M. — Royal London Ophthalmic, 11 A.M. — East London Hospital for Children, 2 P.M. — Royal Westminster Ophthalmic, 1.30 P.M. — St. Thomas's, 9.30 A.M. and 1.30 P.M. — Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- TUESDAY.**—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. John Harley, "On a Case of Sclerema Adultorum"; Mr. H. T. Butlin, "On the Minute Anatomy of two Cases of Carcinoma of the Breast, preceded by Eczema of the Nipple and Areola".
- WEDNESDAY.**—Hunterian Society (London Institution). 7.30 P.M.: Council Meeting. 8 P.M.: Dr. Galabin, "On the Use of Esmarch's Elastic Constrictor in Amputation of the Cervix Uteri"; Association of Surgeons practising Dental Surgery. Council meeting, 7.30. 8.30.: Mr. T. Edgelow, "A Remarkable Case of Maxillary Disease"; Mr. Nathaniel Stevenson, "Abnormal Hypertrophy of Intermaxillary Bone, and Operation to remedy the Defect"; Dr. Orphoot (Edinburgh), "A New Means of Preventing the Access of Saliva in Dental Operations"; Mr. Hamilton Cartwright, "Severe Case of Alveolar Haemorrhage connected with Jaundice".
- FRIDAY.**—Clinical Society of London, 8.30 P.M. Address by the President, Mr. Brodhurst, "Cases of Subcutaneous Section of the Neck of the Thigh-bone"; Dr. Greenfield, "A Case of Hydatid of the Lung"; Mr. Pugin Thornton, "A Case of Tracheotomy in which the Operation was performed three times in a few years".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

- CORRESPONDENTS** not answered, are requested to look to the Notices to Correspondents of the following week.
- AUTHORS** desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.
- PUBLIC HEALTH DEPARTMENT.**—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.
- CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.
- WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.**
- COMMUNICATIONS** respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## COPPENHALL SPA.

**DR. RICHARD LORD** states in the *Crews Guardian* that this new spa may be characterised as a mild sulphurous spring, with alkaline and ferruginous impregnations, and would, therefore, be tonic, antacid, alterative, diuretic, and laxative, and to be used externally as well as internally. The cases most likely to derive benefit are the following: Indigestion, with sluggish liver and bowels; rheumatism and gout, and their allied affections; and chronic skin diseases.

**VERITAS (Manchester).**—The questions raised are of a technically legal character, and we are unable to offer an opinion upon them.

## RECOVERY OF FEES.

**SIR,**—My registered qualifications are L.R.C.P. and L.R.C.S. Edin. I wish to sue a patient for an account for visits and medicine. I am informed, my diplomas being Scotch, that I cannot recover a professional debt in an English court. Holding the above qualifications, and they being registered, can I not legally recover my debts through a county court in England? An answer will oblige.—Yours truly, F.R.L.S.

\* \* \* Yes; under Section 31 of the Medical Act. See *JOURNAL* of November 11th, 1876, p. 640.

**CORRESPONDENTS** are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## CONSULTANTS' FEES.

**SIR,**—In the town where I reside, the gentlemen who profess to practise as consulting-physicians charge £1 is. for three consultations. (Owing, I suppose, to the low fees, frequent (and I may say unnecessary) consultations are often held, putting the general practitioner to much inconvenience. It is difficult for a general practitioner to get adequate remuneration for attendance at consultations where the consulting-physician charges only seven shillings. I find that such consultants trench unduly on the general practitioner. Will you kindly give me your opinion as to whether the above charge is sufficient or not, and what the general practitioner should charge?—Yours truly, BOULANGER.

January 4th, 1877.

\* \* \* We are not acquainted with any consultation fees of less than a guinea.

## THE MEDICAL DEPARTMENT OF FRIENDLY SOCIETIES.

**SIR,**—It is satisfactory to see laymen at length awakening to the gross injustice that is constantly done to medical men. That the injustice is wide-spread is palpable to all; and that a layman should first direct attention to a wrong is in itself a direct proof that the wrong has reached such a height as to force itself on the laity by its very enormity. We accordingly thank Mr. Johnson for his timely and sensible letter, published in the *BRITISH MEDICAL JOURNAL* on December 16th, wherein he exposes the utter injustice of the system pursued by the Medical Attendance Department of Friendly Societies. The case is by no means overdrawn; and it is within my own knowledge that several, in joining these clubs, have openly avowed that their chief object was to avoid paying for medical attendance. Nor is this unknown to the authorities of the societies, the cheapness of the medical fee being adroitly made use of as an inducement to enter the other department, and thereby advance the material prosperity and strength of the Society. As Mr. Johnson distinctly and truly assumes, many are members of the medical branch of these societies who have no right to be. Men whose incomes are by no means contemptible are found taking advantage of the club-doctor. Information has been supplied me lately that a friend and neighbouring practitioner has the pleasure of attending a man in a very substantial position indeed, an employer of labour, while several other cases of a like description might be alluded to.

As to entering the medical department with a view to claim attendance, Mr. Johnson is quite right in saying that a medical man can seldom prevent this. It may not be out of place to mention a sort of back door, by which comparatively well-to-do men gain access to it without passing before the medical man for the purpose at all. Such men, then, enter only the insurance department at first, well knowing that they would not be permitted to join the medical branch in such societies as have the two separate. For a time they remain thus. Then it begins to dawn on them—after a sufficient interval, though, only—that sickness might invade. They send in their names to the secretary, along with their subscription for the doctor, and the name is quietly set down accordingly. The health-certificate has been already given; no new one is asked for, the Society being in reality not interested in the arrangement, which is quietly managed between, it may be, its secretary and the applicant. It is the doctor's business, not its; yet a fresh certificate is required should the same member wish to raise the amount of his insurance. But this is for the protection of the Society, which is alone interested. Yet the Society, it seems, expects to get the necessary examination and certificate for nothing. But there is no reason that the Society should have any of its work done for nothing, its certificates of health among the rest. The charge for medical attendance is, I believe, correctly named in Mr. Johnson's letter; but it is for medical attendance strictly. Why, then, should it be made to include work which is the Society's, and in which the doctor has no interest?

In conclusion, I would only add that in their own interests we should advise medical men to reconsider their position in this respect. The poor we should always wish to see well attended, but we should equally like to see substantial men compelled to pay for themselves, and not, as at present, meanly receiving charity they should be ashamed to accept.—I am, etc., F.R.C.S. Ed.

## SOLUTION OF SALICYLIC ACID.

**SIR,**—Can you or any of your readers inform me whether water will dissolve (by boiling, for instance) as much as a quarter of an ounce of salicylic acid to two pints *without subsequent deposition*? If so, it may prove very useful as a preservative for pharmaceutical preparations in place of rectified spirit. I have hitherto used a solution containing one grain in the fluid ounce, and, so far as my experience has gone, this has been sufficient to prevent decomposition; but, according to some, whose experience has, I suppose, been more extensive, this is not sufficient for permanent preparations. I have not the opportunity or leisure to make experiments on the subject, but there are probably those amongst your readers whose chemical knowledge will enable them to give the required information. I may just repeat, what I have previously and elsewhere stated at greater length, that a small quantity of chloral-hydrate (say, two grains and a half to one fluid ounce, that is, a quarter of an ounce to two pints) will permanently preserve solutions of antimony, morphia, etc.; and that, beyond its antiseptic purpose, the presence of so small a quantity of chloral in a draught, containing a medicinal quantity of a solution so preserved, requires no more consideration than does the presence of alcohol in mixtures dispensed from tinctures, and that, even were this not so with solutions of ordinary strength, the latter might be increased. My experience of the treatment of acute rheumatism (five consecutive cases) with salicylic acid and salicin has not been such as to encourage me to repeat the experiments. Until some better remedy is discovered, I shall rest well content with the anodyne treatment by opium or chloral. I think, however, that salicylic acid is likely to prove useful as a preservative of pharmaceutical preparations, that is, if a sufficiently strong and permanent aqueous solution be practicable. I should also be glad of a little information regarding salicylate of soda. Is it more soluble than the acid? Is it equally antiseptic? May I also ask if boric acid is really antiseptic? that is, will it, for instance, preserve a solution of antimony? According to my experience, it is a failure. Apologising for so far trespassing on your space,—I am, sir, your obedient servant, W. J. MARSH.

Shrewsbury, December 22nd, 1876.



**NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.**

#### CLINICAL THERMOMETERS.

SIR.—In reference to the wish of your correspondent who signs himself "A Subscriber" in your impression of the 6th instant, permit me to submit to you a pattern of clinical thermometer much approved by some of our friends, who, like A Subscriber, demand a distinct mercurial column, capable of being easily read. It is a six-inch instrument, with contraction in the stem; the bore is large and flattened, giving a broad aspect to the mercurial index. In consequence of this greater calibre of the bore, the bulb is rather larger than in the ordinary pattern. As an instrument claiming plainness is best described by a plain name, this pattern is known as the "old man" clinical thermometer.

Will you permit us to add, that since some queries have been made as to the introduction of six-inch and shorter thermometers, it is now just ten years since Dr. Clifford Albutt had the first instrument made. The catalogue of the loan collection of scientific apparatus at South Kensington has placed this fact on record in connection with our exhibits.

"Dr. Aitken used thermometers ten inches long, and the instrument was hardly met with beyond the wards of a few hospitals. In 1867, Dr. Clifford Albutt requested Messrs. Harvey, Reynolds, and Co. to make him instruments with a chamber anterior to the bulb, reducing the length of the tube from ten inches to six inches, then to four inches, and to three inches. From that time the use of the clinical thermometer has rapidly extended, until now it is found in the pocket of almost every medical practitioner."

HARVEY AND REYNOLDS.

12, Briggate, Leeds, January 10th, 1877.

H. MAJES, M.D. (Boston, Massachusetts).—We are obliged for the information. The whole subject is under consideration, and will be dealt with shortly.

#### PATHOLOGICAL WORK IN COUNTY ASYLUMS.

SIR.—In the number of the BRITISH MEDICAL JOURNAL for December 2nd (p. 722), it is stated: "It is lamentable to see how little use is made of the vast material in our great asylums, and how imperfectly the example of the West Riding Asylum is followed in other asylums of this country." Assenting as I do to this statement, and regretting that a stigma of such a magnitude should, with any show of justice, be cast on the medical staff of county asylums, I have watched in subsequent issues of the JOURNAL to see if some justification of the neglect charged was not pleaded by an abler pen than mine; but, failing to have met with anything of the kind, I shall be glad of the opportunity of giving a reason why some of the large county asylums are doing nothing to advance the knowledge of the pathology of the nervous system.

The Commissioners of Lunacy, in their twenty-fourth report, remark: "Whether as a means of discovering injuries which patients may have received, and by the known certainty of detection, tending to check acts of violence on the part of attendants, or with the all-important view of advancing the knowledge of the pathology and treatment of the various forms of insanity, we think that the practice of making *post mortem* examinations should, as far as possible, be everywhere the rule, and not, as in many instances the exception." And: "It is our opinion that such examinations should not be made either contrary to the wish of the relatives of the patients, or without giving them the opportunity of objecting thereto."

As regards the first object for the making of examinations, I have nothing to say, except that I should consider it lamentable if the *post mortem* tables to be looked to for making, instead of confirming, a diagnosis; and, on the second head, for advancing the knowledge of pathology, as far as nervous structures are concerned, this is very materially interfered with if the written consent of friends have to be obtained after the death of the patient. I should imagine that there is very little, if anything, further to be learnt from the naked eye inspection of the brains of those who have died insane; and there should be no further *kudos* assigned to that asylum which slices and weighs all the brains, notes the opacity or not of the membranes, the amount of fluid effused, etc., and does nothing more. Dr. Batty Tuke truly says: "The thorough performance of a *post mortem* examination of a case of nervous disease is a long and arduous task. We can no longer depend on the pound-weight, the foot-rule, or the naked eye as guides to a knowledge of the condition of the unhealthy brain; and unless the microscope be brought into play, the autopsy must be considered imperfect." But if we are to resort to microscopic examination, it is imperatively necessary that the material should be fresh, as no tissue, perhaps, sooner takes on *post mortem* changes than the brain itself; and the very time elapsing before the friends have consented to an examination may be fatal to any attempt at obtaining trustworthy results of microscopic work. Further, the difficulty of time being removed, there yet remains the greater difficulty of place. In some of the more recently constructed asylums which I have visited, or the plans of which I have examined, there is a *post mortem* room adjoining, but separated by a partition from that in which the bodies await removal. In such cases, pathological work might very readily be carried on; but in the older asylums, where the *post mortem* examination must be made in the dead-house itself, it is absolutely impossible that anything like such work could be conducted there. It cannot conveniently be relegated to the surgery, where medicines are dispensed, patients examined, and friends interviewed; and it is as little right that it should be done in the apartments of the medical officers as that it should be left undone altogether. I have not had the pleasure of visiting the West Riding Asylum, but I see in the twenty-sixth report of the Commissioners that they notice the construction and fitting up of rooms for pathological and photographic purposes, so that it would appear that every facility is provided there for any one who is willing to work; and that good work has been done there in consequence, one has only to point to the Asylum Reports as a demonstration of the facts.

The microscopic investigation of disease is that of comparatively late years, and there are of course many in asylums as in general practice who have had no training, nor any natural aptitude for it. It is not of their day, and it is to the younger members of the profession that we shall have to look for a further elucidation of the morbid changes on which mental aberration in all its forms depends. The building or adaptation of a room, and properly fitting it with microscope and other requisite apparatus, would only amount to a few hundred pounds, and when these were once provided, the annual outlay for chemicals, etc., would form a very small item in the expenditure; but the fact remains, that few, very few, of the English pauper asylums are supplied at all with any facilities for properly investigating the disease which is their *raison d'être*; a vast field is left unexplored, and a wealth of material is allowed to slide away, year by year, unvalued, unrecognised, and unutilised. It is lamentable, but the fault is not all to be laid at our doors.—I am, etc.,

FREDERIC H. WARD, M.R.C.S., etc.

**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

#### THE PORTLAND TOWN PROVIDENT DISPENSARY.

SIR,—A paragraph in your last issue, headed Metropolitan Provident Dispensaries, contains a reference to the St. John's Wood and Portland Town Provident Dispensary. As I am well acquainted with the history and manner of working of that institution, you will perhaps allow me to make a few remarks on the subject. The objects of provident dispensaries are, or ought to be, two. The first is to afford, at small regular fixed charges, medical aid to such of the provident poor exclusively as are unable to pay for it in the proper manner; but by a rule of the Portland Town Dispensary, any subscriber of a nominal sum may recommend to all the benefits of the institution any one he pleases, absolutely free of charge; and this rule is taken advantage of by many to get gratuitous medical advice for their out-door and in-door servants, by which means they are able both to save money and to pass as charitable benefactors. This licence, you will agree with me, ought never to be conceded to the governors: it strikes at the root of the institution, and is inconsistent with its fundamental principle; yet I am certain that a proposition to rescind this rule would not be entertained by the present committee. The second object of these dispensaries should be the benefit, professional and pecuniary, of their medical officers, who ought each to be remunerated in exact proportion to the number of patients he attends. At the Portland Town Dispensary the following plan prevails. For each midwifery case attended by him the surgeon receives one guinea, and at the end of the year, what is called a "gratuity" of £35 is given to each, quite irrespectively of the amount of work done. At all other provident dispensaries that I am acquainted with, the surgeons are paid according to the number of their patients. At the St. John's Wood Dispensary it does not signify how few or how many he has attended. He may have had one patient or one thousand—his pecuniary position is not thereby altered one jot. I was surgeon to the Dispensary for nearly eleven years, during six of which I did quite half the work. On a fair system of remuneration, I should have received £35, but £52 10s. In other words, in the six years I refer to, I ought in justice to have received £105 more than I did. I did not complain of this at the time, because I believed my colleagues were as well disposed to me as I certainly was to them. But this delusive circumstance was speedily dispelled. I resigned my office because an appointment was made which would have thrown, without any more pay, nearly the whole work of the Dispensary upon me, and because I declined to act as unpaid assistant to the two largest medical firms in the place. The fair and right plan obviously is to divide the surplus amongst the members of the staff according to the number of their patients, and to have this done by an exclusively medical subcommittee. You express astonishment, sir, at the small sum which is given to the men without whose aid the Dispensary could not be carried on. You would not be so surprised if you were acquainted with the committee with which they have to deal. The Dispensary possesses its own house, has money in the funds, a good annual surplus, and liberal support in the district. It has been established over thirty years, and yet it divided last year among its medical officers £53 less than did the struggling Kilburn Provident Institute at the end of its first year of existence. It is scarcely credible, but it is nevertheless a fact, that when a few years ago it was successfully proposed to add a paltry £5 to the surgeons' "gratuities," one member of the committee actually resigned, and the treasurer threatened to do so. While such a spirit exists, it is not difficult to understand how it is that a Dispensary which ought to be a model to all other similar institutions should fall so egregiously in comparison with others which do not possess one-fourth of its advantages.—I am, sir, yours faithfully,

J. W. ALLEN.

Alexandra Road, St. John's Wood, January 1877.

MR. J. F. HORNE (East Gate, Barnsley).—Perhaps Mr. Hawksley, Oxford Street, might supply it.

MR. G. D. McREDDIE (Wanstead).—The journals in question are not filed: a brief summary, however, might be forwarded.

#### OBSTINATE VOMITING AFTER SCARLATINA.

SIR,—The following notes of a case, which has lately occurred in my private practice, and proved very intractable in its treatment, is, I think, well worthy of being brought before the notice of the profession.

M. F., aged 8, daughter of an officer, born in India, and residing there till within the last three years, has suffered from obstinate sickness during the past six weeks. The patient is one of three children, all of whom enjoy good health, though the mother, owing to residence in foreign climates, is rather delicate. No hereditary maladies exist in the family. Up to last March, she enjoyed very good health, but was then attacked with whooping-cough, the paroxysms of which were accompanied by a good deal of sickness, which, however, passed off with a cessation of the complaint in May; and during this month and June she regained her normal health.

In the middle of July, she had scarlatina, and was attended by a medical man in London, by whose advice she was sent to Bournemouth to recruit, after seven weeks of very severe illness. The mother informs me that during the third week of the fever there were troublesome swellings of the cervical glands, two of which suppurated and broke, leaving scars. Otorrhoea also existed, but no kidney-complication, though the urine was frequently tested for albumen.

When first under my care, early in September, she presented the appearance of a pale, delicate, nervous child, diminutive in stature, and very much emaciated. I was mainly consulted to afford relief for the troublesome sickness, which had then just commenced, and was gradually becoming a confirmed habit. At first, there was merely empty hawking, or at most a little frothy phlegm or mucus would be ejected; but subsequently sickness occurred with every attempt to take food, which could hardly be retained on the stomach beyond a few seconds. The food was brought up just as it was taken, and with it a profuse watery secretion, mucus, and saliva. The reaction of the vomit was distinctly alkaline, and its microscopic examination showed merely a few food, epithelial scales, and mucus-corpuscles. No sarcine ventriculi were detected. The vomiting is quite spasmodic in its character, and is not preceded by nausea, pain, or uneasiness—in fact, it resembles the regurgitation of infants. Deglutition is perfectly normal, and she sits down apparently with the intention of making a hearty meal, which is at once frustrated by the sickness. The food remains on the stomach for a space of time varying from ten to sixty seconds; and, after its ejection, she can return to take more without any feeling of repugnance, but, on attempting to do so, a similar result ensues.



The tongue is moist and clean, teeth and gums healthy. There is considerable hyperæsthesia at the back of the throat, which is much congested, presenting deep catarrhes and marks of old ulceration after the fever. Her appetite is perfectly good. There is no degree of thirst, and no gastric symptoms complained of, such as sense of weight, pain, or flatulence. The bowels have been usually costive. The pulse is 84, weak and thready. The heart-sounds are normal, but anæmic bruits are heard in the neck on auscultation. Liquid food, as a rule, remains down better than solid; and the best results have been obtained from a diet consisting of beef-tea, jelly, isinglass, milk, and lime-water, given in small quantities, and occasionally a little champagne and ice; frequent nutritive enemata being also resorted to, so as to afford the stomach as much rest as possible. Drugs have proved most inefficient and useless, though the following have been most perseveringly tried, both singly and in combination—viz., bismuth, magnesia, hydrocyanic acid, nepoche, chlorodyne, sulphurous acid, hyposulphites, iodide of potassium, etc. In addition to these remedies, blisters and mustard-poultices were applied to the epigastrium, counterirritation over the vagi nerves in the neck, and the application of iodine. All alike proved equally ineffectual in controlling this obstinate symptom. Gargles of bromide of ammonium, etc., the application of solution of nitrate of silver, shared the same fate.

The case is still under treatment, whilst bougies are being passed, and a course of iodide of potassium tried. These last measures were recommended by a physician in London, but at present the case does not promise satisfactory results.—I am, etc.,

JUSTYN G. DOUGLAS, M.D., Surgeon to the  
Bournemouth Dispensary, etc.

January 7th, 1877.

MR. R. M. FAWCETT'S (Cambridge) letter has been placed in the hands of the Manager and General Secretary.

#### ROGERS'S DISINFECTING APPARATUS.

SIR,—Would some of your readers kindly say how Dr. Rogers's invention has been found to work? and oblige yours, etc.,  
T. LAFFAN, Consulting  
Cashed, Ireland, January 14th, 1877.

Z. Z. asks:—Will any of my professional brethren in country practice say whether they have found a two-wheeled or a four-wheeled chaise the more useful for every day work on roads only moderately hilly?

#### THE DRESSING OF WOUNDS.

SIR,—I must beg you kindly to allow me space for this letter, in answer to a communication from Mr. R. Davy in the JOURNAL of December 23rd, on the Dressing of Wounds. In it Mr. Davy at once proceeds to assail Professor Lister for his well known but frequently misunderstood antiseptic treatment. But those of your readers who have walked the wards of the Royal Infirmary will be far from resigning the well achieved laurels Professor Lister has won, after a large experience, in favour of Mr. Davy's "open method," which literally means doing nothing in the way of dressing some of the most unhealthy wounds in hospital practice. Moreover, Mr. Davy's method of abstention has little to recommend its adoption, having only been tried for the last three years. Mr. Davy's anecdote, related on the authority of the great Ambroise Paré, is surely not tenable in the present day; no more is his quotation from Sir Astley Cooper. Neither applies to Lister; and the practice in which "layer after layer of compounds were heaped upon the raw surface," say of a stump, certainly forms no part of Lister's modern plan by carbolic acid. I may mention that Lister's method does not recognise "a host of lotions and ointments" either, and nothing can be cleaner or more effective than his antiseptic dressing. But I can quite understand that every one does not possess the manipulative skill and dexterity, together with the exact knowledge of the successive steps necessary for its success. If gentlemen like Mr. Davy would only do as their countryman Mr. Fairlie Clarke did before them, and visit Edinburgh, they would there find Professor Lister most courteous and happy to initiate them into his secret (see Mr. Fairlie Clarke's *Manual of Surgery*). Without this, they should not ridicule, nor tell the world that the Professor's "hobby has been ridden hard"—a hobby, if it be such, that has saved more lives than any single improvement in our day. But it had to be observed that Mr. Davy discards every-day dressings, and "holds them in abhorrence." Mr. Davy's cases are too few to supersede what they are intended to, and most of them are so trivial that Lister himself would probably have dismissed them with a little water-dressing.\* As to the two cases of excision of the hip-joint mentioned, I submit they were not "hopeless" before operation, as many of Lister's were. In the latter's cases, it was sometimes judged that operative interference would be fatal; yet these did well in Mr. Lister's hands, scarcely a tablespoonful of pus oozing, while convalescence was rapid, and required to be seen to be appreciated. I would ask, How is it that by far the worst cases of scrofulous disease so frequently met with in the cold, variable climate of Scotland, do so well under Lister's care? And what induces continental professors to go out of their way to see for themselves, and judge for themselves the true details of the method, with its result, as carried out in the Royal Infirmary of Edinburgh? Permit me to say, sir, that the want of more satisfactory results by this method, when practised by men who have not witnessed it for themselves under Lister, is suggested by a story that is told of a certain hospital surgeon, who was demonstrating, to his students in the out-patient department, the "utter worthlessness" of Gordon's splint in Colles's fracture, when a visitor present, a pupil of Dr. Gordon, stepped forward and observed, "I quite agree with you, sir, if the splint is to be applied in the reverse way intended by Dr. Gordon, or as you have applied it."—Your obedient servant,  
ERIN KARDEN.

January 7th, 1877.

#### HOMO PLURIMARIV LITERARIV.

SIR,—In going my round of visits this morning, I had the enclosed literary curiosity put into my hands by one of my patients, with the request that I would tell him the meaning of all the large letters therein printed. I had to humbly confess my inability. Will any of your correspondents assist me, and enable me to satisfy future inquiries, by explaining in your JOURNAL the meaning of the wonderful titles?—Yours faithfully,

MEDICUS.

"Westfield House, Mirfield, ..... 187 .

"Mr. .... Dr. to Dr. Whalley, M.A., M.D. Erlangen, D.R.C.S., L.S.A., LL.M., M.B.M.R.A.England, 1855, by Examination and Diploma; formerly Assistant at the Leeds General Infirmary; Senior in Honours, Leeds School of Medicine; Registered 1859. No connection with the Medical Council. Not registered since 1865. Graduate in Medicine and Arts, University of Erlangen.—Folio. .... Not registered."

\* Mr Davy includes them in forming his criterion.

#### VACCINATION AS IN THE CRUCIBLE.

SIR,—Permit me to publish the theory with which I beg to indoctrinate my patients. An attack of small-pox and an efficient vaccination are equivalent—that is to say, he who has been vaccinated once may be considered to have had small-pox once, and is not likely to have it a second time; but as second attacks of small-pox occasionally happen, though always of a mild character, so an attack may occur after vaccination, also mildly. I have known of two instances where small-pox has recurred twice after veritable small-pox. This I have seen: a whole family vaccinated in infancy seized, during an epidemic, with variola. The number of pustules has been in direct proportion to the number of years that have elapsed since vaccination; the youngest child not having a dozen, the next twenty or thirty, and so on to the parents, who, being farthest removed from the protective power, have the largest number of all. One vaccination does for us no less and no more than one attack of small-pox; but that is a great deal. Bigotry, prejudice, and unreason still rear their heads. Let us pursue our good work, sustained by such a sentiment as this, which has reached me from a grateful patient by this morning's post: "The 'poor apothecary,' as you are pleased to call him, I consider one of the noblest workers in this world of toil."—I am, yours truly,  
FAVERHAM, December 30th, 1876.  
ED. GARRAWAY.

A MEDICAL MAN.—Our distinguished contemporary is not quite correct, as the *Gazette de France* was published in 1632, under the patronage of Louis XIV, by a member of our profession, Theophrastus Renaudot.

MR. WILLIAMS (Manchester).—The Library of the College of Surgeons is rich in Transactions of learned societies, both at home and abroad. Will the following lines suit your purpose? They are by E. L. Bulwer.

"The past but lives inwards; a thousand ages  
Were blank, if books had not evoked their ghosts,  
And kept the pale embodied shades to warn us  
From fleshless lips."

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Sheffield Daily Telegraph; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Glasgow Herald; The Metropolitan; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; etc.

\* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

#### COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. H. Charlton Bastian, London; Dr. J. Matthews Duncan, Edinburgh; Dr. Ord, London; Dr. Bradbury, Cambridge; Dr. J. Hughlings Jackson, London; Dr. Foulis, Glasgow; F.R.L.S.; Dr. MacKendrick, Warrington; Dr. A. S. Taylor, London; Dr. Haynes, Malvern; J. M. B.; Dr. Bevan Lewis, Wakefield; Parish Medical Officer; Mr. R. B. Clayton, Torquay; L. H. G.; Mr. G. H. Coles, Shanghai; Dr. Cassells, Glasgow; Mr. Ullick J. Bourke, Netley; Mr. J. W. Herd, Bolton; Mr. H. B. Blackburn, Homerton; Mr. Whitcombe, Birmingham; Dr. Dean, Burnley; Mr. Frank E. Thicke, London; Mr. Arthur Cooper, London; Dr. Pye-Smith, London; Dr. George Wilson, Leamington; Mr. C. F. Maunder, London; Dr. Heywood Smith, London; A Public Vaccinator; Mr. A. Pain, London; Mr. Sidney Haynes, Stansted; The Registrar-General of England; Dr. Gowers, London; The Secretary of Apothecaries' Hall; Dr. J. Milner Fothergill, London; Mr. T. M. Stone, London; W. W.; The Registrar-General of Ireland; Dr. A. A. Gore, Dublin; X. Y. Z.; Mr. J. M. Finny, Dublin; Dr. Munro, Battersea; Dr. James Morton, Glasgow; Mr. Philip Miall, Bradford; Dr. Hardwicke, Rotherham; Dr. Cornelius B. Fox, Chelmsford; Mr. J. F. Horne, Barnsley; Another Public Vaccinator; M.D.; Z.; Dr. Eaton, Cleator; Our Edinburgh Correspondent; Dr. H. Marsh, London; The Secretary of the Obstetrical Society; Dr. McKenna, London; Our Paris Correspondent; Mr. McReddie, Wanstead; Dr. R. P. Cotton, London; Mr. Laffan, Cashed; Dr. Arthur Leared, London; Dr. Joseph Rogers, London; The Secretary of the Hunterian Society; Dr. Sawyer, Birmingham; Dr. Beach, Lower Clifton; Dr. Martin, Portlaw; Mr. Joseph Bell, Edinburgh; Dr. J. W. Moore, Dublin; Mr. Annandale, Edinburgh; Mr. Clover, London; M.D.Ed.; Sir Charles Trevelyan, London; Dr. Stephenson, Beverley; Mr. Fawcett, Cambridge; P. M. R.; Dr. Bodington, Birmingham; Dr. Dudfield, Kensington; Mr. Wright, London; Dr. Cayley, London; Mr. J. U. West, Stoke-upon-Trent; Mr. Haviland, Northampton; "Not a Militia Surgeon"; Mr. Hamilton Cartwright, London; L.R.C.P.L.; Mr. W. A. Skinner, London; A Member of the British Medical Association; Dr. J. S. C. Chubb, Arbroath; Mr. A. H. Jones, Northampton; Dr. Mackey, London; Dr. Whitclaw, Kirkintilloch; Veritas; Archdeacon Vesey, Huntingdon; Mr. Furneaux Jordan, Birmingham; Mr. J. N. Radcliffe, London; Mr. Thomas Wright, Nottingham; Dr. W. F. Wade, Birmingham; etc.

#### BOOKS, ETC., RECEIVED.

Diagnose und Therapie der Krankheiten des Menschen. Von Dr. Bernard Kraus. Wien: 1877.  
Bulletins et Mémoires de la Société Médicale des Hôpitaux de Paris. Tome Onzième, 2me Série, Année 1874. Paris: P. Asselin. 1875.  
Medicinal Plants. By Robert Bentley, F.L.S., and Henry Trimen. M.B., F.L.S. Part 16. London: J. and A. Churchill. 1877.



## A LECTURE

ON

## A COMBAT WITH AN INFECTIVE ATMOSPHERE.

*Delivered at the Royal Institution, on Friday, January 19th, 1877.*By JOHN TYNDALL, F.R.S.,  
Professor of Natural Philosophy.

A YEAR ago I had the honour of bringing before the members of the Royal Institution some account of an investigation in which an attempt was made to show that the power of atmospheric air to develop life in organic infusions—infusions, for instance, extracted from meat or vegetables—and its power to scatter light went hand in hand. I then endeavoured to show you that atmospheric air, when left to itself, exercised a power of self-purification; that the dust and floating matter that we ordinarily see in it disappeared when the air was left perfectly tranquil; and that, when the air had thus purified itself, the power of scattering light and the power of generating life disappeared together. For the sake of reminding you of this matter, we will now cause a beam of the lamp to pass through the air. You see the track of the beam vividly in the air. You know that the visibility of the track is not due to the air itself. If the floating matter were removed from the air, you would not be able to track the beam through the room at all. You see the track in consequence of the floating dust suspended in the air. If the air be enclosed in a place free from agitation the dust subsides, and then, as I endeavoured to show you a year ago, the air possesses no power of generating life in organic infusions. The nature of the argument is this. You see the dust as plainly as if it were placed upon your hand and you could feel it with your fingers. You found that the dust, when it sowed itself in organic infusions, produced a definite crop in those infusions; and you are equally justified in inferring that the crop thus produced is due to the germs in the dust, as a gardener would be in believing that a certain crop is produced from the seeds which he sows. I say that the inference that his crop is the product of the seeds that he sows is not more certain, than the inference that those crops produced in the organic infusions are due to the seeds contained in them.

You know the method that we resorted to for the purpose of enabling us to get rid of this dust. The object was to allow the air to purify itself, and it was done in this way. I have here the first chamber that was used in these experiments. You see at the bottom a series of test-tubes entering the chamber; they are air-tight, and they open into it. There are windows at the sides, and here is a pipette through which the liquids can be introduced. Behind we have a door which opens upon its hinges. Now, imagine this perfectly closed; imagine it abandoned entirely to itself, left perfectly quiet. In a few days, the floating dust of the air contained in the chamber entirely disappears; it has removed itself by its own subsidence; and, then when you send a beam of light such as we have here through these windows, you see no track of the beam within the chamber. When the air is in this condition, you pour through this pipette infusions of beef, mutton, or vegetables into these tubes, and allow them to be acted upon by the air. Last year, between fifty and sixty of these chambers were constructed, and the invariable result was that these infusions never putrefied, never showed any change, were perfectly sweet months after they were placed there, as long as the air had this floating matter removed. You had nothing to do but to open the back door and allow the dust-laden air to enter the chamber to cause these infusions to fall into a state of putrefaction, and swarm with microscopic life, in three days after opening the door. I have a smaller chamber here—for we use chambers of different sizes—and it will enable you to understand our exact process. (See Fig. 1.) You see here the stand on which the chamber rests. There are two bent tubes that communicate with the outer atmosphere, for I wish to have a free communication between the air outside and the air within. You see the pipette through which the tube is filled. When the infusion is poured in, you place it in an oil-bath contained in a copper vessel, such as we have here, in which you boil it for five minutes. Now, that boiling for five minutes was found capa-

ble of sterilising every germ contained in the infusions placed in these chambers. This year our experiments began by a continuation of those that we made last year. In order to enable you to judge of the severity of the results obtained last year, I have here five cases belonging to the experiments then made. You will see that the infusions are vastly concentrated because of their slow evaporation. The quantity of liquid is reduced to one-fifth of its primitive volume, but this

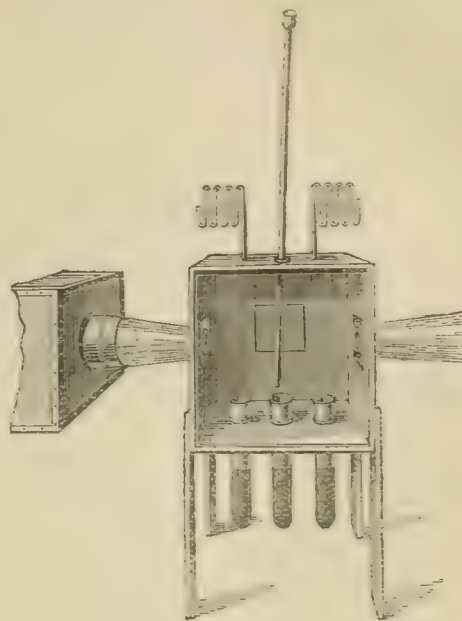


Fig. 1.

one-fifth is as clear as rock-crystal; whereas; the tubes exposed to the ordinary air outside fell long ago into utter putrefaction. They became turbid and covered with scum, and when you examine these infusions to ascertain the cause of that turbidity, you find it to be produced by swarms of small active organisms.

This year our inquiries began in the month of September. But we will pass over these inquiries for the moment and go to those of October. On October 29th, two members of the Royal Institution collected a quantity of fungi in Heathfield Park, Sussex. These were brought to London on the 30th. They were placed for three hours in warm water, and, whatever juices they possessed, were thus extracted from them. They were placed in chambers and digested separately. There were three kinds of fungi; we will call them red, yellow, and black. Now, I confess that, thinking I had secured a perfect freedom from any invasion of those contaminating organisms that produce putrefaction, I expected that we should find that these infusions of fungus would maintain themselves perfectly clear. To my surprise, in three days the whole of them broke down; they became turbid, and covered by a peculiar fatty, deeply indented, corrugated scum. Well, that was a result not expected, but I pursued the matter further. I got another supply of fungi. Even in this first experiment, I had adopted care at least as great as that which I adopted last year, and which led to a perfect immunity from the invasion of putrefaction. With the fresh supply of fungi, I operated with still more scrupulous care. The infusions were placed as before in three chambers. In one of these, the infusion remained perfectly pellucid; there was no trace of any organism to be seen. In each of the other chambers one of the three tubes gave way. Each chamber contained three tubes; so, that out of nine tubes containing an infusion of fungus, seven proved to be intact, entirely uninvaded. Therefore, whatever argument or presumption was raised by the first chamber in regard to the idea that life was spontaneously generated in it, was entirely destroyed by the deportment of the other chambers. Seven out of the nine remaining intact, was sufficient to show that it was some defect in the experiment that caused the first chambers to give way so utterly. I continued the experiments, and, inasmuch as fungi disappeared on the approach of winter, other substances were chosen. I took cucumber and beetroot, having special theoretical reasons for doing so, and prepared infusions of them with the



aid of my excellent assistant Mr. Cotterell. We placed these in our chambers as before, boiled them for five minutes, and abandoned them to what I supposed to be the moteless air within. Again, to my surprise, an infusion of beetroot in one chamber, and an infusion of cucumber in another, broke down. All the tubes became turbid and covered with this peculiar fatty scum. Other chambers were then tried. I had begun to suspect that we were operating in a contaminated atmosphere; that my infusions were in the midst of a pestilence which it was hardly possible to avoid. The consequence was, that I withdrew the preparation of the infusions from the laboratory downstairs, and I went to one of the highest rooms in the Royal Institution, had the infusions prepared there, and introduced into the cases, which were afterwards boiled in the laboratory below. There were a great number of these cases. The substances chosen were cucumber, beetroot, turnip, and parsnip. Great care was taken to have the infusions properly prepared, and to have them rendered as clear as possible. To give you an idea of the care taken, I may mention that the infusions of turnip and beetroot were passed through twenty-four layers of filtering paper, and were thereby rendered clear; that the infusion of cucumber was passed through one hundred and twenty layers of filtering paper, and thereby rendered clear; and that the infusion of parsnip was passed through three hundred layers of filtering paper, and it was still opalescent. The suspended particles were so small that the filtered paper had no power whatever to arrest them, and the finest microscope ever made would have proved powerless to exhibit the individual particles that produced this opalescence. Notwithstanding all this care, the chambers containing these infusions in three days became filled with bacterial life. They were turbid, covered with scum, and showed all evidences of putrefaction. This was on November 20th. On November 25th, we went upstairs and prepared another chamber, or a series of chambers. When the tubes containing the infusions were placed in the oil-bath, the liquids within the tubes opening into the case of course boiled, steam was discharged into the case, the air of the case being thereby rendered warm. It was found that on the cessation of the ebullition, although the pipette was immediately plugged with cotton-wool, and the bent tubes also plugged with cotton-wool, still, in consequence of the contraction of the air within, there was a considerable indraught. Last year, we found invariably that the interposition of the cotton-wool entirely sifted this entering air so as to arrest any germs or seeds that it might contain. I thought, however, in this case, that the germs might be carried in by the suction when the air of the chamber contracted. In the former case, we operated after having filled the chamber with the infusion and boiled it in the laboratory; in this case, we took the additional precaution of boiling the infusion upstairs, and taking care that it was properly plugged with cotton-wool. But here, again, notwithstanding this augmented care, the infusion utterly gave way, and showed those evidences of life that had distracted me previously. When I say distracted, it is not meant that I was in the least degree daunted or perplexed about it. I knew perfectly well that the matter would be probed by and by. On November 27th, a new chamber was constructed containing cucumber and turnip. Particular care was taken with the stopping of the pipette, and also the bent tubes opening into the atmosphere. In one instance about this time, it was noticed that the infusions in the tubes within the chamber opening into the moteless air, or at least what I supposed to be the moteless air, fell more rapidly into a state of putrefaction, became more rapidly covered with scum, than the tubes exposed in the air outside. When the tubes containing precisely the same infusion were exposed to the air outside they were perfectly clear, while those within were turbid and covered with scum. This brought to my mind an experiment made the previous year with trays placed one above the other. It was found that, when two trays were placed one above the other, although the upper tray had the whole air of the room for its germs to deposit themselves, the under tray was always in advance of the upper in the development of life. The reason was simply this. The air in the under tray was less agitated, and this floating matter had time slowly to sink in the infusions. There was no other solution possible than that, by some means or other, the germs had insinuated themselves into my chamber, and that these germs, sinking slowly through the unagitated air of the chamber, were able to produce the effect within in advance of the effect produced upon the openly exposed tubes without. On November 27th, I had a similar case, and also on November 30th, and on December 1st. The chambers were prepared and filled with all care, and yet the infusions broke down, became turbid, and were covered with scum. I then had a number of tubes filled with infusions, and sealed them hermetically. They were exposed in an oil-bath, and heated for a quarter of an hour to a temperature of 230 deg. Fahr., for I wanted to

see whether these effects were due to any germs of life in the infusions themselves. This superheated cucumber-infusion was introduced into the chamber, and it was found that the superheating of the infusion did not even retard the development of life. In two days, every tube of the chamber was swarming with bacteria. I then passed on to another system of experiment pursued last year, that is, the exposure of the infusions to air calcined by passing a voltaic current through platina-wire, so as to raise the wire to a state of incandescence. Such arrangements are here. We have underneath this shade two wires, and stretching from wire to wire we have a spiral of platinum. Passing a voltaic current through the spiral, it was found last year that five minutes of incandescence were sufficient entirely to sterilise and destroy all germs contained in this air, and to protect the infusions underneath from all contamination; the time of incandescence was doubled this year. The wire was raised as close to the point of fusion as possible; still, notwithstanding all this additional care, the infusions one and all gave way. I thought that there might be some defect in the construction of the apparatus. Here, you see, is an old broken apparatus containing infusions that have remained perfectly good since last year; but great pains were taken in having the apparatus of the most improved form. Still, notwithstanding all my efforts, the infusions broke down and became swarming with life. My attention was now very keenly arrested, and, on December 1st, I scrutinised more closely than ever I had done previously the entry of the infusions through the pipette-tube into the tubes opening into the chamber, and I noticed, at all events, a danger of minute air-bubbles being carried down along with the descending infusion. That caused me to adopt another mode of experiment; but previously to this, I fell back upon some of the infusions found so easy to sterilise the previous year. I operated upon beef, mutton, pork, and herring infusions, and found that even such infusions, which with the most ordinary care were completely sterilised last year, and are preserved to the present hour intact like the others, all gave way.

How, then, are we to look at these things? Here are results totally different from those that we obtained last year. You may ask me, perhaps, "Why do you not loyally bow to the logic of facts and accept the conclusion to which those experiments apparently so clearly point? Why do you not regard them as a demonstration of the doctrine of spontaneous generation? Is there any other way of accounting for it than by a reference to this doctrine?" You may ask whether I was held back by prejudice from accepting this conclusion, whether I was held back by a love of consistency, or by the fear of being turned into ridicule and sneered at by those whom I ventured to oppose on a former occasion. Ladies and gentlemen, there is a title which I believe, as the generations pass, will, if the owners of the title are true to themselves, become more and more a title of honour—that is, the title of a man of science—and of that title I should be utterly unworthy were I not prepared to trample all influences and motives such as those mentioned under foot, and were I not ready, did I conceive myself to be in error in what was brought before you last year, to avow here frankly and fully in your presence that error. I should be unworthy of the title of a scientific man if my spirit had not been brought into this state of discipline as to be able to make such an avowal. Why, then, do I not accept those results as proving the doctrine of spontaneous generation? The celebrated argument of Hume comes into play here. When I looked into all my antecedent experience and into the experience of other men for whom I have the greatest esteem as investigators, it was more easy for me to believe the error of my manipulation, to believe that I had adopted defective modes of experiment, than to believe that all this antecedent experience was untrue. It was my own work that was thus brought to the bar of judgment, and my conclusion was, that I was far more likely to be in error than that the great amount of evidence already brought to bear upon the subject should be invalid and futile. Hence, instead of jumping to the conclusion that these were cases of spontaneous generation, I simply redoubled my efforts to exclude every possible cause of external contamination. This was done by means of doing away with the pipette altogether and using what we call a separation-funnel. Here you have a chamber with a pipette entering. This pipette tube has not a bulb or mouth such as you have here; it is simply closed by a tube of India-rubber, and that again is closed by a pinch-cock. Now, here we have an infusion of hay. At present, this stop-cock stops it. I turn it on; it goes down; I turn it off, and this liquid column is now held by atmospheric pressure. This was introduced into the India-rubber tube, the India-rubber tube being first filled with the infusion, so that no bubble of air could get in. When the separation-funnel was placed thus and the cock was turned on, the liquid was introduced into the chamber without an associated air-bubble. Mr. Cotterell will show you the result of this severe experiment. Here is an infusion of cucumber, the most refractory of all infusions that I



have dealt with. It was prepared on December 8th, 1876, so that it is between six and seven weeks old. Two days were sufficient to break down this infusion when contamination attacked it; but, by this more severe experiment, it is enabled to maintain itself as clear as crystal, although it has been there for six or seven weeks. You will see by the light behind that it is, as I have described it, perfectly clear. You will observe that the infusion is diminished by evaporation, but it is as clear as distilled water, and there it remains as the result of this severe experiment.

Let us now ask how it is that these curious results that I have brought before you were possible; how it is that the results of this year differ so much from those obtained previously. The investigation of this point is worthy of your gravest attention. I am now called back to the experiments with which the inquiry this year began. As already stated, it was begun in September, and, leaving out the earlier experiments, I passed on to October 30th. I have now to bring your attention back to the earlier experiments performed in the laboratory. They were suggested by the ingenious investigations of Dr. William Roberts of Manchester, and by the subsequent investigations of a man to whom we are indebted more than to any other for the knowledge we possess of the different species of those small organisms that we call bacteria: I refer to Professor Cohn of Breslau. Let me say that I entertain the very highest opinion of the intelligence and ability with which Dr. Roberts has carried out these experiments; they are in the highest degree creditable to him. This is the experiment to which I refer. Some chopped hay is put into a little can; it is raised to a temperature of 100 deg. to 120 deg.; it is kept for three hours, then poured off and filtered. Last year, we found that hay thus treated was sterilised by five minutes' boiling. I mean that, when it is exposed to the air that has this floating matter removed from it, it never shows any sign of microscopic life. Now, if you examine this natural hay-infusion with litmus paper, you will find that it turns the litmus paper red, showing that it is an acid infusion. Dr. Roberts found that acid infusions could be easily sterilised, and his mode of proceeding will be evident from the figure that I have here drawn. He took a vessel with an open neck at the top (A, Fig. 2) and filled it two-thirds full with the infusion he wanted to operate upon; he then

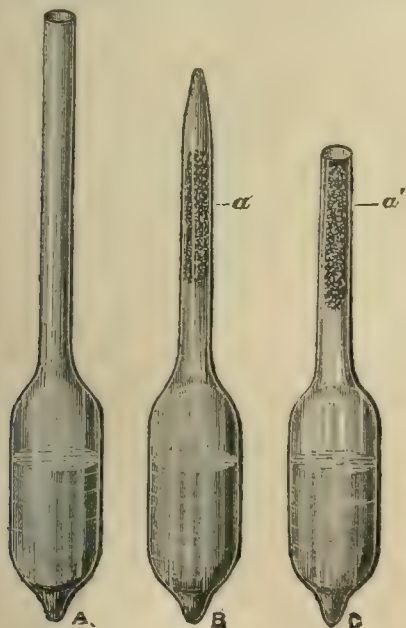


Fig. 2.

stuffed the neck with cotton-wool and sealed it hermetically with a spirit-lamp above the plug of cotton-wool (B, Fig. 2); he then placed it in a vessel containing cold water, and he gradually raised the water to a state of ebullition and maintained the boiling temperature for any required time. In that way, he avoided all commotion, all evaporation, all ebullition in the infusion. After he had placed the tube in this condition in the water, and subjected it to a boiling temperature for any required time, he took it out and simply filed across the neck and broke it off, as I do with this one

(C, Fig. 2). Here you have the infusion practically exposed to the atmosphere. The plug intervenes to prevent the entrance of dust and still allows an interchange between the air of the bulb and the air outside. When Dr. Roberts took this acid infusion and neutralised it by the addition of caustic potash, he found it to possess the most extraordinary power of resistance to heat; he found that, in some cases, it required more than two hours to reduce this infusion to sterility; he also found that, in a particular case, it actually required no less than three hours' boiling to produce this effect. This was very different indeed from the results that I had obtained last year. I made many experiments with hay-infusion, and in every case we sterilised it by five minutes' boiling. I was led to take up the subject this year through the emphatic manner in which Professor Cohn corroborated the results of Dr. Roberts. I operated sometimes with tubes like those of Dr. Roberts and sometimes with those which I call Cohn's tubes. These are formed by heating a certain portion of a test-tube and drawing it out so as to leave an open funnel above, a bulb below, and a narrow tube between both. These are Cohn's tubes. His method was this. He placed the tubes, as they are placed here, in boiling water, and, when they had been subjected to a boiling temperature for a sufficient time, he simply lifted them out. He found a certain amount of water condensed upon the neck of the bulb; he waited one or two minutes until that evaporated, and then quietly plugged his tube with cotton-wool, and he thought that this was perfect immunity against the entrance of contamination; and Professor Cohn is very emphatic in saying that there is no thought of contamination from without in pursuing this method of experiment. I operated upon a great variety of hay-infusions, and after a time, by pursuing with the most scrupulous exactness the method laid down by Dr. Roberts and Professor Cohn, it was possible for me, by practice, now to corroborate and now to contradict them. It is perfectly useless to bring forward before public assemblies merely opposing assertions, so that I did not really content myself with falling back upon the results I obtained last year, but tried to get some knowledge as to whence the differences arose which showed themselves between me and these distinguished men. Here are tubes of alkalisated hay, some of them subjected to a boiling temperature, not for three hours, but for ten minutes, and they are perfectly brilliant; there is not the slightest evidence of life in them; they have been entirely sterilised by an exposure to a boiling temperature for ten minutes. If I illuminate them, you will find that these infusions are perfectly brilliant; there is no turbidity that gives any sign of the production of animalcular life. These tubes have remained there for three months perfectly intact, uninvaded by those organisms which were invariably found both by Dr. Roberts and by Professor Cohn. Again, we turn to another series of tubes, and find that every one of them has given way. Thus I went on ringing the changes, until, as I have said, it was in my power, by pursuing with undeviating fidelity the mode of experiment laid down by Dr. Roberts and Professor Cohn, to get at one time a contradiction and at another time a corroboration of their results.

And what was the meaning of these irreconcilable contradictions? The meaning was this: when we came to analyse these various infusions, we found that those that were sterilised by a boiling of from five to ten minutes were invariably infusions of hay mown in the year 1876, whereas the others were infusions of hay mown in 1875 or some previous year. The most refractory hay-infusion that I have ever found was in the case of some Colchester hay five years old. Now, what do these experiments point to? The answer may be in part gathered from an observation described in the volume of the *Comptes Rendus* for 1863 by one of the greatest supporters of the so-called doctrine of spontaneous generation. A description is there given of an experiment that was made by the woolstaplers of Elbœuf. They were accustomed to receive fleeces from Brazil, which were very dirty, and had, amongst other things, certain seeds entangled in them. These fleeces were boiled at Elbœuf sometimes for four hours; and the seeds were afterwards sown by some of these expert fellows that had to deal with the fleeces, and were found capable of germination. The thing was taken up by Pouchet. He gathered these seeds, exposed them to the temperature of boiling water for four hours, and then examined them closely; and he found (and I recently made an experiment which showed the same thing to be true with regard to dried and undried peas) that the great majority of the seeds were swollen and disorganised, while the others were scarcely changed; they were so indurated and perhaps altered in the surface as to prevent the liquid from wetting them. At all events, a number of them appeared to be quite unchanged. He separated these two classes of seeds and sowed them side by side in the same kind of earth. The swollen seeds were all destroyed; there was no germination; but in the case of the others there was copious germination. Here, then, you have these seeds



proved to be capable, by virtue of their dryness and induration, of resisting the temperature of boiling water for four hours. There is not the slightest doubt that, if time permitted, I could heap up evidence of this fact, that the wonderful sterility of this old hay is due to the induration and desiccation of the germs associated with it. Here you have three tubes containing cucumber infusion of crystalline clearness; they have been simply subjected to a boiling temperature for ten minutes; they have been completely sterilised, and they are as clear as when the infusions were first introduced into the tubes. On the other hand, here are tubes that have been subjected to a boiling temperature for five hours and a half showing a swarming development of life. What is the reason of this difference? The reason depends entirely upon the method of experiment. When Dr. Roberts filled his bulbs, he simply poured in his infusion, plugged his tube, sealed it, and subjected it to a boiling temperature. Not only did the liquid contain germs, there was a quantity of air above the liquid, and the germs were diffused in the air. Germs thus diffused in the air are very differently circumstanced from germs diffused in a liquid; they can withstand for hours a boiling temperature; whereas that selfsame temperature, brought to bear upon germs immersed in liquid, destroys them in a few minutes. And why do these tubes differ? The reason is to be sought entirely in the method of filling the tubes containing the clear infusions. Here is a diagram (Fig. 3) representing one of Dr. Roberts's

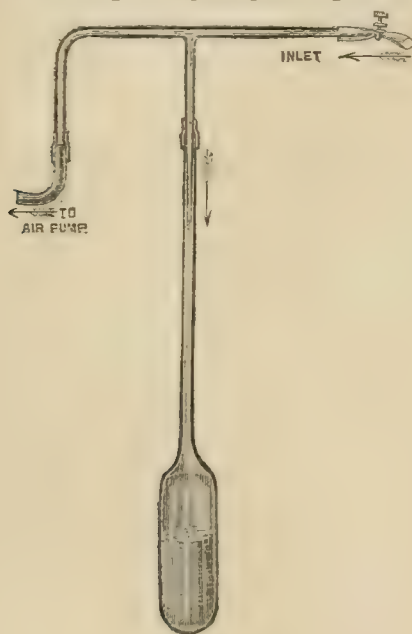


Fig. 3.

bulbs. You see that the top is united to a T-piece with a collar of India-rubber. This comes down and ends in the neck of the bulb. Here is an air-pump, and here is the end of the T-piece surrounded by a tube of India-rubber, and here is a pinchcock to close that tube of India-rubber. If you open the pinchcock and work the air-pump with which this end is connected, it is completely exhausted. You may allow it to be filled with air; you may then open the pinchcock; the air will enter through the cotton-wool, and will fill the bulb. In this way, you get the bulb filled, not with common air, but with filtered air. This process is carried on three or four times, so as to make sure that the common air has been displaced by the filtered air. We will suppose that I detach the tube from the air-pump, and other precautions taken. At present, you see the bulb is empty. Taking an infusion of hay, I put the end of the T-piece into the infusion to be introduced into the bulb. The bulb is dipped into hot water; the air expands, and it is driven out. Simply introducing our bulb into cold water, the air shrinks, and by atmospheric pressure the liquid is driven into the bulb. Again we drive the air out, and, by a few operations of this kind, we find that we can charge our bulb with a very great degree of accuracy. You can see the liquid in the bulb at the present time. In this way we charge a bulb which has had its common air and floating matter removed with our infusion. When it is charged, it is very carefully removed, and great precautions are taken so as to prevent any indraught of air. For instance, it is always

removed from the cold water, so that, when it is lifted up into the air of the laboratory, a slight expansion shall take place, so that the motion of the air shall be from within outwards, instead of from without inwards. In that way we can, by careful manipulation, obtain bulbs devoid of this floating matter. These are the bulbs you now see before you showing this beautifully pellucid infusion.

Were this a biological investigation, and not a physical one, I should feel myself out of my element in dealing with it. I leave the determination of the species of bacteria to others far more competent than I am. I can see these organisms and wonder at them when I see them through the microscope; but I have no ability or knowledge to classify them and divide them into species, genera, etc. But these are purely physical experiments, and it is only by such severe experiments that this question can be freed from the haze and confusion in which it has been hitherto involved. Even the celebrated Professor Cohn—I say it with the greatest regard and respect for him—appears to have no adequate notion of the care necessary to be taken in experiments of this kind. To lift a tube out of the boiling liquid and allow it to remain quietly in the air, the entry of the air taking place from without inwards, and then, after one or two minutes' exposure, to plug it with cotton-wool and say that no contamination can reach it, is in my opinion a great mistake. He could not, but by the merest accident, get an infusion free from contamination by operating in this way. I have here tubes prepared according to his method. Here are some melon-tubes all putrid, all gone into a state of fermentation. I ask you to compare those with some other melon-tubes that I have operated upon in a different way and that are as clear as crystal. The others are all gone, simply through a defect in the mode of manipulation.

The defeats that I at first described to you were due entirely to the contaminated atmosphere in which we worked. It ought to be noted that, in the earlier experiments in this inquiry, the results were always in accordance with those brought before you last year. By degrees, however, masses of hay were introduced into the laboratory—old hay and new hay from various places; and they ended by rendering the atmosphere so virulently infective that everything was contaminated by the germs set afloat. It resembled the case of a surgical ward of a hospital, where gangrene and putrefaction have attained such a predominance that the surgeon has in despair to shut up his ward and abandon it to disinfection. Desiring to free myself from this pestilential atmosphere, I wrote to my friend the President of the Royal Society, Dr. Hooker, and I found that he was able to furnish me with a means of getting away from it. In Kew Gardens, there is a beautiful new laboratory, erected by the munificence of that most intelligent supporter of science Mr. Thomas Phillips Jodrell. He, at his own expense, has had this beautiful laboratory built—being designed, I believe, by Dr. Thimelton Dyer. It is one of the neatest things I have ever seen, and it is to me a great gratification that the first experiments made in that laboratory were those to which I have now to refer. I broke away from the contaminated air of the Royal Institution. It is very well for you that I can tell you, that all the germs referred to are perfectly innocuous to human beings, for I have no doubt the air of this room is contaminated with them. A series of chambers were made—not of wood, for I wanted to get rid even of that, but of tin—and I would not allow Mr. Cotterell to carry those chambers into the Royal Institution at all. They were carried from the tinman's where they were made to the laboratory at Kew. There, with the greatest care, the tubes were treated first with carbolic acid and then washed with water, and then with caustic potash to get rid of all traces of carbolic acid, and finally drenched with distilled water. Carbolic acid, as you know, is a deadly foe to these germs. In this way I hoped that every contamination that might be adhering to the tubes would be destroyed, and that, having got clear of an infected atmosphere, we might get the same results as we invariably obtained last year. The temperature was raised to between 80 deg. and 90 deg., and once a little above 90 deg., so that the warmth was all that could be desired for the development of those organisms. It gives me the deepest gratification to find that what was foreseen has occurred, and that this very day these chambers have come back from Kew perfectly intact. They comprise the most refractory substances that I had experimented upon here. It was almost impossible to save a cucumber; I never did succeed in saving a melon infusion from contamination, and from this so-called spontaneous generation. But here, when the air had been allowed to deposit all its motes, and when we were withdrawn from an infected atmosphere, as I have said, the chambers were returned with their infusions as clear as crystal. Mr. Cotterell will show you some of them. You will see that one of these is muddy and turbid, and it has a deposit at the bottom. These are all dead bacteria, and the muddiness is due to swarming bacterial life. Here you have two infusions perfectly clear. Why did

the other tube give way? When we came to examine it, a little pinhole was found at the bottom of the chamber, and through that pinhole the germs got in. Here is a melon infusion; and, in order to show you what would have occurred if the infusions had not been protected from the floating dust of the atmosphere, we have hung beside this case two tubes that have been exposed to the common air and have fallen into a state of utter rottenness. In this way, from the Jodrell Laboratory at Kew, we have had these cases returned with their infusions perfectly intact. Even in our infected atmosphere, when we subject our infusions to experimental conditions sufficiently stringent, we are able entirely to shut out contamination, and to show that spontaneous generation never occurs. When we get clear of our atmosphere altogether, this is a matter of perfect ease and facility; and we find in Kew Gardens that nature runs her normal course.

### CASE OF LARGE HYDATID TUMOUR OF THE OMENTUM TREATED SUCCESSFULLY BY A FREE INCISION, WITH ANTISEPTIC PRECAUTIONS.

By THOMAS ANNANDALE, F.R.S.E.,

Surgeon to the Edinburgh Royal Infirmary, and Lecturer on Clinical Surgery.

IN connection with the most instructive cases recently reported in the JOURNAL by Dr. Bradbury, I trust that a brief account of the following case may not be without interest. To Dr. Stone, my late house-surgeon, I am indebted for the notes.

M. F., aged 32, a married woman and a native of Shetland, was admitted into the Edinburgh Royal Infirmary under my care on the 11th of August last. Her history was that, about eight years before her admission and a few weeks after the birth of her first child, she noticed a small hard swelling at the lower part of the abdomen. This swelling was freely movable, gave her no uneasiness, and remained in much the same condition until about two months ago, when, soon after the birth of her fifth child, it began to increase in size and to cause pain. Her general health, too, began to fail, and she commenced to lose flesh.

When admitted, a tumour was found occupying the lower part of the abdomen. The tumour somewhat resembled in shape and size an ox's kidney, and lay across the abdomen a little below the umbilicus and towards the right side. It was freely movable, fluctuated indistinctly, and appeared to be connected with the omentum. No connection with the liver or other abdominal organs could be detected. The digestive system and general health were in a very unsatisfactory state, and both pulse and temperature were above the normal. After a week of general treatment, I requested Dr. Stone to puncture the tumour with the fine needle of an aspirator, and he accordingly drew off in this way a few ounces of a turbid fluid, which, owing to some mistake of the nurse, was thrown away before being examined. The patient expressed herself relieved by the tapping; but, a week after the operation, the tumour again increased in size and gave her more pain than formerly. The aspirator was, therefore, again used, and a small quantity of the same kind of fluid was drawn off; and, when carefully examined microscopically, hooklets of the "echinococcus" were found in it. After this second tapping, the patient became very ill, and the tumour increased rapidly in size. Her temperature was 103 deg. in the evening, and her pulse was high. She suffered also from rigors; and the tumour became more fixed, and was also more tender to the touch.

On September 19th, the tumour was as large as a child's head; and, from the patient's symptoms, it seemed evident that the tumour had suppurated, and that she must soon die if she were not relieved by the removal of the disease. On September 20th, I made a free incision in the mesial line over the tumour; and, the various layers of the abdominal walls having been divided, a large cyst was exposed. The wall of the cyst was thick and dense, and was found to be firmly adherent to the omentum and abdominal organs behind. In front, it was free. A large trocar and cannula were then passed into the cyst, but, owing to the large number of smaller cysts and their density, its contents would not pass through the cannula. Precautions having been taken to prevent any of the contents of the cyst from passing into the peritoneal cavity, which had been opened into by the incision, the cyst-wall was freely incised, when a large quantity of small hydatid cysts, floating in purulent fluid, escaped. The cyst having been in this way thoroughly emptied, the edges of the incision in the cyst-wall were stitched to those of the external wound, and two large drainage-tubes inserted into the cavity of the cyst. The whole operation was performed under the antiseptic

spray, and the usual antiseptic dressing was applied to the wound afterwards. Her progress after the operation was most satisfactory; and her pulse and temperature at once improved, and in a week were normal. The wound was daily dressed with antiseptic precautions; and the cavity of the cyst gradually contracted, leaving a small sinus, which in time also closed, and the patient was discharged cured on December 17th.

### THE SUPRARENAL CAPSULE AND LYMPHATIC GROWTHS.

By P. H. PYE-SMITH, M.D., F.R.C.P.,

Assistant-Physician to Guy's Hospital, etc.

IN commenting on the remarkable case of lympho-sarcoma of the thorax, which Dr. Byrom Bramwell published in the JOURNAL of January 6th, he writes as follows: "The condition of the (left) suprarenal capsule was a remarkable feature of the case, and tends to show the close physiological relation which these organs have to the lymphatic glandular system. The absence of pigmentation of the skin proves that all forms of disease of the capsules are not necessarily attended by bronzing."

If Dr. Bramwell will refer to Dr. Wilks's classical paper on *Morbus Addisonii* in the *Guy's Hospital Reports* for 1862, he will see that the last conclusion was even then fully established, and it has since been abundantly confirmed by the exhaustive analysis of cases of disease of the adrenals, on which Dr. Greenhow founded his well-known Croonian Lectures, which appeared in the JOURNAL during March 1875. It is only the peculiar quasi-tubercular change in both organs which produces the symptoms of Addison's disease. Primary or secondary tumours, whether cancerous or sarcomatous, hæmorrhage, hydatid, amyloid degeneration, miliary tubercle, can no more produce bronzed skin, muscular weakness, feeble pulse, nausea and cerebral symptoms, than cancer, or hydatid, or calculus of one kidney can produce the symptoms of Bright's disease. True carcinoma, in the histological sense, probably never affects the adrenals (or any other organ without an epithelial surface) except as a secondary disease. But among the twenty-three cases in Groups VIII and X of Dr. Greenhow's list (*On Addison's Disease*, 1875, pp. 208, 210) there are several of various forms of sarcoma which in their clinical features were, like Dr. Bramwell's, malignant, and almost always secondary.

Almost all cases of primary intrathoracic growths are only clinically cancerous, and the majority are, like Dr. Bramwell's, lympho-sarcoma. This is the conclusion from Dr. Risdon Bennett's cases in his monograph on *Intrathoracic Growths* (1872), as well as from the numerous cases recorded in the *Pathological Transactions*. At one end, the series of these lympho-sarcoma approaches cancer, but, at the other, they become indistinguishable from the lymph-adenomata of Cornil and Ranvier. These again pass into the multiple glandular hypertrophy of Hodgkin and Wilks, and so by *anæmia lymphatica* to *anæmia splenica*, or true leuchæmia. Dr. Bramwell does not state what were the microscopical characters of the blood in his case, during life or after death. Probably there was only *anæmia* without the increase of leucocytes, since even in the most "constitutional" and least "cancerous", i.e., the most multiple and least destructive form of Hodgkin's disease, it is doubtful whether true leuchæmia has ever been observed.

A recent writer in another medical journal described a typical case of *anæmia lymphatica* as something new in this country, and announced the discovery of a similar condition, under the name "adénie", by Trousseau. The late eloquent professor at the Hôtel-Dieu made no such pretension. He says: "D'abord, messieurs, qu'il soit bien entendu que je n'ai rien découvert, que la description de la maladie a été assez bien faite avant moi; en Angleterre par M. Hodgkin (1832); en France, par un de mes élèves, M. Bonfils (1856); et en Suisse, par M. Cossy (1861)". (*Clin. Méd.*, tome iii, p. 569.) He afterwards mentions Dr. Wilks's name, who in the *Guy's Hospital Reports* for 1856, had accurately described the disease under its most appropriate title, "*anæmia lymphatica*". See also Virchow's comments (*Krankhafte Geschwülste*, Bd. ii, S. 619). I must not trespass on space by further references, but it is worth while recalling the labours of our own pathologists when they are so soon forgotten. In a late discussion on the subject, not only was the *anæmia lymphatica* of Hodgkin and Wilks confused by some speakers with the allied leuchæmia splenica discovered by Virchow, but two other entirely unconnected diseases were brought in as allies—viz., idiopathic *anæmia*, first and completely described by Addison (*Works*, p. 212), since rediscovered and named "pernicious" by Biermer and others, and the totally distinct disease which is more generally connected with the same physician's name as *morbus Addisonii*. In a recent work on Medicine, it is stated that in the latter disease the white blood-corpuscles are sometimes increased



but I know of no evidence for this statement, and it is contrary to the very numerous observations which are already on record.

There is certainly no pathological connection of the suprarenal capsules with the lymph-glandular system. No less certainly is there no physiological connection between them. The function of lymph-glands with the other cytogenic structures (spleen and thymus, tonsils and Peyer's patches) is to make leucocytes; the function of the adrenals is unknown, if they have any in the adult, which in a recent number of the JOURNAL (December 9th, 1876, p. 741) I have given reasons for doubting. But the structure of the adrenals is totally different from that of cytogenic organs—as different as from that of true (secreting) glands. The absurd name, “ductless gland”, and the ambiguous terms, “glandular” and “adenoid”, have led to endless confusion in histology as well as in physiology, by connecting together such absolutely different organs as the suprarenal capsules, the thyroid, and the true lymphatic or cytogenic structures. That the confusion may not spread to pathology, is my apology for these remarks.

## REPLIES TO DR. BROADBENT'S QUESTIONS AND OBJECTIONS IN THE MATTER OF THE SOUNDS OF THE HEART.

By ARTHUR LEARED, M.D., F.R.C.P., etc.,  
Senior Physician to the Great Northern Hospital, etc.

THE tone of my friend Dr. Broadbent's communication in the JOURNAL of December 23rd reminds me of that of certain puritan pamphlets still extant. These productions bear such titles as “A Ready Method with Unbelievers”, “The Sinner convinced against his Will”, etc. There really seems to be a resemblance between the polemic effects of theology and those of controversy about the cause of the heart's sounds.

“In contradiction,” says Dr. Broadbent, “to Dr. Leared's statement that it is absolutely impossible to distinguish the sound caused by friction of the heart's surface against the end of the stethoscope from any allied sound—*i. e.*, in this case muscular sound—I maintain, from a large experience of auscultation of the naked heart when assisting Dr. Sibson in his experiments, that it is both possible and easy.” The argument, of course, refers only to the contracting empty heart, because, so long as the organ is acting upon its contained blood, several other alleged causes of sound are in operation. From a large experience of the same kind, I can fearlessly meet one flat contradiction by another equally flat, or, in other words by maintaining my statement as above quoted. Now, the matter in question is stated to be possible and easy. A German investigator evidently did not regard it in this light when he took the precaution of causing the heart to act while surrounded by water. But I do not admit that the faint sound alleged to have been transmitted by the fluid medium was necessarily muscular. The experiment was also exposed to a fallacy arising out of the sound-waves formed by commotion in the water caused by the moving heart.

Let us now see whether Dr. Broadbent's contradiction cannot be met by one of at least equal force and free from all taint of partisanship with my views. Dr. Halford, now Professor of Anatomy in the Melbourne University, is well known to have performed many vivisections in reference to the question of the causes of the heart-sounds; and the conclusions arrived at were, in the main, not in accordance with mine; but he positively affirms that, when the supply of blood was cut off from the acting heart, “neither first nor second sound was heard”.

Dr. Broadbent's reply to my question, Why is it that in anæmia *the first sound of the heart only, and the second never*, becomes replaced by a murmur?—is “by disputing the fact. The first sound is not replaced under these circumstances, but accompanied by a murmur”. If Dr. Broadbent will modify his statement—and it will then equally answer its purpose—by inserting the word “always” before “replaced”, and the words “is sometimes” before “accompanied”, I will at once admit its truth. But how does this “take much of the ground from under” me? My contention is, that the body or main portion of the first sound is constantly transformed, under the influence of the change from normally viscid blood to abnormally thin blood, from a shock sound to a murmur. The accompanying feeble shock-sound heard in certain instances over the aorta may have various origins. “It may,” says Dr. Broadbent, “save trouble to say that I am aware that there are two first sounds, and that I speak distinctly of the co-existence of a murmur and sound both of left ventricular origin.” Now, it may also save trouble to remind the reader that so closely placed are all the apertures of the heart, that the bell of a very small

stethoscope would cover a portion of all the valves which close these apertures.

It is certainly possible by certain manœuvres to distinguish the sounds of the heart in relation to the separate sides from which they spring; but I maintain that, when the normal aortic sound is replaced by one of entirely different character, it is not always possible to guard against error arising from conduction of sound. If the chest-wall did not intervene, the difficulty would be much lessened. Now, an instance in which this difficulty did not exist presented itself to a very competent authority—namely, Cruveilhier—in the case of an infant born with the heart exposed. He found that the maximum intensity of both sounds was at the same place—namely, the base. And he adds explicitly: “Hence it is that at the base of the organ we are to look for the cause of these sounds.” Thus it comes to pass that, although “a systolic murmur and a first sound may coexist”, and is admitted by me, I am not conscious of any insecurity of “the ground”.

The undisputed facts are that, in anæmia without valvular lesion, the first sound of the heart, examined over its left side, is sometimes entirely replaced by a murmur, while at others the murmur is accompanied by a sound more or less resembling the normal first sound. The second sound at the same time never undergoes the like change. My explanation of this is, that in the one case the unnaturally thin blood allows the formation of a blowing sound instead of a shock sound, on known physical principles; while in the other case the intervention of the valve prevents the formation of the blowing sound on the same principles. When, on the other hand, a murmur replaces the second sound owing to incompetency of the valve close to which it is formed, more or less of the normal second sound may sometimes be heard coincidently with the murmur. Dr. Broadbent would perhaps assign the normal portion of the sound to the vibration of the healthy part of the valve. This, for reasons too long to discuss, I would deny, and would assign simply to the same cause as I have already done the sound heard with the anæmic murmur on which Dr. Broadbent lays so much stress—namely, to conduction. There is, indeed, only one argument that can be brought to bear with effect against my view that sounds are always caused at the outlets of a heart acting with ordinary force, and that the aortic murmur of anæmia is nothing but a modified, or, as I would term it, a degenerated shock sound. That argument has been afforded by Dr. G. Balfour, who, in his lately published work on *Diseases of the Heart*, maintains that the anæmic cardiac murmur is not of hæmic origin at all, and is not formed in the great outlet-vessels. Founding his argument on the circumstance that, according to his experience, the murmur is most distinct just over the left auricular appendix, he ingeniously maintains that it is really mitral and regurgitant. Here the difficult question of conduction again meets us; and there are besides so many reasons for upholding the long established blood-theory, that I do not think he will find many supporters.

Dr. Broadbent ends his paper with a series of questions, which, in order to be answered, must be reproduced; but I shall abbreviate them when it can be done without injury to their meaning.

1. A sound due to collision between blood issuing from the ventricles with stationary blood in the great vessels must be produced at the aortic and pulmonic orifices. How is it, then, that the first sound is better heard over the ventricles, and even at the apex, than at the base and over the great vessels? If the first and second sounds be originated at the same point, they ought to be heard over the same area. Here the difficult question of the propagation and conduction of the first sound again presents itself. When the ventricle contracts upon its contents and the sound is formed at its outlet, it is probable that, owing to forcible contact with the stationary blood, sound-vibrations in the blood are propagated backwards and conducted by the walls of the ventricle, so as to make the first sound most audible over the ventricle and its apex. Such vibrations are prevented in case of the second sound by the closure of the valve, and therefore the second sound is not heard so distinctly over the ventricles. I put this explanation forward hypothetically. But I beg to draw Dr. Broadbent's special attention to the fact that there are exceptions to his statement. In some instances, the first sound is as loud or even louder at the base than at the apex. Moreover, how is he to explain the positive statement of Cruveilhier already mentioned in this connection? His objections are, I think, fairly balanced until these points are set aside.

2. In cases of high arterial tension, with its accompanying increased propulsive power in the left ventricle and consequent increase in the violence of the collision between the ventricular and aortic blood, “the first sound near the seat of this collision, its supposed cause, is enfeebled. Will Dr. Leared explain this?” He will, and, he believes, satisfactorily. From my various experiments on the production of



sound by the propulsion of a moving column of fluid through a stationary body of the same fluid, I arrived at this conclusion: that, when pressure upon the fluid was raised to a certain point, sound could be with difficulty obtained. The application of this observation to Dr. Broadbent's question is obvious; and I have to thank him for bringing under my notice a pathological point which has a direct bearing on my theory of the first sound.

3. There is a well recognised difference in character between the synchronous first sounds, formed respectively in the right and left sides of the heart. "How does Dr. Leared explain these (differences), if the sounds be the product of collision of the blood, and not of tension of the ventricular walls and valves?" I explain this very simply by the fact that the conditions under which both these sounds are formed are as different from each other on my theory as they are on his, assuming Dr. Broadbent's theory to be the true one. I have just shown that pressure has much to do with sound; and I have a word more to say bearing on this point presently.

4. In dilatation of the ventricles, and in stenosis of the mitral orifice, the first sound is often louder than usual, but it is short and sharp like the second sound. "This is easily explained in the case of dilatation, if the ventricular walls and valves are supposed to be the origin of the sound. An explanation on the hypothesis of collision of moving ventricular and standing aortic blood is requested." It would require too much space to go into this matter in detail. But, so far as an indication of the direction of how it is to be explained, the request shall be complied with. First, I would say that I consider Dr. Broadbent's assertion that the matter is easily explained on the hypothesis mentioned, although plausible, is a long way from being proved. I have spoken of the difficulty experienced in forming sounds in fluids when they are under a certain pressure. If water be employed in the experiment, the sound produced under considerable pressure is always a blowing sound; although, if the pressure be increased, it approximates more or less to a shock sound. If a sufficiently viscid fluid be employed, and a low pressure, the sound is also a murmur. But, if the pressure be increased to a certain point, the sound becomes more or less a shock sound. If the pressure be still further increased, the shock sound becomes lowered in tone; and, if increased beyond a certain point, can hardly be heard at all. The explanation of Dr. Broadbent's difficulty lies in this: the first sound is loudest when the blood is under moderate pressure. If the pressure be much diminished, the sound is transformed into a murmur, as has been observed repeatedly in cases of excessive hæmorrhage. Probably, the first sound is loudest just at the point when the conditions, as regards pressure, are sufficient to form a shock-sound instead of a murmur. Now, in diminished ventricular power (dilatation) and in diminished pressure from want of supply of blood (stenosis), we have two conditions which lessen pressure and increase the loudness of the first sound.

5. In aortic dilatation and in aneurism, the second sound is louder and greatly changed in tone. This is easily explained, if it be admitted that the change results from the tension and vibration of the enlarged area of resonant membrane, but could scarcely be the effect of increase in the size of the column of blood.

But, why not? The resounding nature of membranes seems to haunt some men when arguing on this subject. They never can get the drum and tambourine out of their minds. Let me assure Dr. Broadbent that, when he whistles, it is the air issuing from his lips, and not the lips themselves, or the vibration of any of his membranes, which forms sound. In case of an aneurism, the enlarged body of fluid exercises its peculiar effect on the production and conduction of sound, so much so, that good authorities have maintained that sounds resembling both heart-sounds are formed independently in aneurismal sacs. But this subject is too large for further discussion here.

Dr. Broadbent's questions leave the main argument unassailed. They grasp at the shadow instead of the substance, and do not, except indirectly, attack the salient points, namely, the close analogy between the known conditions on which certain hydraulic sounds are formed and the existence of similar conditions in the human body. One point only to which I still attach "capital importance" has been handled, with what result let the "candid reader" decide.

## LARGE AND LONG NEGLECTED POLYPUS OF THE EAR.

By H. BURFORD NORMAN, F.R.C.S. Eng., Southsea.

THE following case may serve as an useful companion to those cases of neglected aural polypi which were recorded by Mr. Field in the JOURNAL of December 16th.

Mrs. C., aged 62, but much older in appearance, consulted me on November 29th, on account of a growth in her left ear. It had existed ten or twelve years at least, and, for a large part of the time, without causing any great inconvenience. She had often shown it to her medical man, who never advised her to do anything for it; and, as she says, her mind being much more concerned for the care of her family than of herself, she let the matter take its course. Of late, however, the growth having increased much in size, and caused incessant pain and foetid discharge, with occasional bleeding, she thought she might get something done for her relief. On examining the ear, I found a large pinkish and somewhat spongy-looking mass filling up the cavity of the outer ear, pushing the tragus forward: it sprang from the depth of the auditory canal, which it filled. On examining the growth by the probe, and gently lifting it in a pair of bowed pile-forceps, a considerable gush of blood took place. In front of the ear, the skin was of a dusky-red colour, and swollen nearly to the cheek, and the temporal artery was felt throbbing and hard just in front of the tragus. The outer ear was also in a similar state—red, thickened, and rigid; whilst, below the ear, and on the side of the neck, besides a reddened state of skin, there was some induration of the lymphatic glands, and an ulcer discharging thick gummy matter. I put a compress and circular bandage on to stop the bleeding caused by the examination, and ordered the use of tepid-water and alum-injections whilst deciding what to do with the growth. The hearing on the diseased side was impaired, but not so much as might have been expected; and the growth seemed to have a perfectly "benign" character, for in its long life it had remained quite isolated.

From these considerations, I thought it probable that the growth was connected with some part of the circumference of the auditory canal, and not with the membrana tympani. I made several attempts to ascertain the point by the use of the probe, but in vain; it gave me no help, and could not be passed on all sides and around the growth, in consequence of its not only filling the meatus, but swelling out much, mushroom-like, over the edges of that passage. The same circumstance made it at least very doubtful whether I could either put a wire around the growth, or cut it off by knife or scissors at sufficient depth to be effectual. I therefore decided to apply torsion, either so far only as to cause strangulation, which I have seen answer well in slight cases, or to twist the growth off.

On Dec. 3rd, I put this plan in operation, grasping the outer part of the growth in the bowed forceps, and slowly twisting it once quite round. Finding this not very painful, I carried the proceeding further, and was gratified at finding the growth snap off when the second turn or twist was about half made, and in my possession a polypus more than two inches long, the lower and more slender part of which, having a smooth mucous covering, had filled the meatus, and measured two inches and a half in circumference; while the larger and protruding part was granular on its surface, and measured between three and four inches round.

A great gush of blood followed the removal of the growth, but it was quickly stopped by plugging the ear with long strips of lint soaked in strong solution of perchloride of iron, and this was secured by a compress of lint and bandage round the head. In plugging the ear, my forefinger passed readily to the bottom of the meatus.

Next day, I removed the compress and part of the plug, as they caused uneasiness; and, on the second day, the remainder of the plug, which was loose. Since then the case has done very well, and I saw my patient yesterday in good health, the swelling and redness of the auricle and neighbouring integument all gone, the ulcer on the side of the neck healed, and the auditory canal much reduced from its lately exaggerated size, and this notwithstanding a slight attack of erysipelas which followed the operation.

This is by far the largest polypus of the ear, and altogether the worst that I have ever met with—worthy, I think, of being recorded for an example of what may be done in such a case.

## SOME EXPERIMENTS WITH NITRITE OF AMYL.

By W. LEMON LANE, M.B., etc., Crossgate, Dunfermline.

THERE is so little known about the action of this medicine, that I think a few experiments which I made with it will be interesting.

*Experiments 1 and 2.*—Two kittens of the same age and size got chloroform simultaneously. When both were thoroughly insensible, I gave one of them two minims of nitrite of amyl to inhale. The result was this. In the kitten which had no nitrite of amyl to inhale, reflex motion appeared in five minutes, and sensibility returned in eleven minutes thirty seconds; while, in the other kitten (which had amyl-



nitrite), reflex motion appeared in four minutes, and sensibility returned in six minutes. In this kitten, the cardiac sounds were nearly inaudible, and its action very rapid; but, upon inhaling the nitrite of amyl, the cardiac sounds became louder, and its action less rapid.

*Experiment 3.*—A kitten with a temperature of 100.2 degs. Fahr. (thermometer in the axilla) had nitrite of amyl to inhale, which raised its temperature to 100.8 degs. Fahr. In this case, the amyl-nitrite produced reddening of the nose and mucous membrane of the mouth. The dose being small, it did not make the kitten insensible. I may state that, twenty-five minutes after inhaling the nitrite of amyl, the temperature in the axilla was 100.6 degs. Fahr.

*Experiment 4.*—A kitten, whose temperature was 100.2 degs. Fahr., got chloroform; after it recovered sensibility, its temperature was 98.8 degs. Fahr. The fall of temperature caused by chloroform was 1.3. The kitten was trembling with cold. The number of minutes before reflex motion appeared was nine, and before sensibility returned was fifteen. The chloroform made the heart's sounds rapid and weak.

*Experiment 5.*—The same kitten was again, two days afterwards, made insensible with chloroform. The anaesthesia was complete at 5.27 P.M. Three minims of nitrite of amyl were then given for inhalation. At 5.29 P.M., reflex motion appeared; at 5.30 P.M., it tried to raise its head and move; at 5.32 P.M., it began mewing and standing. The nitrite of amyl produced reddening of the nose and mouth, while it made the heart's action stronger, less rapid, and its sounds louder. Its body felt quite warm. I unfortunately did not take its temperature with the thermometer.

*Experiment 6.*—The same kitten was again, two days afterwards, anaesthetised with chloroform. Ten minims of amyl-nitrite were then given, which, at first, made the cardiac sounds louder and its action slower, but its sounds soon got weak and its action rapid. Reflex motion appeared in three minutes; it began opening and looking about in four minutes; tried to rise in five minutes, and began walking, although it staggered a good deal in doing so, in six minutes. I may mention that, in this experiment, the large dose of nitrite of amyl produced cyanosis of the nose and mucous membrane of the mouth.

The following table will conveniently show the effect of amyl-nitrite on the chloroformic anaesthesia.

No. of the Experiment.	No. of minutes before reflex motion appeared.	No. of minutes insensible.
1. Chloroform only.....	5	11 minutes 30 secs.
2. Amyl nitrite after chloroform.....	4	6 minutes.
4. Chloroform only.....	9	15 minutes.
5. Amyl nitrite after chloroform.....	2	3 minutes.
6. Amyl nitrite after chloroform.....	3	4 minutes.

The average duration of insensibility, according to the above table, in kittens when chloroform only was given, was thirteen minutes; while in those that inhaled the nitrite of amyl after chloroform, it was four minutes twenty seconds.

*Experiment 7.*—A kitten was rendered quite insensible with twenty minims of nitrite of amyl. It kept mewing although quite insensible. Its respiration became very slow, and was performed in the following manner. A sudden inspiration followed by expiration, then it would stop breathing for a considerable time, when it would again make a sudden inspiration, etc. It died in five minutes from the time it became insensible. Before death, its nose and tongue were quite cyanosed.

**POST MORTEM EXAMINATION**, three hours after death.—The lungs were collapsed, floated in water, were more full of blood than normal; upon section, blood exuded from their cut surfaces.—*Heart.* All its cavities were filled with blood. The vena cava and the pulmonary vessels were distended with blood, while the aorta was empty. The blood in all the cavities of the heart was quite fluid and of a dark colour; upon exposure, it soon coagulated.—*Brain.* The vessels on its surface were full of blood; its cut surfaces were of a natural appearance to the naked eye and of a normal consistence.

*Experiment 8.*—A kitten, with a temperature of 100.8 degs. Fahr., was made insensible with nitrite of amyl. It having almost ceased breathing, the respiration was kept up artificially; its nose and the mucous membrane of its mouth were cyanosed, while the veins under its tongue were engorged with blood. It kept licking its lips with its tongue, and moving its forelegs, although quite insensible. It passed faeces and urine. When it was recovering, a very small quantity of chloroform was given it (inhalation), which, as it seemed to make it worse, was discontinued. After this kitten recovered sensibility, its temperature was so low that the clinical thermometer did not mark it. The amyl made the heart beat very rapidly, while it made its sounds very feeble.

*Experiment 9.*—Another kitten was also made insensible with nitrite of amyl. The results were similar to the above.

*Experiments 10 and 11.*—Two kittens got chloroform at the same time, when both were quite insensible, one got four minims of nitrite of amyl to inhale, and the other twenty minims. The first recovered consciousness in six minutes; the second (which inhaled twenty minims of nitrite of amyl) took twenty-five minutes to recover consciousness. In these two experiments, it will be observed, that a small dose of nitrite of amyl hastened the recovery from the chloroformic anaesthesia, whereas a large dose prolonged it. It is also well worth mentioning that, in the first kitten, the small quantity of amyl caused reddening of the nose and mouth; while, in the second, a larger quantity of amyl produced cyanosis of the nose and mouth.

From the above experiments, I beg to submit the following deductions.

1. Amyl-nitrite, when inhaled in small quantities, produces reddening of the face in man, and of the nose and mouth in kittens; this action is due, according to Brunton, to the dilatation and overfilling of the arterioles.

2. When inhaled by kittens in large quantities, it produces cyanosis of the nose and mouth along with insensibility. The cyanosis arises from overdistension of the venous system (experiment 7), this being due to the engorged arterioles propelling the blood into the veins, while the insensibility is probably caused by overdistension of the venous system and the heart.

3. When inhaled in small quantities, it produces recovery from chloroformic insensibility (see experiments 1, 2, 4, 5, and 6), by dilating the arterioles of the brain, and thus removing the cerebral anaemia due to the chloroform.

4. When inhaled in large quantities, instead of producing recovery from chloroformic insensibility, it not only retards it, but it may cause death by paralysis and overdistension of the heart, and engorgement of the venous system. *Vide* experiments 7, 10, and 11.

5. It causes a rise of temperature when inhaled in small quantities by the increased amount of blood in the arterioles causing an increased tissue change in the body (experiments 3 and 4).

6. In large doses (inhaled) it produces a fall of temperature (experiment 8).

7. It also helps to produce recovery from the chloroformic insensibility by raising the temperature which is always lowered by chloroform, and by removing the paralysis of the heart due to chloroform; this action is well seen by the nitrite of amyl making the heart's beat fewer and its sounds louder.

8. Death is caused chiefly by paralysis of the heart, which is shown by all its cavities being distended, and by engorgement of the venous system.\*

## CASE OF MALIGNANT CHOLERA TREATED BY NITRITE OF AMYL AND HYDRATE OF CHLORAL.

By EDWIN FAIRLAND, L.R.C.P.Ed., Staff-Surgeon, Lucknow.

PRIVATE J. C., 8th Royal Irish, confined in the Lucknow Military Prison, aged 36, in service fifteen years and nine months, in India one year and eight months, of bilious temperament, and of previous good health, was seized with an attack of malignant cholera at 9.45 A.M. on June 22nd, 1876. In the previous week, there had been two other cases of cholera in the prison, terminating fatally in seven hours each. Both cases were of the most malignant type.

He had suffered for two or three hours from slight faecal diarrhoea when the symptoms of cholera manifested themselves, and he was at once removed to hospital. The symptoms on admission were constant and severe purging of rice-water motions; very severe cramps in the abdomen and legs, the abdominal muscles being knotted up and feeling like a board under the hand; surface of the body cold and clammy; extremities very cold and livid in appearance; excessive thirst, accompanied by constant vomiting of watery fluid; facies cholericus strongly marked; conjunctivæ flattened; eyes sunken and a dark ring surrounding them; countenance livid and shrunken; breath and tongue cold; voice whispering. He was almost unconscious, being roused with difficulty; and apparently quite callous as to the result of his illness. The respirations were laboured. The pulse at the wrist was barely perceptible and thread-like. He complained of great heat of body, and preferred to lie quite naked. Six hours after admission, he passed about two quarts of rice-water motion. After being under treatment, a slight reaction commenced; the extremities becoming warmer and the pulse slightly fuller—98 per minute; but the cramps

\* These experiments were made before the Vivisection Act came into operation.



and vomiting continued unabated. Prostration was very much marked; he could not raise his head from the pillow. The thirst was intolerable. The symptoms continued the same until twenty-three hours after admission, when he was again purged, passing about a quart of rice-water fluid. The cramps and vomiting were incessant; the temperature unaltered. He dozed off to sleep at intervals. About forty hours after admission, reaction was fairly established; the eyes were becoming fuller and brighter; the complexion lost its lividity; the tongue, breath, and surface became warmer; the pulse fuller, 98; respirations easier, 14 a minute. About fifty hours after the seizure, he complained of pain in the back and limbs and great debility, and became very restless, sinking down to the foot of the bed, and very despondent. Thirst was extreme, and vomiting incessant. The cramps occurred at long intervals. There was no purging. He was slightly incoherent and wandering in his ideas, though conscious when sharply spoken to; he had occasional muttering and great restlessness. Sixty-nine hours after the seizure, and for the first time since early on the morning of the seizure, he passed twelve ounces of urine. His bladder had been empty up to this time. On the morning of the fourth day, the conjunctivæ became highly inflamed; the skin remained moist and warm; pulse regular and full. He voided about eight ounces of clear and limpid urine. He continued very restless, complaining of headache. At 9 P.M. he passed a large quantity of urine. The purging had completely ceased. He had been sleeping. The thirst continued; the vomiting had ceased. The inflammation of the conjunctivæ was diminishing. There was no headache, his mind was clear; great debility remained. On the sixth day, the bowels were opened by castor-oil, the motions being normal. From this time he continued to improve. The debility was overcome by appropriate nourishment, and, on the tenth day, he was removed to another hospital for change.

*Treatment.*—Soon after admission, I gave him five minims of nitrite of amyl by inhalation, and continued this steadily every half hour until twenty hours after admission, when it was inhaled hourly for fourteen hours more. It was then administered every two hours in the same doses until fifty-six hours after admission, when it was discontinued altogether, reaction having been well established. Five drachms had been inhaled altogether. I also hypodermically injected hydrate of chloral in two grain doses—strength of solution 1 in 10. Of this drug, sixty-four grains were injected altogether, at intervals of about two hours, in the arms, legs, and twice over the epigastrium. No evil results locally followed any of these injections. About twenty-nine hours after his seizure, the following mixture was taken every two hours: *R* Liquoris ammoniæ acetatis ʒij; potassæ nitratis gr.xv; spiritûs ætheris nitrosi ʒj; olei juniperi ʒij; aquæ ʒj. M. After taking this medicine for twenty-eight hours, the kidneys resumed their function, and twelve ounces of urine were passed. His body was frequently sponged over with tepid vinegar and water. Sinapisms were applied over the kidneys, and, on the third day, I allowed him a small quantity of beer, which he retained, and which seemed to promote diuretic action. During the whole time, he was allowed to drink as much soda-water and ice as he needed.

In concluding these notes, I wish to say that I have recorded them for the sake of information; a much more extended experience being necessary to prove whether either or both the two drugs relied on in this case had any real curative power over the disease that has hitherto proved so unmanageable. I was induced to try the nitrite of amyl by reading some remarks on its action by Dr. B. Richardson; and, last October, a case occurred in the military prison very strongly resembling cholera, in which I tried it with the most satisfactory results; warmth and animation to the collapsed system being almost immediately restored by its use. I have also employed it in a few native cases of cholera with more or less satisfactory results; but it is not easy to employ amyl in such cases and note the results with the same accuracy as in European cases.

I used it, also, in the two cases of cholera referred to in the opening lines of these notes; but the disease had seized the poor fellows with such full force, that nothing short of a perfect antidote to cholera could have saved them.

A HOSPITAL at Lanark, erected and endowed by Sir Simon Macdonald Lockhart of Lee, was formally opened to receive patients on the 13th ult. During the past five years, there has been in use a temporary hospital, which has been very successful. The new building is situated in the western suburb of Lanark, and has a southern exposure. The front elevation consists of a main block of two storeys, with projecting wings on each side, each ending in a gable flanked by small round towers with conical roofs. Each wing contains a ward with six beds, and a private ward.

## THERAPEUTIC MEMORANDA.

### TREATMENT OF "CHRONIC DIARRHŒA," BY KOUMISS.

IN reference to several articles on this subject, which have appeared in our JOURNAL at the end of last year, I think the following notes may be of interest and use.

We all agree that, amongst the great variety of pharmaceutical remedies, there are many which, in so-called constitutional diarrhœa, produce but a temporary benefit; and, with the cessation of the use of the remedy, the diarrhœa returns upon some slight error in diet or after cold to the feet, abdomen, etc. I have had during the last few years opportunities of treating various kinds of chronic diarrhœa in young and old, thin and stout people. In some cases, the opium preparations; in others, the mineral acids and vegetable astringents, or aqua calcis, etc., were sufficient to cure an attack, or even the disease itself; but in other cases I battled in vain, although I have employed nearly all the good weapons of the *Pharmacopœia*; but it struck me particularly that these latter cases were especially those in which the appetite, digestion, and in some even the nutrition, were more or less impaired. In all of these cases, I evidently lost ground with every return of the diarrhœa; being, therefore, compelled to look around for other preparations to combat these latter complications, I am happy to say I found in the old koumiss, of either sort of full, medium, and whey-koumiss—according to the plumpness of the individual—the required remedy, which in a few weeks cured the chronic diarrhœa, increasing at the same time the appetite, and improving the nutrition. These latter properties of the koumiss are particularly advantageous in all complications with chest-diseases, in cases of excessive expectoration, in heart and kidney-diseases, and wherever anæmia, general weakness, and impaired digestion and nutrition prevail. Children with lymphatic constitutions, swollen abdominal glands, and relaxed mucous membranes, with scrofula and a general bad health, benefit very greatly by a koumiss treatment in a few weeks. In stout people, I usually curtail the diet to very small but frequent meals of fish, eggs, meat in any form of cooking, and I allow them to drink as much old whey-koumiss as they may like; but the articles generally to be avoided during the treatment of chronic diarrhœa, especially at the beginning, are: milk, beer, sugar, vegetables, and fruits; most of the condiments, as onions, garlic, mustard, pepper, vinegar; certain fats and oils, particularly oily fishes and birds. These restrictions are absolutely necessary, and are to be relaxed only when the digestion improves and the normal tone of the bowels returns, which shows itself in a normal frequency of the stools, and the normal shape, colour, etc., of the fæces. In two or three months, and sometimes sooner, I find patients have nearly entirely been freed of these restrictions, without fear of a recurrence of their chronic complaints.

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Honorary Physician to the Infirmary for Consumption,  
Diseases of the Chest, etc.

### TREATMENT OF RINGWORM BY CHRYSOPHANIC ACID.

IN reply to Dr. Foulis's inquiry, I may say that it is not quite probable that Goa powder should contain in any form the leaves of the cassia lata. All that is at present known of the composition of Goa powder is, that it is derived from some kind of leguminous tree, probably from the medulla or pith of the stem and branches. Nevertheless, his communication is remarkably interesting, inasmuch as the cassia lata is also a leguminous plant. Chrysophanic acid, which exists in Goa powder to the extent of 85 per cent., has also been separated from the medicinal rhubarb-root, of which it forms 2½ per cent., and it has also been found in dock-root. But I have reason to judge from the numerous authorities I have consulted, that chrysophanic acid has not been found in the senna plants (*Cassia acutata*, *lanata*, &c. *obtusata*); but I cannot say anything as to the cassia lata.

As to the question of either Goa powder or cassia lata leaves doing good to ringworm, it must be remembered that there are two kinds of ringworm; namely, strict ringworm, and ringworm of a less exclusive kind. Under the latter heading, I should include what is known as "Indian ringworm", which is a very comprehensive term indeed, and bears about the same relation to English ringworm as an empire does to a kingdom; for example, it does not require the presence of an all-important parasite.

Dr. Foulis's description does not make it quite clear to which kind of ringworm he refers: that is to say, he leaves it in doubt whether he



desires merely to indicate some eruption, which extended, as many different kinds of eruption are wont to spread, in rings, and to which the property of contagion had, on more or less sufficient grounds, been imputed; or whether he wishes to convey that his experience relates exclusively to phenomena which resulted from the presence of the trichophyton tonsurans on the skin.

I have myself tested the value of chrysophanic acid in several cases of true ringworm since the time when I contributed the article in which I recommended that remedy in psoriasis. I verified each of these cases of ringworm by microscopic examination, so as to make sure of the actual presence of the trichophyton tonsurans, and I have ascertained the progress of the cases from time to time by the same reliable method. The conclusion at which I have arrived is, that chrysophanic acid is a true "parasiticide". After a comparatively short course of treatment by that remedy, I have pulled out of those portions of the scalp which had previously been most infested by the disease various hair-stumps. These hair-stumps, from their brittleness and disintegrated condition, had evidently at one time been copiously occupied by the parasite. On moistening these with dilute solution of potash, and examining them under the microscope, I have found them absolutely free from any trace of the parasite in the same cases where, before commencing the treatment, every hair-stump that I examined presented in luxuriant abundance the well known appearances of the trichophyton tonsurans.

However, I do not wish to urge the conclusion that the long wished for desideratum—a safe and speedy cure for contagious ringworm—has been found at last in chrysophanic acid, unless other observers should also record from their own experience the same results which have appeared to present themselves to me.

BALMANNO SQUIRE, M.B., Surgeon to the British Hospital for Diseases of the Skin.

#### TREATMENT OF OPHTHALMIC AFFECTIONS IN SMALL-POX.

READING, in the BRITISH MEDICAL JOURNAL of the 6th instant, Dr. Schwarzgruber's communication on small-pox and vaccination, wherein he speaks of the recovery of one of the patients "with the loss of an eye," I am induced to mention a plan of treatment of the opacity or ulceration of the cornea common in small-pox, which I believe is an infallible remedy against such a loss as that of an eye. Formerly this loss was of very common occurrence; but since the present plan of treatment has been adopted, Dr. Gayton, to whom the merit of the discovery is due, tells me that he has not had one single case. The following ointment is applied to the cloudy or opaque cornea once daily with a camel's-hair pencil.

R Hydrargyri oxidi flavi gr. xij; olei olivæ 3ij; adipis præparati gr. cccx. Ft. unguentum.

The ointment is known to be of great use in severe conjunctivitis, and it was first used by Dr. Gayton for conjunctivitis in variola, in cases in which opacity of the cornea coexisted; and he found that it had a most marked effect on the latter.

The red oxide of mercury is also applied to opaque spots on the cornea, but I do not know that it has been used in cases of variola with the same condition of cornea.

It is most important to examine the eyes of patients with small-pox daily; and, the moment the slightest nebula is discovered, to apply the ointment, when the increase of the opacity will not only be prevented, but a cure will probably be effected in a few days. I have seen an opacity commence one day and entirely disappear on the next, after a single application of the ointment. If, however, the case have progressed, and the cornea have become entirely opaque, a cure will be effected eventually, although we may have to continue the application for a long time.

We have now in this hospital a most marked case, in which I feel confident that, but for the treatment, the patient would long ago have had bursting and entire collapse of the eye. The affection of the cornea was, unfortunately, overlooked until it was far advanced; and not only was the cornea entirely opaque, but, although the ointment was applied for two days, on the third staphyloma presented itself, the excrescence being raised at least one line above the general surface of the cornea; and there was oozing of fluid slightly tinged with blood. I applied solid nitrate of silver to the staphyloma, and afterwards the ointment, for three days, after which time the staphyloma had disappeared; and since then I have applied the ointment alone daily. The cornea is becoming gradually clearer; and the patient can discern light, which until very lately she was unable to do.

It may be as well to mention that the yellow oxide of mercury is merely an allotropic form of the red oxide (the old nitric oxide); but it

is important that the latter be not substituted for the former when it is desired for application to the eye, as the yellow oxide is a fine amorphous powder, while the red oxide, being in crystalline scales, is more irritant to the eye.

H. B. BLACKBURN, Homerton.

## REPORTS

OF

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### MIDDLESEX HOSPITAL.

##### CASES OCCURRING IN THE OUT-PATIENT DEPARTMENT.

(Under the care of Dr. EDIS.)

*Subacute Vaginitis.*—The ordinary magnesia mixture and lead lotion have generally been tried with but little benefit. Dr. Edis recommends swabbing the vagina freely with strong carbohc acid. A speculum is inserted, and the fundus vaginæ first touched; the speculum being gradually withdrawn, the acid is allowed to come into contact with the whole length of the vagina, stopping short just before the junction of the mucous membrane with the vulval outlet, otherwise intense burning pain will be produced. Care must be taken not to allow any excess of the acid to run down externally. It is well to insert a pledget of cotton-wool soaked in oil just within the orifice of the vagina to prevent this; but should much burning pain ensue, the patient is directed to squeeze a little olive-oil into the passage, and to insert a morphia suppository *per anum*. In several instances, lately, this method of treatment had been adopted with marked success; two or three applications, at most, arresting the discharge, after several weeks' ineffectual treatment with ordinary lotions.

*Chronic Metritis, with Extensive Granular Erosion of the Cervical Canal.*—These cases are of frequent occurrence, and are more amenable to treatment than is generally supposed, if only the proper method be adopted. Many of the patients have already been under treatment for several months, or even years—taking medicine and using lotion; but, when asked if they have ever been examined, they almost invariably reply in the negative. The first thing to be done is to make a thorough examination, in order to ascertain the exact condition. If the uterus be very congested, a few leeches to the cervix will often materially lessen the duration of treatment. Fuming nitric acid should then be applied to the cervical canal and os uteri. This will need to be repeated every week or ten days for a month or two until marked improvement takes place. A mixture consisting of iron, sulphate of magnesia, and nux vomica, generally proves most useful. A lotion of the glycerate of carbohc acid and borax is to be used night and morning with a syringe. Careful regulation of the diet and exercise, with a proper amount of rest, are to be enforced, and, in six weeks, the patients will say that they feel better than they have done for some months or years. The discharge diminishes, and the dysmenorrhœa lessens in severity; the periods become more regular and less profuse; the bearing down, dragging, and burning pains cease; the general health improves; and, within a few weeks, the patient reports herself as convalescent. The application of nitric acid is far superior to that of the nitrate of silver; six of the former being equivalent to at least a dozen of the latter.

*Impaction of Fibroid in Pelvis: Retention of Urine.*—This was a case of much interest. She presented herself on the first occasion with complete retention of urine. A catheter was with some difficulty inserted into the bladder, and between two and three pints of urine were drawn off. A fibroid tumour of the posterior wall of the uterus was found to be impacted in the pelvis, pressing upon the urethra, and so preventing micturition. The patient being placed in the genu-pectoral position, careful pressure *per vaginam* was made with two fingers; and, after some difficulty, the bulk of the tumour was pressed beyond the pelvic brim. The patient was kept quiet in bed for a few days, but never presented any bad symptoms. No recurrence of the retention of urine has since occurred, now three months. The tumour has since become abdominal, and is growing somewhat rapidly.

*Aspiration of Small Ovarian Cysts.*—In one case, the patient had been under observation for several years. A cyst of the size of a coconut had existed on the left side for over six years, causing much distress, bearing down, dragging pain, numbness and aching in the left leg, dysmenorrhœa, and sterility (?). A fine trocar was passed through the left *cul-de-sac* of the vagina, and eight ounces of clear fluid were drawn off. A few days later, the operation was repeated on the right side,



there being a cyst about the size of a large orange of more recent growth than the former. Four ounces of clear fluid were withdrawn. Six weeks afterwards, on examination, no reaccumulation had taken place. The patient had experienced no inconvenience whatever from the operation, and had quite lost her former symptoms.

*Genu-Pectoral Position in the Treatment of Uterine Disorders.*—This method, apparently but little known and seldom resorted to, proves of much service in all cases of retroversion and retroflexion, more especially when metritis also exists. In a short time, patients become accustomed to the posture, and will say that they can get more relief in one hour by resorting to this method than by lying down in the ordinary position for several consecutive hours. The uterus falls forwards in the abdomen, pressure posteriorly being thus removed; the distressing pain in the back frequently complained of in these cases disappears within a short time. In many instances, where a Hodge's pessary cannot be tolerated under ordinary circumstances, by resorting to this position for a quarter of an hour occasionally during the day, the instrument can be worn with comfort. The genu-pectoral position, also, offers manifest advantages in the replacement of the retroverted gravid uterus; also in pressing the uterus up beyond the pelvic brim in cases of impacted fibroids. In cases of prolapsus and subinvolution, much may be gained by adopting this position. In the morning sickness of early pregnancy, and in cases of prolapse of the ovary, considerable relief may be thus obtained.

*Spasms and Cramps in the Abdomen.*—These symptoms are of very frequent occurrence in females, and are generally treated by antispasmodics, tonics, and aperients. In the majority of instances, defective masticatory power, from decay or absence of the molar teeth, will be found to exist, and constitutes the *fons et origo mali*. Until this defect be remedied, medicine is powerless to prevent a recurrence of the symptoms. Defective mastication is responsible for far more suffering in women than is generally supposed. Sick headaches, neuralgia, dyspepsia, flatulence, diarrhoea, dysmenorrhoea, and many other symptoms, are often traceable to this cause. The insertion of a few artificial teeth will accomplish more than the most elaborate combinations of the *Pharmacopœia*.

*Cephalatomata: Aspiration.*—These cases are somewhat rare; two instances have, however, lately presented themselves, both in young children a few weeks old. The duration of the labour had in each case been prolonged, and the pains unusually severe. The tumours were situated over the posterior portion of the left parietal bones; the diameter of the base being about three inches. A ring of new bone, thrown out by the elevated pericranium, was plainly felt. The tumour itself was soft and elastic. A very fine trocar was inserted, and about two ounces of grumous blood drawn off by means of the aspirator. Within a week, the flaccid skin had quite recovered itself, and it was difficult to recognise the site of the recent extravasation. If nothing be done, there is frequently a distinct bony ring left for many months subsequently, causing much anxiety to the parents.

## LIVERPOOL ROYAL INFIRMARY.

A CASE OF RHEUMATIC HYPERTHYREXIA TREATED BY THE PATH.

By F. T. PAUL, L.R.C.P., Resident Medical Officer.

THE PATIENT, A. C., aged 24, was admitted into the obstetric wards of the Royal Infirmary, April 21st, 1876, under the care of Dr. Steele, to whose kindness I am indebted for permission to publish this case. She had been married three years, and had had one child, which was since dead. Her complexion was fair, somewhat florid. She was short, and of rather full habit. The trouble for which she was admitted was pain in the back and right groin and leucorrhœa. The cause of this was found to be endometritis with abrasion of the cervix. She was ordered bromide of potassium internally, which, together with local treatment, had brought about considerable improvement, when, on May 1st, she was attacked with a severe sore throat, accompanied by a good deal of fever. For this she was ordered a steel gargle and a febrifuge mixture, which was changed as the pyrexia lessened for one of chlorate of potash and cinchona. On May 23rd, before the throat had quite recovered, an attack of acute rheumatism set in, involving rapidly most of the joints of both the upper and lower extremities. The pain was very severe, though the joints were not much swollen, with, perhaps, the exception of those of the fingers; nor was there much sweating, though the pyrexia was very marked. An effluvia mixture was at first prescribed, but it was changed at the end of twenty-four hours to one containing salicin in ten-grain doses every two hours. The temperature stood as follows: May 23rd, evening 103.2 degs.; 24th, morning 104 degs., evening 104.4 degs.; 25th, morning 103.6 degs., evening 105 degs. All day on the 25th, she had

felt very ill; for, though less distressed with the pain in the joints, she was continually vomiting, and had a nauseous taste in her mouth. At 9 P.M. the temperature was taken, and one-third of a grain of morphia was injected subcutaneously, as had been the case on the two previous evenings. Unfortunately, the temperature of 105 degs. was allowed to pass unnoticed, so that it is impossible to trace with certainty the progress of the case through the remainder of the evening. The night nurse (who had charge of two separate wards) affirms that she was asleep the whole time, and that, at about a quarter to twelve, she began to snore so loudly as to disturb the other patients, upon which she attempted to rouse her, but was unable to do so. I think it rather probable that the patient was quite unobserved until the stertorous breathing came on. At 12 o'clock I was called to see her. The temperature had been 105 degs. at 9 o'clock. She was now deeply comatose, breathing eight to ten in the minute; the conjunctivæ were totally insensitive, the pupils contracted, the face pallid. She seemed to be at the point of death. On rapidly taking her temperature in the axilla, the thermometer registered 109 degs. She was clothed with several flannel wraps, and her limbs were bandaged with cotton-wool. I therefore carried her, just as she was, without delay, to the bath-room, and, placing her in the bath, turned the cold water on; then, having got rid of the clothing, we raised the temperature of the bath to 70 degs. The effect of the bath on the temperature and pulse was as follows:

Time.	Bath Temp.	Temp.	Pulse.
12.5 .. ..	70 .. ..	109 .. ..	148 (?)
12.15 .. ..	70 .. ..	107.3 .. ..	145
12.30 .. ..	72 .. ..	106.4 .. ..	132
12.45 .. ..	72 .. ..	102.6 .. ..	122
12.50 .. ..	73 .. ..	101.7 .. ..	126

She was placed in the bath at 12.5 and removed at 12.30. The temperature was taken in the vagina. After six minutes in the bath, the stertorous breathing gave place to a more rapid respiration, gradually assuming the forced noisy character that we see in some forms of brain irritation, such as commencing uræmia. At the same time, the deadly pallor changed for a more hopeful hue, and the conjunctivæ became sensitive, while the eyes so far recovered their functions as to assume a vacant stare. As a whole, the patient had changed from deep coma to a state of simple insensibility. In this condition she still remained when we removed her from the bath.

12.40. Ten minutes after the bath, her temperature was 99.1; pulse 128. There was slight twitching of the facial muscles. The limbs were not rigid.—12.50. Temperature 98.2; pulse 136. There was general muscular straining, and she was making a whining noise, with respiration.—1 A.M. Temperature 98.3; pulse 126. She was retching.—1.10 A.M. Temperature 98.2; pulse 124. She occasionally coughed up tenacious phlegm.—1.20 A.M. Temperature 98.4; pulse 140. A little brandy was tried, but, as she made no effort to swallow, it passed into her trachea and produced coughing.—1.30 A.M. The first return of consciousness was evidenced by her answering "yes" or "no" to questions put to her. There was no sign of memory. She took some brandy and water with avidity. A catheter was passed, and 55 cubic centimetres (nearly 2 ounces) of clear high-coloured urine were drawn off; it had a specific gravity of 1023, and contained a fair amount of albumen.—2 A.M. Temperature 98.8 (first since the bath taken in the axilla); pulse 116. She had just vomited.—2.30 A.M. Temperature 99.8; pulse 120. She seemed to sleep quietly. She still had the vacant stare, though not unconscious.—3.30 A.M. Temperature 99.8; pulse 116. She talked sensibly in answer to a question, but had no memory. She had a very nasty taste in her mouth. Some beef-tea was tried, but immediately returned.—4.30 A.M. Temperature 100.1; pulse 120. She could now remember my visit to the ward yesterday morning, but could recall nothing since. She was surprised to find her bandages all gone, and that she was not properly dressed.—5.30. She could now tell all that occurred yesterday up till 9 o'clock when she had the injection, after which she went to sleep and remembered no more. She had been sleeping quietly, and said that she had not been aware of anything since 3 A.M. Temperature 100.7; pulse 114. There was a little diarrhoea. Of urine, 115 cubic centimetres (a little more than 6 ounces) were collected; still albuminous.—7.30 A.M. Temperature 100.8; pulse 115. She continued to sleep, though the ward was not at all quiet.—8.30 A.M. Temperature 100.8; pulse 108. She took milk pretty well. There was no pain whatever in her joints.

The temperature was taken every hour through the day, but showed no variation greater than .2 from 100.8, until 6.30 P.M., when it rose to 101.8. At 7 A.M. it was 101.7, at 8 A.M. 101.8, at 9 A.M. 102.2; at 10 A.M. 102.4; at 11 A.M. 102.5; at 12 P.M. 102.6; at 1 P.M. 102.7; at 2 P.M. 102.8; at 3 P.M. 102.9; at 4 P.M. 103.0; at 5 P.M. 103.1; at 6 P.M. 103.2; at 7 P.M. 103.3; at 8 P.M. 103.4; at 9 P.M. 103.5; at 10 P.M. 103.6; at 11 P.M. 103.7; at 12 M. 103.8.



quinine were given. — 11.30 P.M. Temperature 103. She had diarrhoea.

May 27th. 1 A.M. Temperature 102.9. She had diarrhoea, with retching. — 2 A.M. Temperature 102; pulse 124. — 3 A.M. Temperature 101.8. — 4 A.M. Temperature 101.4. The fall continued in this way till 99.8 was reached at 9 A.M. She did not take much food; about a pint and a half of milk, a little beef-tea, and some brandy and lemonade, constituting the diet. The trunk of her body, and, to a less extent, the limbs also were becoming covered with sudamina, so that she was as red as anyone affected with scarlatina. Throughout the day her temperature did not exceed 100, nor the pulse 106. The diarrhoea continued, and she suffered from the effects of so large a dose of quinine, having the usual condition of deafness, noise in the head, nausea, and so on. She coughed up a little tenacious sputa every now and then. There were a few moist clicks at the bases of her lungs, and the first heart-sound, which up till now had been normal, was laboured and prolonged. The quantity of urine, as will be seen by referring to the table, remained small, namely, 820 cubic centimetres in the twenty-four hours, and all contained albumen.

May 28th. The temperature ranged from 99.8 to 101, and the pulse from 82 to 100. There was only a little diarrhoea. The effect of the quinine passed off, and she felt much better.

May 29th. The highest temperature was 100.6; pulse 94. She was progressing very well.

May 30th. The temperature reached 101.4; pulse 90. The sudamina were disappearing. She looked bright and comfortable. A systolic basic *bruit* had developed.

May 31st. Temperature 99.9; pulse 82 to 90. Bread and butter were added to the diet. She still took very little. A pint and a half to two pints of milk, four ounces of brandy with lemonade, and a little beef-tea.

June 1st. Morning, temperature 101; pulse 84. Evening, temperature 99.6; pulse 73.

June 2nd. Morning, temperature 99.8; pulse 76. Evening, temperature 100; pulse 90.

June 3rd. Morning temperature 98.8; pulse 70. Evening temperature 99.4; pulse 70.

June 4th. Morning, temperature 98.4; pulse 64. Evening, temperature 98.6; pulse 70. Patient convalescent.

Urine Table.

Date.	Amount. Cubic centimetres*	Sp. gr.	Reaction.	Albumen.	Urea. Grammes.
May 26.—1½ hour after bath	55	1022	Acid	Cloud	1.65
Whole 24 hours	1030	1020	"	Thick cloud	36.05
May 27	820	1023	Alkaline	"	32.8
" 28	600	1022	"	Cloud	21.6
" 29	420	1024	"	Slight cloud	16.8
" 30	600	1024	"	Trace	24.
" 31	550	1027	"	"	17.6
June 1	680	1027	"	"	19.7
" 2	620	1027	Acid	?	19.84
" 3	500	1025	"	?	16.5
" 4	430	1025	"	"	15.05
" 5	430	1027	"	None	11.825
" 6	550	1022	"	"	11.
" 7	540	1027	"	"	12.285
" 8	350	1030	"	"	10.5
" 9	510	1024	"	"	13.77
" 11	370	1020	"	"	10.73
" 13	400	1028	"	"	11.4
" 16	910	1012	"	"	10.238
" 27	620	1021	"	"	13.02

The uræa was estimated by the hypobromite of sodium method, which was checked by both a standard solution of uræa and Liebig's process. It is noticeable that, though taken alone, there would seem to be no great excess of uræa after the high temperature; still, when compared with the daily average under the existing circumstances, it was doubled or trebled in quantity. This may have been the case in some of the cases I published in the *Liverpool and Manchester Reports*, for in them the analysis was not continued, and thus the conclusion is supported that hyperpyrexia is always followed by an excessive excretion of uræa. For the rest, but little need be said about the case. Of course, the most remarkable point is, that she should have recovered at all; for, notwithstanding that I had been so deeply impressed by the brilliant results of the bath, I was almost without hope when I adopted it in this case. It was the most marvellous recovery I have ever witnessed. There is one thing, however, that ought not to be

overlooked, and that is the previous sore throat. Mr. Stocker of Guy's Hospital expressed the opinion that these cases of hyperpyrexia were not as a rule simple uncomplicated rheumatism. He thought that some more severe form of blood-poisoning was usually present, taking its origin in some pre-existing ailment, such as a sloughing sore throat, etc. Without contending that there is sufficient proof to maintain this opinion, I may mention that, of the five cases of hyperpyrexia that it has fallen to my lot to bath, registering temperatures of 110, 111.4, 107.4 (under careful observation and bath treatment), 109, and 109; three suffered previously from severe sore throat, lasting some time; one was a case of undoubted septicæmia, and the remaining one had nothing to distinguish it from ordinary acute rheumatism.

This case, though its main feature is undoubtedly the evidence that it bears to the inestimable value of the bath treatment of hyperpyrexia, is also of use as a test of the value of quinine. It seemed here certainly to check the second rise in temperature, and, though no doubt this drug is not to be relied upon whenever life is in immediate danger, we may often find it of service in checking a less important rise, or where the bath is inadmissible, bearing in mind one fact, namely, that the dose must be large, from 30 to 40 grains, smaller doses being apparently followed by negative results.

The albumen, as has been seen by the table, completely disappeared from the urine in the beginning of June; and, in the middle of July, when she left the hospital after another course of treatment for the uterine complaint, the cardiac *bruit* had also gone, thus giving the case as satisfactory a conclusion as could be desired.

## REPORTS OF SOCIETIES.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 23RD, 1877.

Sir JAMES PAGET, Bart., D.C.L., LL.D., F.R.S., President, in the Chair.

ON THE MINUTE ANATOMY OF TWO CASES OF CARCINOMA OF THE BREAST PRECEDED BY ECZEMA OF THE NIPPLE.

BY HENRY TRENTHAM BUTLIN, F.R.C.S.

THE same conditions were found in these cases as in the two breasts which were the subject of a communication to the Society last session (see *Medico-Chirurgical Transactions*, vol. lix; and *BRITISH MEDICAL JOURNAL*, January 15th, 1876): namely, dilatation of the ducts and alteration of their epithelium, with proliferation of the same; infiltration of the surrounding connective tissue with small cells; dilatation of the small ducts and acini, with proliferation of their epithelium. Further, there were, in these cases, fusion of the acini and ducts thus filled with proliferating epithelium into larger and irregular spaces; and escape of the contents, or growth of the contents, into the surrounding tissues, producing the full formation of carcinoma. With a view to discovering the origin of the newly formed epithelium in the ducts and acini, a careful comparison of the characters presented by this epithelium and by the cells in the connective tissue was made. The difference was most marked. No transitional forms could be discovered. No connection was found between the two sets of cells. It was, therefore, held, that the disease is essentially a disease of the epithelium of the mammary gland. The disease was thought to travel from the surface of the nipple and areola through certain of the ducts to the smaller ducts and acini.

Mr. HENRY MORRIS asked whether the connection between chronic eczema of the breast and cancer was commonly met with at St. Bartholomew's Hospital, where Mr. Butlin's observations had been made. It had been stated that this was the experience of Sir James Paget and others. He had investigated four or five hundred cases in the cancer-ward of the Middlesex Hospital; and in only four or five had he found eczema, but never in connection with cancer. Nor had he been able to obtain from the patients with cancer any previous history of eczema or similar affections of the breast. In July last, however, he saw a woman, aged 40, the mother of seven children, all of whom she had suckled, who had had eczema of the breast five years. She had, when seen, an ulcerated sore at the site of the nipple, with some hardening of the surrounding tissue at the upper side and some beneath. From this appearance, and the fact that there was an indurated gland in the axilla, the case seemed to be one of epithelioma. The ulceration had commenced in the form of a small vesicle on the nipple, which had burst. The breast was removed, and the woman made a good recovery. On examination, no epithelioma was found, nor any appearance characteristic of cancer. The mammary gland was atrophied, and there was a considerable deposit of fat; and the

\* A cubic centimetre=about one-twenty-eighth of an ounce avoirdupois.

surrounding induration was evidently of inflammatory origin.—Mr. HULKE said that Mr. Butlin's observations confirmed the conclusion at which he had arrived several years ago, that the various forms of cancer had an epithelial origin. He had been led by observation of facts to adopt this view in place of Virchow's. In cancer of the skin, the stages of the process could be gradually traced up to the development of pure epithelioma, with filling and choking, and consequent breaking down, of the sebaceous glands. Again, in ichthyosis of the tongue, the disease often lasted for many years as a simple hypertrophy of the natural epithelium of the organ, without any trace of epithelial cells among the muscular tissue; but, after a time, the epithelium dipped down into the deeper parts of the tongue, producing epithelioma of the organ.—Dr. THIN believed that the connection between eczema and cancer had scarcely been observed, except in London. In Paris, Hardy used to attribute eczema of the breast to itch, pregnancy, or suckling; none of which causes could have been in operation in Mr. Butlin's cases. It would be well to have detailed histories of the clinical features and treatment of the cases. Eczema, though obstinate, was a curable disease. As to the histological point, the doctrine of the epithelial origin of cancer was becoming more and more established. Cornil and Ranvier, indeed, held that cancer was developed in the spaces of the connective tissue; but they attributed the origin of epithelioma to the epithelium. He could not see ground for agreeing with their opinion of the origin of cancer; for, by making sufficient sections, the connection between epithelium and cancer could be traced. There was much difficulty as to the alleged proliferation of cells. Cornil and Ranvier believed in it, although they had not seen it; and no observers had devoted more attention to histology than they had. The question of the development of cancer would never be settled until there was an understanding as to the mode of growth of epithelium; regarding which there were two views. He remarked on the difficulty of investigating the mode in which cells grew; he had never seen a picture of a cell dividing into two, nor had he seen the process. Stricker had, indeed, described it as occurring in a corneal cell; but Dr. Thin doubted the accuracy of the observation. He would ask Mr. Butlin as to the meaning of connective tissue cells. The term had been applied both to the spaces between the bundles and to flat cells lying on the bundles. The term was ambiguous; it was given up by Krause, and had been protested against by Henle and Hughes Bennett. Another ambiguous term in use was "nucleated protoplasm". It would be better to adhere to the old term cell, qualifying it with regard to shape, etc.—Sir JOSEPH FAYRER was convinced that the various forms of cancer and epithelioma were closely related. The development of epithelioma of the lip, and that of cancer from the cicatrix of a burn, supported this view.—Mr. GASKOIN remarked that the term eczematous cancer had been employed by Bazin.—Sir JAMES PAGET said that there could be no doubt that chronic eczema or any other irritative disease of the breast might be followed by cancer. He regarded the connection as so certain, that he could prophesy in a case of irritative disease of the breast, in a person of the age at which cancer usually occurred, and with other favouring conditions, that cancer would follow. In some cases, the affection was psoriasis rather than eczema; and he had seen simple excavation of the nipple followed by cancer. He had observed fifteen or twenty cases illustrating the connection; and he would make the statement more general, and say that not only in the breast, but in any organ, the long continued presence of irritation was liable—age and other conditions being favourable—to be followed by cancer. The sequence of epithelioma on ichthyosis of the tongue was a case in point. He thought it was not an overstatement to say that more than half the cases of epithelioma of the tongue occurred in this way. The cases described by Mr. Butlin were, then, only examples of a general rule.—Mr. BUTLIN replied.

A CASE OF SLOWLY ADVANCING SCLEREMA ATTENDED BY CARDIAC AND GASTRIC DISORDERS. BY JOHN HARLEY, M.D.

The patient had been under the author's observation nearly five years. He was a man of fair complexion and of rather feeble constitution; he was in his fiftieth year, and a stonemason by trade. He was obliged to give up work in February 1872, and applied to the author a month later. Then he was unable to close the hands on account of induration of the subcutaneous tissue. The fingers were of normal size; hard like wood, dusky, very cold, and moist. The induration was marked around the wrists, so as to reduce the movements of the joints to a minimum and render them painful. The rotatory movements of the forearms were reduced to one half. The induration gradually subsided at a little distance below the elbow. The temperature of the fingers was usually from three to five degrees only above that of the external air. Touch was but very slightly, if at all, diminished. From the first, there was a tendency to gangrene at the extreme tips of

the fingers. During the progress of the case, the face gradually lost power of expression; the mobility of the skin, especially over the malar bones and forehead, decreased; and the subcutaneous tissue became firmer. The affection spread over the neck and upper part of the chest, and the aponeurosis of the external oblique became hard and unyielding. The characteristic features of the disease were best displayed on the neck. The skin in front formed a thin, hard, rigid plane, gathered into vertical ridges feeling like knotted cords; and complete extension of the head was prevented. The skin was drawn very tightly over the upper part of the chest. The sides and back of the neck were mottled red and white, with what might be regarded as interrupted lineæ atrophicæ, forming regularly arranged areolæ, measuring from half a line to three lines in width. The pink areolæ exhibited to the naked eye ramifications of minute blood-vessels, such as are seen in this locality in persons much exposed to the weather. The extremities of these vessels terminated abruptly in the margins of the colourless areolæ. These latter were of ivory-like whiteness and opacity, and usually were absolutely bloodless. The skin of the affected parts retained, as far as could be ascertained, its normal degree of sensitiveness. Apart from wasting of the muscles from want of use, and excepting the cutaneous muscles, the muscular system was free from disease. The course of the disease had been marked by increasing debility, and the patient had for the last two years experienced attacks of pain in the cardiac and epigastric regions, attended with flatulency, and ending in retching and vomiting of sour and bitter fluid. The pulse began to intermit, and, at times, the intermission was so regular that, with a regular radial pulse of 40 to 42, there were just double the number of cardiac systoles, every other one being too feeble to reach the wrist, and occasionally the secondary beats disappeared from the heart, which then beat in unison with the pulse, 40 to 42 times a minute. Some days the pulse was regular, other days very irregular. With the stomach derangement, he was liable to attacks of palpitation, and sometimes of extreme faintness. The patient was at present weakly, ill-nourished, and semianæmic. After slight exertion he "felt faint, as if he had no breath at all"; and slight prolapse of the mucous membrane of the bowel with a little mucous discharge came on. He was liable to profuse perspirations. The lungs and kidneys were normal. The author drew attention to the condition of the skin of the neck, and to cases in which the subcutaneous tissue of the palm becomes slowly adherent, as a depressed, hard, tucked in cicatrix—a condition which existed in the patient himself; and he concluded that the sclerema was merely the direct result of atrophy, *pari passu*, of the blood-vessels, and of the lacunæ and canaliculi of the connective tissue, converting the soft, moist, open and well-nourished network, into a hard, comparatively dry, close, and ill-nourished tendinous tissue. The atrophy he believed to be due to depression of vasomotor nerve-power, and that the functional disturbance of the heart and stomach was due to the same cause; in a word, that the case was one of slowly advancing paralysis of the sympathetic system generally, and that the affection was manifested at the periphery by the atrophy of the connective tissue, and nearer the centre by the grave disturbances of the circulating and digestive functions.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JANUARY 3RD, 1877.

WILLIAM O. PRIESTLEY, M.D., F.R.C.P., President, in the Chair.

*Report of the Delegate to the Philadelphia Medical Congress.*—Dr. ROBERT BARNES, the delegate representing the Society at the Congress, was elected President of the Obstetric Section. Dr. Barnes expressed his high estimation of the papers read before the Section, and his great admiration for the zeal and earnestness with which work was done. He gave a brief sketch of the manner in which the business of the Section was conducted; and concluded by expressing his satisfaction with the hospitality and kindness shown him in America.

*Specimen.*—Dr. GOWER DAVIS exhibited a specimen, which was referred to a Subcommittee for report.

*President's Address.*—The PRESIDENT delivered his annual address, which was published at page 4 of the JOURNAL for January 6th.

*Infants Nourished.*—Dr. NAEHR of Basel, read a case which occurred in an infant five days old. The parents were healthy. It was treated with bromide and iodide of potassium. Great difficulty was, however, experienced in administering medicine and food. The child died. Examination after death revealed no cause for the disease. The umbilical cord had separated on the fourth day, and no scratch or sign of injury could be discovered on the body.

*Pyæmia from Infection during Labour.*—Dr. R. read reported two fatal cases of pyæmia occurring in infants. In the first, the



only abscess formed during life was situated in the neighbourhood of the right deltoid muscle. The cord had separated on the fifth day, and the skin around it had continued red. The child died on the nineteenth day. After death, general peritonitis was found; and the umbilical and portal veins were inflamed and full of pus. The second case presented several abscesses in the wrists and the feet; the right lower limb was gangrenous as far as the hip. The internal organs were healthy, even the liver; and the only lesion found to account for the disease was purulent inflammation of the first inch of the umbilical vein.

*Case of Pyæmia, with Extensive Purulent Deposits in a New-born Infant.*—Dr. EDIS described a case. A feeble prematurely born child was attacked with pyæmia about the end of the first week of life. Abscesses formed in the right shoulder and in the right lower limb. Death took place on the eighth day. The *post mortem* examination revealed local peritonitis, inflammation of the umbilical vein, which contained pus, and plugging of the right femoral vein.

#### HARVEIAN SOCIETY OF LONDON.

THURSDAY, DECEMBER 21ST.

FREDERICK COCK, M.D., President, in the Chair.

*Syphilis.*—Mr. EDMUND OWEN brought forward a communication on some cases of syphilis. In the first case, there was a sore on the prepuce, soft to the touch and irregular in outline. It afterwards became indurated, and, though mercury was given, a crop of secondary symptoms appeared. According to text-books there should have been two sores and not one. The second case also was at first a soft sore which assumed a phagedenic character; then it got nearly well, when it became indurated, and the gland in the groin became enlarged. There were soft chancres on the penis. It was said by some authorities that when there was sloughing there was no secondary syphilis, but in this case it was not so. Sloughing was much more rare since the recent Act was passed.—Dr. CHARLES DRYSDALE spoke of the unity of chancres. The Americans and French were dualists. There were apparently two factors in these cases. There was enlargement of the glands in the groin, and the incubation period. There might have been two infections; first, the soft sore showed itself, and then, after a month or so, the hard sore developed itself. Soft sores had disappeared from Paris at present.—Dr. GIBBON asked if the carbolic acid treatment might not have caused the induration.—Mr. OWEN replied.

*Harveian Lecture.*—Mr. LANE read his second Harveian Lecture on Syphilis.—Dr. JAMES POLLOCK proposed a vote of thanks to Mr. Lane for his calm judicial *résumé*. This was seconded by Dr. J. C. LANGMORE, and carried unanimously.

THURSDAY, JANUARY 18TH.

T. CARR JACKSON, F.R.C.S., President, in the Chair.

On taking his seat, the new President thanked the Society very much for the honour they had done him, the more so that it was unsought. He trusted to be able to maintain the dignity and sustain the character of the discussions.

*Hermaphroditism.*—Dr. DE GORREQUER GRIFFITH made a communication on hermaphroditism. The first child had been shown to the Medical Society, and what had been thought to be scrotal integuments were found to be labia. The apparent penis was not perforated, but an urethral orifice was found beneath. There were two labia minora. The child had been registered as a male. On its death, an examination of the pelvis was made, and an uterus and ovaries were found. The second child was also registered as a male, but was a female. The deformity in this case was attributed by the mother to getting a fright in the monkey-house in the Zoological Gardens.—After some remarks by the PRESIDENT, Messrs. CASSON and A. THOMPSON, Dr. FITZPATRICK defended the theory of maternal impressions as having much foundation in fact.—Mr. WESTMACOTT related the case of a boy who was brought up to the age of fourteen in a home for girls, before his real sex was discovered. He also knew a case in Paris where a widower was found, on *post mortem* examination, to have a uterus and ovaries.—The PRESIDENT remarked that orthopædic practice furnished many curious cases of deformities of other organs.—Dr. MILNER FOTHERGILL then gave a brief account of *Caroline alias Carl Hoffman*, the most perfect case of hermaphroditism ever recorded.—Dr. GRIFFITH replied.

*Goa Powder.*—Dr. A. HARRIS, THOMPSON read a paper on Goa Powder as an Internal Remedy. This powder, also known as "Indian mygmyon powder," was of unknown origin. It possessed such irritant

properties that those who ground it had to wear veils to protect their eyes, conjunctivitis being readily set up by it. When used externally, it was mixed with oil or water. Chrysophanic acid was known to be purgative. Goa powder was emetic and purgative. Its action was delayed by a full stomach. The motions were dyed by it. It was comparatively a more certain remedy than castor-oil. For a child of ten, six grains were enough, and fifteen for an adult. It brought away quantities of bile. It would be found to be an useful emetic purge. It did not cause vomiting by any reflex cerebral action.—Dr. RADCLIFFE CROCKER spoke of its use as an external remedy. It was apt to produce a coppery rash on the face when applied to a spot on the head. It also united with the alkali of soap and dyed the hair of a purplish brown. A case illustrating the rash was shown.—Dr. TILBURY FOX said it sometimes dyed the skin of the neck and face a dark mahogany colour, which constituted a great objection to its use.—Dr. GRIFFITH spoke of personal experience of its use in India.—Dr. THOMPSON replied, and the meeting adjourned.

#### CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 12TH, 1877.

Sir WILLIAM JENNER, Bart., M.D., D.C.L., F.R.S., President, in the Chair.

*Cases illustrating the Treatment of Rheumatic Fever and some other Febrile Diseases by Salicin and its Congeners.*—Dr. HERMANN WEBER, after alluding to the rapid establishment of the reputation of these remedies in the treatment of rheumatic fever, to the remarkable and uniform success of salicin in the hands of Dr. MacLagan and many of his followers, and to a similar success of salicylic acid in the practice of Stricker, Broadbent, and others, and also to some failures of these remedies in the hands of several observers, gave the result of his experience as well in rheumatic fever as in some other febrile affections.

I. He reported fifteen cases of *rheumatic fever*, eight treated by salicin, four by salicylic acid, and three by salicylate of soda. As he had not observed any essential difference in the effects of the three remedies, he analysed the results of the fifteen cases together. In eight of them, mostly mild cases, the disease was checked within two to four days, without any unfavourable accidental effects of importance, by doses of fifteen to twenty grains, at first given every hour, afterwards every two or three hours; in one case, the attack was rapidly overcome, but all the phenomena of serious collapse, accompanied with delirium, attended the complete defervescence, although only a comparatively moderate dose had been given, viz., two hundred and fifty-five grains of salicin in thirty-four hours; in one, of subacute type, three relapses occurred, by which, though each single outbreak was rapidly subdued by the remedy, the duration of the disease extended over five weeks; in three others, the first attack was checked by the remedy, but the relapses which occurred had to be treated without salicin or its congeners on account of the vomiting produced by them; in one case, the remedy caused vomiting almost from the first, before it had exercised any influence on the disease, and another plan of treatment had to be adopted; and in one case, finally, the disease rapidly increased in severity and became complicated with pericarditis, in spite of large doses of the remedy given in short intervals during five days.

II. Of *gonorrhæal rheumatism*, there were four cases, attended with slight pyrexia (99 deg. to 101 deg. Fahr.) so treated. One was sick after every dose of either salicin, salicylic acid, or salicylate of soda; one took for two days fifteen grains of salicin every two hours, then for three days twenty grains of salicylate of soda every two hours, without obtaining more benefit than rest alone produces in most cases; the remedy had then to be discontinued on account of nausea and giddiness; in a third case, the pain and swelling in the joints and the pyrexia were much relieved after two days of this treatment, while the swelling of the joints and the state of the urethra were not materially influenced; in the fourth case, after three days' use of salicylate of soda, twenty grains every two hours, the pyrexia, pain, and swelling were much reduced, the state of the urethra remaining almost unchanged.

III. Two cases of *acute gout*, i.e., gouty inflammation of the knees, feet, and hands, accompanied by pyrexia (99.5 deg. to 101.5 deg. Fahr.), were not materially benefited by either salicin or salicylate of soda.

IV. *Typhoid fever*: four cases. In three of them, of average severity in young adults of good constitution, salicylate of soda, in doses of forty grains three or four times a day, or sixty grains twice a day, exercised a distinctly antipyretic influence, causing diminution of temperature from 1 deg. to 2½ deg. Fahr., together with a slight reduction in the pulse-rate, and the same was the case when enemata con-



taining one hundred and twenty grains were given; when sickness and prostration in two, and intolerable nausea in the third case, rendered the discontinuation of the remedy necessary, the pyrexia again increased. The duration of the whole disease was probably not materially influenced, but the drowsiness, the tendency to diarrhoea, and the dryness of the tongue were diminished while the patients were under the influence of the remedy, and nourishment was taken more readily. In the fourth and fatal case, the symptoms were excessively grave from the beginning (stupor and vomiting), and salicylate of soda was given only on a few days, with the effect of diminishing the temperature, but neither the pulse-rate nor the grave nervous symptoms.

v. In two cases of *ague*, one of the tertian and one of the quotidian type, neither salicin in thirty-grain doses three times a day nor salicylate of soda in sixty-grain doses three times a day had any curative effect.

vi. In two cases of *hectic fever* in consumptive patients, two thirty-grain doses of salicin given in the forenoon had several times the effect of diminishing the intensity of the evening pyrexia, but in one of the cases the remedy had to be discontinued on account of the prostration produced by it; in the other, it seemed to lose its effect.

vii. In a case of *chronic pneumonia* of the lower part of the right lung, a single ninety-grain dose of salicylate of soda administered on several mornings reduced the evening pyrexia very considerably.

viii. In a case of acute *cynanche tonsillaris* (quinsy), thirty-grain doses of salicylate of soda were given every three hours, from the evening of the second day, followed by defervescence towards the evening of the third; but as this complaint occasionally terminates on the third day without medicine, no inference can be drawn from a single case.

ix. *Scarlet fever* in a boy, aged 12, was treated from the first day of its manifestation (by sore throat and pyrexia) with twenty-grain doses of salicylate of soda every two hours; on the second day, the pyrexia was diminished, and, on the fifth day, there was complete apyrexia, followed by a satisfactory recovery.

x. In a case of *polyarthritidis scarlatinosa* (scarlet fever rheumatism), the joint-affection manifested itself on the seventh day from the beginning of scarlet fever symptoms, and was entirely checked within less than three days by twenty-grain doses of salicylate of soda every two hours; but here, again, the experience of isolated cases does not justify sanguine inferences.

In comparing his own experience with that of others, Dr. H. Weber arrived at the following inferences. 1. Salicin and its congeners are powerful *antipyretics*, equal to quinine, with the exception of the effects of the latter on *ague*, against which they are comparatively powerless. 2. They are of more general value in the treatment of *rheumatic fever* than any remedies hitherto tried, although they are not applicable in all cases, and thus not always able to prevent complications. 3. Their antipyretic influence may be usefully employed in other febrile diseases, such as typhoid fever, in combination with other modes of treatment, such as alcohol and bathing. 4. Their use is occasionally attended with accidental symptoms, some of these being unimportant, as noise in the ears, various degrees of deafness, giddiness, nausea, abundant perspiration, and possibly a cutaneous eruption; while others are graver, such as vomiting after every dose, delirium, and collapse, pointing to the necessity of caution and watchfulness, especially in states of weakness of the heart and exhaustion. 5. There is no essential difference in the action of the three remedies mentioned; but salicylate of soda, being more soluble and more easily absorbed, exercises a more rapid effect, but requires to be given in somewhat larger doses, than either salicin or salicylic acid; amongst the two latter, salicin possesses in so far the preference, as the taste is less disagreeable, and as it is more soluble than salicylic acid, which, in its undissolved condition, seems to be able to give rise to local irritation of the mucous membrane of the fauces and stomach.

A Case of Acute Rheumatism treated by Salicylate of Soda: *Intermittent Scarlatina and Puerile Scurfing*.—Dr. CANNY read notes of this case. A footman, aged 33, was admitted into St. George's Hospital on June 1st with rheumatism of four days' duration. He was anemic, and nearly all his joints were painful. The knees and right wrist were red and swollen. The heart was normal. The temperature reached 103.8 deg. on the evening of June 2nd, on which day he was given half a drachm of salicylate of soda every two hours, beginning at 6 P.M. This was reduced to every four hours next day, as he complained of giddiness. Pain was much relieved, and the temperature fell to 101 deg. On the 5th, he was quite free from pain, and the temperature was normal. He continued well till the 7th, when he had shivering sickness and headache, with slight sore-throat. The throat was worse next day, the soft palate, uvula, and tonsils being of a brilliant red. On this day also, he had a bright scarlet rash on the neck and chest. He complained also of great itching of the arms and legs,

which were seen to be covered with raised red patches varying in size and shape. He was now given perchloride of iron. The erythematous patches became covered with a copious crop of vesicles resembling herpes, which soon dried up. The rheumatic pains reappeared on the 9th, and, on the 14th, were as severe as on admission, and the temperature rose to 102.6 deg. The sore-throat, rash, and itching having now subsided, he was again ordered salicylate of soda as before. This again lowered the temperature and removed the pain; but, on the 16th, the erythematous eruption reappeared, with great itching; the patches again became covered with vesicles, but much more scantily than before. Notwithstanding this and also some nausea, the salicylate was persisted in, and, on June 19th, the eruption had almost disappeared and there was general desquamation, more especially of the hands. The urine was free from albumen. As he was again free from rheumatism, he now took gentian and magnesia instead of the salicylate; but the temperature gradually rose again, and, on the 23rd, he had a sharp relapse. The salicylate was resumed, and again the temperature fell and the pains left him in three days. On this occasion, he again complained of itching of the skin, but no eruption whatever appeared. He continued well till July 13th, when another relapse was treated in the same way, without any skin-eruption. He was discharged well on August 1st, the heart being normal. The case illustrated the antipyretic and antirheumatic action of salicylic acid and its salts, but was hardly favourable, as relapses occurred so frequently. It was a question whether these were due to the intercurrent of scarlatina; but the fever had probably no share in their production, as rheumatism was the initial illness, and relapses of equal severity sometimes occurred in ordinary rheumatism. The curious herpetic eruption was plainly caused by the salicylate of soda. This was certainly not a frequent toxic effect of its internal administration, but seemed to be not uncommon after external application of the acid, as shown by the cases communicated to the Society last year by Mr. Callender. A gradual tolerance of the drug seemed to have been established in the case under consideration, as the second eruption was not so severe as the first, and the third and fourth administrations were not followed by any eruption at all.

Dr. JULIUS POLLOCK had used the salicylate of soda in about twelve cases, with an almost uniformly good result. In one case, which was fatal, the drug was discontinued and the ice-pack begun, but the man died. In all the other cases, the patients had derived great benefit from the salicylate. The temperature generally fell to almost normal in from two to four days. Large doses were not requisite. Sickness had been caused from fifteen grains given every hour. His cases had been principally of the subacute variety of the disease. In one man, who had pericarditis, the salicylate of soda was used, and the temperature and pulse fell, and he had no relapse. Dr. Pollock would suggest that the remedy was essentially antirheumatic. He had recently had a chronic case of low fever of a rheumatic type, without elevation of temperature, in which salicylate of soda, in doses of twenty grains thrice daily, were given, and after three days the patient wrote to say he was quite well. Salicine had not answered the hopes first formed of it. Salicylic acid had not in his hands had a good trial, because salicylate of soda had cropped up, and he had used that remedy. He believed salicylate of soda would eventually take a high place in the treatment of rheumatism.—Dr. ALTHAUS could not join in the same terms of commendation of salicine and its congeners. In some cases, much harm had been produced by these drugs. In one case, peculiar symptoms had been caused which he had not seen in any other case of rheumatic fever. He had seen a skin eruption come on in a case so treated, which appeared first as a herpetic rash on all parts of the body except the face. It afterwards became pemphigus, containing serum. Iodide of potassium was then given, and the eruption ceased. The patient also had peculiar intestinal symptoms, and the mouth and fauces were covered with aphthae, preventing proper feeding; and there was hæmorrhage from the bowels. These symptoms Dr. Althaus had attributed to the drug, and had for some time been very careful in its use.—Dr. WHIPHAM said that cases of rheumatic fever, formerly sent to the St. George's Convalescent Hospital at Wimbledon, had a relapse, especially if sent in the winter months; now cases which had been first treated with salicine and its congeners, and which were sent there, had no relapse. He himself had seen no difference in the result whether salicine, salicylic acid, or salicylate of soda were used. The temperature in his cases had almost always come down at once. In a boy who had a pericardial rub on admission, the rub also soon ceased. The boy, however, had noises in the head when salicylate of potash was used; but the salt was found to have a smell of carbolic acid, and the noises might have been due to that contamination.—Dr. ROGERS had recently used salicine in doses of ten grains every



two hours in the case of a seventh attack of acute rheumatism in his own child; on that occasion, the child ran through the attack much more rapidly than on former occasions. Salicylic acid he had been obliged to discontinue in two or three other cases, because of the irritation it caused in the throat and bowels; he then returned to salicine, and found that the patients received all the advantages of the acid without its drawbacks. He had seen no secondary eruption or other symptom due to salicine. In one case of friction-sound of the heart, the sound ceased when the remedy was used.—Dr. SUTRO remarked that in cases of rheumatism with great debility the salicine subdued the fever and raised the strength. In one case where the temperature was very high, the salicylate of soda appeared to reduce it much more quickly than did salicine itself. Was the good effect produced by the salicylate of soda due to the salicylic acid or to the soda in that compound? Soda itself was known to be a good anti-rheumatic remedy.—Dr. BROADBENT had treated many cases of both chronic and acute rheumatism with salicylic acid and salicylate of soda, and his conclusions were similar to those detailed by Dr. Weber. He gave six doses of twenty grains of salicylic acid or salicylate of soda for six consecutive hours on the first day, and repeated them on the second day. The almost invariable result had been that the patient had greatly improved. If the remedy were then quite discontinued, a relapse often occurred; but, if twenty grains were then administered three times a day for a time, there was no relapse. If there were pericarditis before the treatment was begun, no benefit followed the use of the salicylic acid. In one case, hyperpyrexia was set up, and the patient only recovered by the use of the cold bath. In one case, he had to discontinue the salicylic acid treatment before the first six doses had been given, because of the supervention of delirium; but the four doses already then taken had relieved the patient, and the modified dose begun as usual on the third day quite cured the patient. In another case, it being the fourth attack with the patient, she went into acute mania. In subacute and chronic forms of the malady, the patients often had relapses.—Dr. DUFFIN said that in none of the cases yet related had the rheumatism succeeded scarlatina. In one of his patients, a little girl, on the eighth day of scarlatina rheumatism came on, and, on the second day of the rheumatism, her knees, hips, shoulders, and other joints, were affected. Her temperature was 103 deg.; and ten grains of salicine were then given every hour. The child bore the drug well; at the end of fourteen doses, she was relieved, and, after eighteen doses, was comparatively well. The fall of temperature during that time was only about half a degree. On the third day, the drug was given every second hour, and the joint-trouble kept off, although the temperature did not fall below 100.5 deg. until the sixteenth day. The salicine had an immediate effect on the joint-affection, but not on the temperature.—Mr. GEORGE BROWN said every one was casting about for a new treatment of rheumatism. He himself had never, however, seen any case which had caused anxiety, although he had seen some scores of cases. All had eventually recovered. Occasionally, heart-trouble cropped up even under the use of all drugs. Alkalies had not yet been given in sufficiently large doses, and until specific effects had been produced. He gave details of cases treated with salicylic acid, which had done ordinarily well.—Sir WILLIAM JENNER had seen, with Mr. Barker and Dr. Martin, a case of severe burn treated with lint dipped in solution of salicylic acid, in which there ensued a general copious eruption, which it was at first thought might be scarlatina. It was difficult to say whether it was so or not. Dr. Martin wrote then to Mr. Lister and others, to ask if such eruptions were caused by the acid, but could not learn if such an occurrence had been seen. The cases now related would show that the use of salicylic acid might produce eruptions. Formerly, he had failed to have a remedy for rheumatism; he had given the usual drugs, in deference to the judgment of others, not because he anticipated good from them. He had hoped daily that a new class of cases might occur in which the conventional drugs might be of benefit. During the last three months, however, his scepticism of the value of remedies in rheumatism had considerably diminished. He had seen very little improvement from the use of salicine itself. But by salicylic acid he thought great benefit had been produced—benefit which had not ensued from any drugs previously employed by himself. He thought a case for salicylic acid and its compounds, the salicylates of potash and soda, had been made out, and that they were deserving of patient use.

It is announced that Dr. Morier, Surgeon of the *Antelope*, has applied for permission to resign his commission in Her Majesty's Service, and that the Admiralty telegraphed to the Commander-in-Chief in the Mediterranean that this officer might be discharged forthwith.

## BIRMINGHAM AND MIDLAND COUNTIES BRANCH : PATHOLOGICAL AND CLINICAL SECTION.

NOVEMBER 27TH, 1876.

T. H. BARTLEET, M.B., F.R.C.S., President, in the Chair.

*Lungs from a Case of Acute Emphysema in a Child.*—Dr. WARNER showed the lungs from a child aged 4. Acute emphysema of both lungs appeared whilst the patient was under observation for pleuritic effusion. This effusion became absorbed. During life, the chest gradually enlarged, becoming permanently distended. This was accompanied by cyanosis and irritable cough. At the necropsy, both lungs were universally emphysematous, excepting a few patches, where there was collapse. There were dilated cells from one-sixteenth to one-half of an inch in diameter. The bronchi were large; there was no catarrh, no tubercle. There were recent adhesions of the left lung. The other organs were healthy. Such a condition appears to be rare in the absence of pertussis or severe bronchial catarrh. The cause in this case was not determined.

*Cancerous Tumour of the Brain.*—Dr. RUSSELL exhibited a specimen. A report of it appeared in the *BRITISH MEDICAL JOURNAL* for December 2nd, 1876.

*Detachment of Retina.*—Mr. PRIESTLEY SMITH exhibited three specimens of detachment of the retina preserved in glycerine jelly. The detachment was due in each case to long-standing disease of the choroid and ciliary processes. The first specimen showed partial detachment, with atrophy, pigment-changes, and colloid cells in the choroid. The second specimen showed almost entire detachment of retina, excepting at the optic disc and ora serrata, and at one other spot where it was fixed to the choroid by inflammatory products. The third specimen showed the retina contracted to a thin cord attached at the optic disc and the ora serrata; ossification had commenced in the inflammatory effusion from the choroid. In each case, the eye had been long blind, and was causing sympathetic irritation at the time of its removal.

*Fibrous Polypus from Posterior Nares.*—Mr. MESSITER (Dudley) showed a fibrous polypus removed from the right posterior nares by ligature. The growth was about the size of a walnut.

*Thermic Caution.*—Mr. WILLIAM THOMAS showed the *thermo-cautère*.

*Aspiration in Pleuritic Effusion.*—Dr. BALTHAZAR FOSTER opened a discussion upon aspiration in pleuritic effusion. He remarked that, although the operation of paracentesis thoracis is upwards of two thousand years old, the indications for its performance are still in a measure uncertain. Experience had led him to the conclusion that, in cases of pleuritic effusion, expectant treatment is entirely untrustworthy. Active rational is alone useful. Dr. Foster divided the cases of pleuritic effusion into several classes.—1. *Acute Cases.* In these, the use of the aspirator is forced upon us by certain urgent symptoms, especially dyspnoea. Here, the operation is a means of saving life, not of treatment; for a chest full of fluid, dyspnoea being absent, is not an indication for aspiration. Certain adynamic cases, however, occur where the fluid soon becomes purulent; here, a preliminary opening should be made, and, if pus be present, aspiration is the most appropriate treatment.—2. *Cases of over three weeks' duration where fever has abated.* Here, the operation should be performed to relieve the morbid condition and expedite recovery. In such cases, the lung becomes covered with a fibrinous deposit, and absorption of fluid is impeded. No dependence, therefore, can be placed upon the use of diuretics, blisters, and other general remedies.—3. *Chronic pleurisy, with exacerbations.* Here, if the chest be from one-half to two-thirds full of fluid, and the disease have lasted over two months, aspiration is decidedly indicated.—4. *Empyema.* Pus being present, the rule should be evacuation.—Dr. Foster then compared the various methods employed for emptying the pleural cavity. He recommended in children repeated aspirations, with, in some cases, washing out the pleural cavity with carbolic fluid. In other cases, and especially in adults, Dr. Foster preferred two incisions through the chest-wall and the use of drainage-tubes; and, if this should not be sufficient, a free opening and a thorough washing out of the pleural cavity. Some cautions, Dr. Foster added, were necessary in aspirating. First, the operation should not be too rapidly performed; second, the quantity of fluid allowed to escape must be carefully watched, and must depend upon the condition of the lung and the state of the patient.—Mr. FURNEAUX JORDAN spoke more particularly of empyema. He mentioned Dr. Bowditch's method, and said that he preferred one opening, the guide for which was, taking the breathing line upon the healthy side, half an inch above this; and from this, half-way, on a level with the angle of the scapula. Into this opening should be put a drainage-tube with spiral wire, to keep open



the space between the ribs. In aspirating, instead of allowing a great rush of fluid, let the piston be gradually withdrawn; this insures slower emptying and less disturbance. He asked the degree of importance to be attached to the ingress of air.—Mr. WILLIAM THOMAS narrated a case in which bulging between the ribs showed the presence of pus; an incision was made under carbolic spray, a small quantity of pus was allowed to escape, a drainage-tube inserted, and the case was successful. He held that, where the lung is bound down and contracted, great gentleness should be exercised in the use of instruments; and, above all, no air should be admitted.—Dr. JAMES JOHNSTON agreed with Dr. Foster in the treatment of acute cases. He thought that, in all cases, great attention should be given to the diathesis of the patient; for example, in the rheumatic diathesis, there is but small tendency to the formation of pus, and absorption is rapid; hence, more may be hoped from medicines before proceeding to operation. In strumous cases, the contrary would hold good. In the second class of cases mentioned by Dr. Foster, he would tap if no improvement occurred for ten days. In long cases, he would aspirate first; then, if not benefited, open freely. He approved of Dr. Bowditch's method.—Dr. TOTHERICK (Wolverhampton) agreed with Dr. Foster, but would ask, Why use the aspirator? Pressure upon the collapsed lung must injure it. He thought he was only justified in having so much fluid removed as would run away propelled by the expansion of lung or collapsing side of chest. He quoted a case in illustration.—Dr. RICKARDS recommended operation, especially in chronic cases, where there had been long retention of fluid, no matter what sort of fluid. He had two objects in view; to get rid of fluid as *slowly* and as *completely* as possible. In the non-phthisical variety of cases, this procedure was very successful. In the phthisical cases, a few recovered where the phthisis was of pneumonic origin. He considered that the aspirator could not sufficiently empty the pleural cavity; but was sometimes useful in cases where there was no immediate bad symptom, but where life could only be prolonged for a few months.—Mr. SAMPSON GAMGEE remarked that these cases illustrated aptly the unity of medical and surgical practice. Medicine and surgery form one science. He thought drainage-tubes were not sufficiently used; in support of this, he narrated a case. In his opinion, a common large-sized trocar was sufficient for all puncture purposes. In cases *in extremis*, it was ready to hand and should be used.—Mr. T. H. BARTLETT could not agree with Dr. Rickards, that the pleural cavity could not be emptied by means of the aspirator. The aspirator could be passed anywhere and any number of times without danger. He could not see the supposed advantages of Bowditch's method.—Dr. FOSTER, in reply, summed up the various opinions expressed, and said that he thought openings into the pleural cavity too low down were bad, because the egress of fluid was apt to be hindered by thickened false membranes.

## GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, DECEMBER 12TH, 1876.

JOSEPH COATS, M.D., President, in the Chair.

**Malignant Pustule.**—Dr. H. CAMERON read from his hospital-ward journal the notes of a case of malignant pustule or splenic apoplexy. The patient was a worker in a hair-factory, and the pustule made its appearance first on the lower lip. The further details will be published separately.—Dr. FINLAYSON quoted a letter from Professor McCall of the Veterinary College, in which the latter gentleman stated that he had never seen a case of splenic apoplexy; it was a rare disease in this country, and did not affect cattle which were tied up in byres; of the few cases in the last fifteen years, none had occurred in the West of Scotland; it had been supposed that splenic apoplexy was caused by the use of meat of animals which had died of pleuropneumonia, but experiment had shown to Professor McCall the inaccuracy of this view.—Dr. PERRY referred to two cases in which were some symptoms resembling those of the case read. The patients were children, who were sleeping in a loft over the stable. There was a discharge from the nose, and an eruption of minute pustules over the body. Death took place after a lingering illness. He classed the disease as farcy rather than as malignant pustule.—Dr. DUNLOP said that some years before he had examined the body of a girl who had been working in a hair-work; and described appearances which left no doubt in his mind that the case had been one of malignant pustule, although it had been set down as erysipelas.—Dr. CHRISTIE recollected a peculiar case in his practice in East Africa, which was called at the time erysipelas, but which he had no difficulty in classing with the case of malignant pustule read.

**Hydrophobia.**—Dr. FORREST gave a history of a case of hydrophobia which occurred in his practice, and which he subsequently placed under the care of Dr. Dunlop in the surgical wards of the Royal Infirmary.

The patient was an engineer, aged 40, who had been bitten on the right thumb by a retriever bitch. From inquiries which Dr. Forrest made, it was clear that the bitch had been vicious, and that she was rabid at the time that she bit her master. She had a litter of pups; one of these was bitten, and it, too, showed signs of rabies before it died. The patient was bitten on July 22nd, 1876; and the wound, which had been freely cauterised with nitrate of silver, healed up, but reopened just before the symptoms began to show themselves on September 24th. In the interval between the bite and the first symptoms of the malady, he read in the newspapers the account of the case of hydrophobia in Falkirk, and that upset him very much. *It was never off his mind.* The symptoms began by an itching in the wound and uneasy tingling sensations, which extended up his arm to his neck and head. These continued for a day or two, when he became excited, frightened, and talkative, more especially as he discovered that he could not swallow liquids without some difficulty. On September 27th, he was admitted into the Infirmary, where he died on October 1st from exhaustion. For several days, he was in a condition of acute mania; and for the greater part of the time was kept under the influence of chloroform. Ice to the head and neck, chloral, and bromide of potassium in large doses, had no effect upon the disease.—Dr. FOULIS stated that the *post mortem* examination yielded negative results. A microscopic examination of the nerve-centres failed to show the nuclear proliferation described by authors in the sheaths of the vessels. He inferred, therefore, that this lesion (which was found in some sections by Dr. Coats) was a very scattered one, and that it affected only a few of the vessels.—Dr. PATTERSON related details of a case of hydrophobia which was under his care in the Western Infirmary.—Dr. COATS spoke of the *post mortem* appearances, which were, to the naked eye, quite negative. On microscopic examination, however, he found a number of groups of inflammatory cells in the sheaths of blood vessels, both in the nerve-centres and near the seat of the scar of the bite. These groups of cells he looked on as effused from the blood-vessels into the tunica adventitia, and even into the surrounding tissue. Some of the ganglion-cells in the nerve-centres were padded round with similar groups of cells. He thought there was here evidence of irritation in the scar, and from it to all parts of the body per the blood-vessels. The lesion was, therefore, a vascular lesion; and not, as in tetanus, where inflammatory traces had been noticed in the course of the nerves, a nervous lesion. The examination did not extend to the whole of the tissues of the body; and it was, therefore, only possible to infer that the lesion affected other organs besides the nerve-centres and the vicinity of the scar, but observers had recorded similar perivascular lesions in the liver and in the salivary glands (Klebs), etc. It might be argued that, the lesion being generalised, it could be of no local importance; but the same thing was seen in tuberculosis, where a generalised lesion produced specially marked nervous symptoms as soon as it attacked the sensitive nerve-centres. The period of latency was another point of analogy to the case of tubercle, which often lay localised for years, and then suddenly developed itself as a general lesion. The generalised nature of the lesion explained to Dr. Coats's mind the varying symptoms of the disease—the mania from affection of the cortex, the hyperæsthesia and spasm from affection of the central parts of the brain, the hyperæsthesia and heightened reflex action over the surface of the body from the implication of the peripheral vessels.

## WEST KENT MEDICO-CHIRURGICAL SOCIETY.

JANUARY 5TH, 1877.

THOMAS CREED, M.D., President, in the Chair.

**Spasmodic Neuroses.**—Dr. HILTON FAGGE read a paper on some spasmodic neuroses. He commenced by saying that the main object of this communication was to frame definitions of the less common spasmodic affections, which might be both more general in their scope and, at the same time, more accurate than those given by writers on the subject. The author accordingly gave brief descriptions of the following:—1. Solitary spasm (equivalent to convulsive tic); 2. To-and-fro spasm, or paralysis agitans; 3. Cumulative spasms, represented by clonic wry-neck, but including similar affections of other parts of the body; 4. Co-ordinated spasms (chorea and athetosis); 5. Spasms connected with special voluntary movements (writers' cramp and many other varieties of spasm); 6. Tonic spasms running a chronic course. Of these last, Dr. Fagge endeavoured to show that, with the exception of tetany and the spasms occurring in paralysed limbs, they were always connected with hysteria or dependent on reflex irritation. Under the former head, he referred to cases of tonic wry-neck, and to the contractures of which Charcot has given full description; under the latter, he cited cases of trismus and tonic wry-neck due to affections of the teeth.



BRITISH MEDICAL ASSOCIATION:  
SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, JANUARY 27TH, 1877.

APOPLEXY AND DRUNKENNESS.

WE have again and again written in these columns on difficulties in the diagnosis of the causes of coma, and in particular we have insisted that it is sometimes not only difficult, but impossible, to tell whether a patient is comatose from drink or from intracranial hæmorrhage. Especially have we insisted, that in some cases of intracranial hæmorrhage there is a stage of excitement closely simulating the "uproariousness" producible by non-comatousing doses of alcohol. This is a clinical fact not at all widely realised. We put it once more thus. If a man be found staggering about in the streets, or sprawling in the gutter swearing, and if he struggle violently and perhaps remonstrate in words with those who are trying to help him, or with the policeman who is taking him in charge, the probabilities are that he is only very drunk. But he may be the subject of some speedily fatal intracranial lesion; or he may be an epileptic, who has become confused or maniacal after one of his paroxysms. Once more, too, we say that, whether a man be comatose or uproarious, his smelling of drink is not trustworthy evidence that he is suffering only from drink. For, supposing that by some means we could ascertain that the patient *was* drunk, he might have fallen and have struck his head, and have therefrom suffered hæmorrhage in the arachnoid "cavity"; a thing often caused by a very *slight* injury.

Smelling of drink is most untrustworthy evidence, for the obvious reason that the average Englishman takes brandy, or his friends administer it to him, for many kinds of symptoms, and for those premonitory of cerebral hæmorrhage among others. It is also administered on good grounds by experienced medical men early in cases which turn out later to be cases of fatal brain-disease. We once saw an old lady who was then comatose from fatal brain-disease; we were told that she had been taken ill at a dentist's and brandy was given her. As she was being removed into her carriage, her appearance was that of a drunken person; the street lads cried out, "See the drunken lady". Had this lady gone to the dentist's alone, and had she become seriously ill a little after leaving his house, it is very likely that, instead of dying at home with her son and daughter at her bedside, she would have died in a police-cell; for would she not have smelled of the drink the dentist had given her? But to return to the remark that a patient who has fatal intracranial hæmorrhage may swear and struggle. We wish to say that, besides the indefinite state we have called uproariousness, we sometimes witness definite actions surviving in deep and fatal coma not caused by alcohol; the lady whose case we have just mentioned, when otherwise deeply comatose would, when a sponge was put in her hand, sponge her face with it. The writer has recorded the case of a man who, when comatose from cerebral hæmorrhage speedily fatal, occasionally twirled his moustache elaborately. Sometimes we find actions still more definite, less automatic, in patients fatally ill from intracranial hæmorrhage. Thus, he may make replies to questions put to him, which in some degree he evidently understands, or oppose simple procedures intended for his benefit. A man, aged 68, was found two or three hours after leaving a workhouse in the streets insensible by a policeman. Although this man smelt strongly of rum then, and for several hours after, the policeman acted rightly and

took him to a hospital. Now this patient, who died of hæmorrhage in the pons Varolii, could, when admitted, move all his limbs, although the right side was paralysed later on; what is more to our purpose, he made the definite reply when asked his name, "What's that to you?" Moreover, he put out his tongue when told. This case was noted by Dr. Woodman, to whose valuable papers on Alcohol Poisoning, *Medical Mirror*, July 1865 and February 1866, we take this opportunity of referring our readers. A patient, fatally ill from injury to the head, under Mr. Hutchinson's care, replied, when asked to put out his tongue, "What's that to you about my tongue?"

Occasionally, in suddenly occurring and fatal intracranial lesions, we have both the condition of uproariousness and the performance of definite actions. The following is part of a case published by Dr. Hughlings Jackson in the *Medical Times and Gazette*, April 1st, 1871, from notes by Dr. Stephen Mackenzie. The patient was, as the necropsy showed, the subject of meningeal hæmorrhage. He was not supposed to be drunk, for he was taken ill at his work and was brought straightway to the hospital. The circumstances of the case negated that diagnosis.

"James R., aged 45, cooper, admitted about 4.30 P.M., died at 7.15 P.M. When seen in the receiving-room, he was lying on the couch, partly on his back and partly on his right side. He would at times lie quite still for some minutes, and at others would roll about on the couch. When roused, he made irritable movements, as though to push one away, swore, and turned round on to his right side. At times, when roused, he was quite violent, and made attempts as though he would strike. He could move both arms and legs. He was so irritable when excited, that I listened to his chest with a stethoscope with some trepidation, lest he should strike me. All this time he did not speak, except to swear when irritated. Raising his eyelids had the greatest effect in arousing him, more than shaking him had. He always turned over to the right, which was towards the wall, and consequently away from the light. He *never* turned to the left. His swearing generally took the form of 'd—ing my — eyes', or 'blasting' me. . . . When lifted on to the stretcher to be carried up stairs, he rolled on to the right side, and he was able to move so much that he was obliged to be strapped down for fear of his falling off. When he was lifted, he swore a great deal. When being carried up stairs he moved about on the stretcher, and swore several times. By rousing him I could make him put out his tongue, but he would not, or could not give his name. His wife says that when he was placed in bed she tried to make him recognise her. He said more than once 'Mary Ann', but she does not think he really knew her. She says, further, that he sat up in bed, and looked round him, and several times put his hands up to his head, one front and the other back. He said 'John' and 'Jack', and also 'I am dying', several times, and 'What be going to do?'"

The following are remarkably definite actions under the circumstances.

"Both she (his wife) and the patient's in the ward say that he got out of bed without assistance, sat on the edge of the bed, and looked for the chamber utensil beneath. Not finding it on that side of the bed, he stretched right over to the other side, reached it, used it, and then put it down quickly, and threw himself back into bed, turning over to the left side. Afterwards, he started up in bed several times, throwing off the bed-clothes, and would then subside after a few minutes. He would then rouse up and 'rub his head'. Some fellow workmen who came with him, say that the expression he used several times was, 'God d—n die', and a patient in the ward says he exclaimed 'Christ!'"

What would have become of this patient had the police found him in the streets?

A sad case has recently occurred, which shows the absurdity even to the laity of leaving the differential diagnosis of the causes of disturbance of the nervous system producing excitement and of the causes of insensibility to the police. It is thus summarised in the leading columns of a daily paper.

"Few more painful cases have come before the public of late than that in which Mr. Coroner Payne and a city jury were occupied yesterday. Mrs. Francis, the wife of a respectable tradesman at Ealing, came into the city last Friday afternoon to buy goods. She had with her her nephew, an intelligent boy, who accompanied her to several wholesale places of business. After spending four hours in bustling about in the city, Mrs. Francis was hastening to London Bridge, when

she was seen to stagger in the street, and a passer-by kept her from falling. A policeman came up and took her in charge. Her request to be taken in a cab was disregarded, and she was haled through two or three streets by the police. At the station she was laid on the floor of a cell, with a cushion under her head. There she lay more than eight hours, and, about two o'clock, being obviously worse, she was taken to a hospital. A doctor then saw her for the first time, and found her to be suffering from paralysis, from which she never rallied, but died of apoplexy on Sunday morning."

The following comments were added.

"The police, even at the inquest, with the medical evidence before them, and proof from a *post mortem* examination that Mrs. Francis had taken nothing intoxicating, persisted in their stupid belief that she was drunk when they arrested her. They did nothing to ascertain her condition, and, though there was her nephew to tell them how to find her husband, no message was sent to him till Saturday morning. This was even more than the 'gross negligence' which the jury recorded in their verdict. It adds a new terror to the streets, that if a respectable person is taken with paralysis away from home, the police may run him in as a drunkard, fling him on the floor of a cell, and let him lie there while his life ebbs away, without calling in a doctor or giving any warning to his friends. It is beside the mark to plead that this is only another regrettable mistake. The public have a right to be protected against such mistakes, and if the police cannot distinguish between illness and intoxication they are bound to call in medical aid. These cases have been so frequent of late, that unless some other rules are acted on, juries will find verdicts in future cases far stronger than even that of gross negligence returned yesterday."

Now, we do not blame a policeman because he was unable to tell whether this lady were drunk or not; it is very likely that no one could have made a diagnosis early in the course of the case. We blame the police for attempting to make a diagnosis at all. In every case of seeming drunkenness a medical man should be sent for, and, if he be wise, he will not hastily conclude for drunkenness, however drunken-like the condition may be. Supposing the cooper, whose case we have just referred to, had been taken ill in the streets, how could a medical man have told whether he was drunk or ill? It is not doubtful what a policeman's diagnosis would have been. And if the medical man do in any case come to the conclusion that the person charged is drunk, he should take medical care of him. In the eye of the law a drunken man is a criminal; to the professional eye he is a patient poisoned by alcohol.

The position of a resident medical officer at a hospital is far more difficult; for him to take in a drunken man may be for him to have to refuse the next man who comes for evident and serious disease. We believe that physicians to hospitals do not always realise the difficulties under which our hospital residents labour. Cases which are evidently apoplectic at the physician's visit, have, so to speak, "diagnosed themselves" since admission, although, when first seen, the diagnosis from drunkenness to the shrewdest man might have been altogether impossible.

A policeman's experience of drunkenness is very extensive; but this is no reason for supposing him to be competent for the *diagnosis* of drunkenness; for he knows nothing at all of the causes of coma, and of excitement of the nervous system. It is, indeed, inaccurate to say that he has experience of cases of drunkenness in the sense that he can diagnose this condition. For diagnosis implies discrimination of the thing from other things greatly resembling it. The policeman in this matter is a specialist in the worst sense of that term. His so-called experience of drunkenness is somewhat analogous to the "experience" a congenitally blind man has of darkness—which is scientifically none.

Let us not, however, try to place the burden of responsibility for such a calamity as that Mrs. Francis and her family have suffered on the back of a partially educated, although may be intelligent, policeman; he is rather to be pitied. His superiors should forbid him to act on any opinion he may form on the cause of excitement of the nervous system or of coma in any case; it is evidently ludicrous to suppose him capable of such diagnosis when the subjects of the diagnosis are thus technically and yet correctly stated; it is, if such a combination of words be allowable, jocose cruelty to expect it from

him. His superiors are to blame. Yet we fear that some of the old hands in the force would very complacently accept the responsibility. In a previous article, we recorded the statement of a police-sergeant that the police had larger experience of drunkenness than doctors. We can easily conceive the kind of criticism such an experienced person would make on the careful and laborious diagnostic efforts of a young doctor. "If you had seen as many cases of drunkenness as I have, you would not talk about apoplexy and coma." It is just as a gardener might receive information from a botanist. "Ah! if you had grown as many cabbages as I have, you wouldn't talk about cruciferae." Mere contact is not experience. The policeman's experience, so-called, and, we may add, that of the pseudo-practical routinist doctor, reminds us of the reply of a coachman who was told that he knew nothing about music. "Me know nuffen of music! why, I druv Signor Lablache's brougham for twenty years." However many drunken people a policeman may have looked over, or however many times a routinist doctor may have correctly *guessed*, drunkenness from such tests as smell of drink and the like, their experience so-called is analogous to that which the coachman had gained of music.

#### COPPER IN ARTICLES OF FOOD.

THE question, What is adulteration? which we considered in our last week's impression, in reference to the sale of lime mixed with sulphur as a medicine, has since presented itself in a more important form, and under circumstances involving more serious consequences in relation to public health. There have been the usual conflict of scientific evidence, and a similar display of legal subtleties on the part of the defence; while the magistrate, before whom the case was heard, has reserved his decision.

An importer of foreign provisions was charged with selling French preserved peas adulterated with copper. Three other dealers in this article of food were also summoned on a similar charge; but it was arranged that one case should be decisive of the whole. Mr. Pierce examined the peas, and found that they were contaminated with copper. He separated 0.56 of a grain from a specified portion (the quantity not stated). In his opinion, the quantity was such that, if the peas were taken for a continuance, they would prove injurious to health. The presence of copper in the peas was also proved by the report of a Government analysis, the quantity being therein represented as amounting to the 0.31 part of a grain. Dr. Evans, a district medical officer of health, corroborated the opinion of Mr. Pierce, stating that the quantity of copper found in the peas, if taken repeatedly, would be injurious to health.

The defence rested mainly on two points. 1. Copper had been found in certain articles of food; in the kidney, spleen, and blood of the human body; in a sheep's liver; and in the feathers of a bird. Nearly all kinds of food cooked in copper-vessels were known to acquire an impregnation of that metal. 2. The quantity found in this case was too small to affect health injuriously. The quantity of 0.31 of a grain might be consumed daily by an adult without injury. Although not directly stated in the defence, we presume that this opinion included the larger quantity (0.56 of a grain) found by Mr. Pierce, and that the use of such cupreous food was held to be as safe for children as for adults.

It has been long known that the salts of copper have been used for the purpose of intensifying the green colour of certain pickles as well as green fruits; and this art, in which the French are said to be perfect adepts, has been for two or three years extended to preserved peas. Several convictions have very properly taken place. This is an offence under the third clause of the Sale of Food and Drugs Act, provided the material added for staining or colouring renders the article injurious to health.

With an ingenuity worthy of a better cause, the solicitor for the



defence contended that a certain quantity of copper (in green peas, gooseberries, pickles, etc.), so far from being hurtful, was a tonic, antispasmodic, and actually beneficial to health. He quoted Dr. Pereira's authority to the effect that six grains of sulphate of copper, repeatedly given, would not be injurious to health. Dr. Pereira, however, nowhere states that copper can be safely used for a continuance in any articles of food. On the contrary, in a part of his book not quoted in the defence, he describes, as the effects of the long continued use of small doses, cramps, paralysis, slow fever, and wasting of the body. Other effects, known as copper-colic, also result. It has not yet been determined experimentally how small a quantity can be taken daily in food with impunity; and the safety of the public demands that this metal should be excluded as far as possible from any articles of food. In fact, as with lead in water, any detectable quantity should be sufficient to condemn the article for use.

In the use of copper vessels in cooking, the substance may find its way into the food and be thus conveyed into the human body. Out of many accidents that have occurred from this cause, it has not been possible to define the actual quantity taken by the person who has suffered; it has in general been small. Further, continuous use makes up for the smallness of quantity, and injury to health is produced by the gradual accumulation of the metal.

If the peas in question had been boiled in a copper vessel, the presence of a small quantity of the metal might be innocently explained; but, in order to improve their green colour, and to facilitate their sale as early peas, a salt of copper has been added, and we consider it to be a matter of trivial importance whether three-tenths or five-tenths of a grain were present in an equal quantity of the peas. The peas must be regarded as adulterated with copper.

It is easy to test this question by another likely to arise. The red aniline colours having been used for giving a red colour to confectionery. In the preparation of these dyes arsenic is employed. If this substance be not carefully washed out of the dye, it may convey a minute portion of arsenic, say 0.31 of a grain, to a pound of confectionery. It might be easy to produce evidence that arsenic in such very small proportions as this is not injurious to health; and, to prove that, it is much used in medicine as a tonic, and may be considered as beneficial to health. We do not believe, however, that any medical man, in spite of these admissions, would recommend the sale of such articles of confectionery as a safe proceeding for the public. The fact, therefore, that the copper is in too small a quantity to injure health is, in our opinion, an insufficient ground of defence. The metal should not be there at all. The same plea might be set up for selling pickles and fruits containing copper; and, as no two samples are likely to yield the same amount of the metal, endless casuistical distinctions would be drawn as to the proportion present. It would then become a question of tenths or hundredths of a grain in "specified" quantities.

We believe that there is no real difficulty in the case. One almost similar in its details came before the Kentish magistrates, at Cranbrook, in July 1875. The evidence for the prosecution and defence was similar. The opinion that the quantity of copper detected in the peas was too small to be injurious to health was strongly maintained by the late Dr. Letheby; this gentleman admitting the presence of copper in the peas, and that in such articles of food it was likely to be very unequally distributed, thus fairly accounting for the differences in the chemical results. The decision of the bench was shortly expressed by the chairman: "We have given the evidence in this case our best attention, and have carefully considered all the points therein adduced. The question really is, Were these peas adulterated or were they not? and we have come to the conclusion that they were" (*Pharmaceutical Journal*, August 1st, 1875, p. 119).

DR. WILLIAM PLAYFAIR is gazetted one of the Physician-Accoucheurs to H.R.H. the Duchess of Edinburgh.

DR. R. WILBRAHAM FALCONER was this week elected President of the Royal United Hospital at Bath, for the third time.

HER Majesty the Queen has graciously sent from Windsor her usual present of twenty brace of pheasants for the use of the in-patients of each of several London hospitals.

DRS. H. C. CROOKSHANK, S. J. Gordon, Charles Monks, and J. Williams, have received from the Imperial Ottoman Government the Military War Medal, in recognition of their services during the Turco-Servian campaign.

TURKEY, in prevision of war, is organising ambulances on the principle of the Geneva Convention, but with the Crescent instead of the Cross for emblem. A French physician, Dr. Verdière, has accepted the post of surgeon-in-chief of the Turkish ambulance.

As a result of the recent inquiry respecting the Carlisle Place Orphanage, the guardians of St. George's, Hanover Square, have passed a resolution entreating the Home Secretary to cause a return to be made of the rate of mortality in all institutions in London which receive infants.

THE Hunterian Oration at the Royal College of Surgeons will be delivered, as we have already announced, on Tuesday, February 13th, in the theatre of the College, by Sir James Paget, Bart., at 3 o'clock precisely. Members will be admitted on presentation of their private cards. It is expected that H.R.H. the Prince of Wales will be present, and will afterwards dine with the Council.

WE are glad to hear of the decision, by a majority of the governors of Queen Charlotte's Hospital, that there shall, during the absence of the physician, always be a qualified resident surgeon in charge of the hospital. We regret to hear that the opposite view was supported by the consulting surgeon of the hospital, who also took part in an unsuccessful attempt to remove the honorary medical officers from the governing board.

IT is stated that a general distribution of gold "takovas" had been made to the English surgeons and nurses who have been in Servia. The English hospital at Belgrade now contains about fifty patients, but more are expected soon. Drs. Attwood, Hume, and Watts are in attendance; they have been serving since December 1st without pay, and the contributions sent from England and promised have been more than exhausted, so that the expenses are now borne by Dr. Attwood entirely.

MR. THOMAS COOKE, the proprietor of the School of Anatomy, New Bridge Street, Blackfriars, on Saturday answered the adjourned summons at the Guildhall Police Court, charging him with creating a nuisance by the effluvia arising from his dissecting room. The defendant said he had made arrangements, although at considerable cost to himself, to have the school removed to a more isolated position in case the magisterial decision should be adverse to him. Sir Thomas Gabriel decided that a nuisance existed, and made an order for its abatement, observing that great credit was due to Mr. Cooke for the course which he had pursued in the matter.

WE are glad to hear that a fund is being raised for a convalescent home for King's College Hospital. Mrs. John Wood of Wimpole Street is taking an active interest in this excellent movement, as one of a Ladies' Committee for the purpose. Mrs. Gordon Whitbread, one of the Committee, is giving her house for a Shakspearian reading by Mr. Brandram on the third of next month, at 19, Upper Wimpole Street at 3 P.M., and a ball is also spoken of to be given early in May.

M. JACCOUD has been nominated Chief Professor of Internal Pathology in the Paris Faculty of Medicine, and M. Peter has been appointed to the second chair of the same branch of medical science.

MR. CROSS, the Home Secretary, on Wednesday, opened a new infirmary at Warrington, which has been erected at a cost of £8,000, and endowed by Mr. Hatton with the sum of £10,000. The right honourable gentleman, who formerly resided in Warrington, was very warmly received.

#### FREE TRADE IN POISONS.

ONLY a few weeks since, we called the attention of our readers to the necessity for some strong legal restrictions on the sale of poisons. On that occasion, our remarks were chiefly directed to the sale of "vermin-killers" by unlicensed persons. Under this name are included some of the most active poisons with which we are acquainted. While a licensed druggist is bound down by strict penalties not to sell strychnia or phosphorus except in the presence of a witness and after the registration of the name of the purchaser, etc., a grocer, not licensed to deal in poisons, is allowed to sell with impunity to any person, young or old, on any pretence, a quantity of these poisons sufficient to destroy many lives. Scarcely a week passes without reports of inquests on the bodies of persons who have fallen victims to this kind of free trade in vermin-killers. In one of these reported last week, a married woman, who had suffered from nervous depression, procured from a neighbouring grocer two bottles of phosphor-paste, on the pretence of poisoning beetles. The grocer admitted that the bottles were marked "Poison", and that it was very unusual for a person to ask for two; but, he added, there was no law to prevent his selling twenty bottles to one person. The woman died from the effects of the poison. As usual after the inquest, the coroner and jury agreed in censuring the legislative authorities for allowing poison to be sold in such a reckless manner. At another inquest recently held in the City, a gentleman was proved to have died from the effects of strychnia. The deceased admitted to the surgeon who was called to see him, that he had swallowed *eight* of Battle's vermin-killer powders. Each powder contained three grains of strychnia, which was sufficient to kill six human beings. The coroner, in summing up, commented upon the unsatisfactory state of the law regarding the sale of poisons. We agree with the coroner in strongly condemning this mock legislation, which professes to give security to the public by requiring a druggist who sells a grain of strychnia to register every minute detail of name, abode, day of sale, purpose required, condition or occupation of purchaser, etc., while it permits an oilman or grocer to sell, under the name of vermin-killer, twenty times the quantity without any restriction. It thus practically legalises the sale of a ready instrument for suicide or secret murder.

#### URBAN POPULATIONS.

THE Registrar-General estimates the population of twenty of the largest English towns, in the middle of the present year, at rather more than seven millions of persons. He, however, calls attention to the fact that it is nearly six years since the last census enumeration, and that the difficulty of framing satisfactory estimates of town populations naturally increases with the length of the period since the most recent census. A more frequent national census than once in ten years, or intermediate local censuses in all large towns, would alone supply satisfactorily the means for calculating approximately accurate estimates of town populations. Population-figures naturally form the basis of all vital-statistics; and the increasing interest which is now shown in rates of mortality, as a test of sanitary condition, makes it essentially desirable that our knowledge of the numbers of persons living should be more accurate than it can possibly be so long as we have to depend upon decennial censuses. The Registrar-General complains that local authorities, who are ready enough to object, if they have any reason to believe their population to be understated, while they are silent on the subject of overestimation, do not afford him any assistance in the difficult task of estimating populations so long after the last census. He

suggests that an annual return of the number of inhabited houses on the rate-book would often afford the means for revising an estimate which is open to suspicion. A good deal of indignation was recently expressed in the Salford Town Council at the Registrar-General's underestimate of the population of that borough. The Registrar-General, failing to receive any special local information, assumes that the rate of increase which prevailed in a population during the period between the last two censuses has since been maintained. Calculated by this approved method, the population of Salford in the middle of 1876 would be 138,425. Calculated, however, from the number of inhabited houses, the local estimate of the population on January 1st, 1876, was 160,260, which, raised to the middle of the year, would become about 165,000, which, if correct, would make the Registrar-General's estimate too low by 16 per cent. The effect of this underestimate of population would be to overstate the death-rate to the same extent. The death-rate in Salford borough during 1876, calculated upon the local estimate, is 27 per 1,000, whereas the use of the Registrar-General's estimate makes it 32 per 1,000. The mortality statistics of Salford in 1876, showing as they do no less than 27 per cent. of deaths from the principal zymotic diseases, are unfavourable enough without any exaggeration due to an underestimate of population. A little more than two years ago, the town council of Barrow-in-Furness took a local census at a very small expense, which proved the correctness of their assertion that the population of the borough had increased since 1871 at an abnormally high rate, a rate out of all proportion to that which prevailed in the preceding ten years. The case of Salford affords the strongest evidence that, in the present day, a decennial census cannot be relied upon to afford a trustworthy basis for estimates of population.

#### SANITATION AT HANLEY.

THE Sanitary Committee of Hanley reported to the town council, on Tuesday, that the death-rate during December had been 30 per 1000. The chief cause of this very high rate, as compared with other large towns during the like period, was the prevalence of scarlatina. Without the deaths from this cause the rate would have been 24.3; without any zymotic deaths, 22.2. By the deduction of all deaths under five years of age, the death-rate would have been reduced to 11.4. There is at present no hospital for infectious diseases in Hanley and the adjacent towns; and there are so many governing bodies in the district, that it seems doubtful whether any agreement can be come to between them for the establishment of a joint hospital. The chief cause of the spread of scarlatina was stated by the medical inspector to be the parents of children affected with the disease visiting neighbours' houses, while the contagion existed in their own homes. We suspect that to this may be added the playing of children, incompletely desquamated, with their little neighbours. It was decided, apparently for the first time, to issue notices that such infringements of the Public Health Act would be punished, and that after this caution offenders should be summoned. We will ask, not why this has not been done sooner at Hanley, but whether there may not be other places where this very necessary duty is still being neglected?

#### METROPOLITAN HOSPITAL SUNDAY FUND.

ON the 19th instant, a meeting of the Council of this fund was held at the Mansion House, the Lord Mayor presiding, the object being to elect the Committee of Distribution for the current year and the General Purposes Committee. In the course of the proceedings, Dr. Glover expressed his opinion that the sums collected annually in aid of the fund were altogether inadequate to the amount that could be desired from all metropolitan churches and chapels, and he proposed the following resolution, which was carried unanimously: "That it be an instruction from the Council of the General Purposes Committee to consider whether any, and, if so what, means can be taken to excite the interest and co-operation in this fund of congregations which have never yet contributed to it, and to increase the interest already kindly



displayed in it by the great majority of London churches." The Council afterwards re-elected the Committee of Distribution for the current year, and also the General Purposes Committee, the first named to consist of the Lord Mayor, as President, *ex officio*: Sir Sidney H. Waterlow, M.P., Vice-President; Lord Ashley, Mr. Alderman M'Arthur, M.P., Mr. Samuel Morley, M.P., Mr. G. W. Calender, Dr. Sedgwick Saunders, Mr. Jervoise Smith, and Mr. Thomas Turner, Guy's Hospital. The General Purposes Committee to consist of the President and Vice-President, *ex officio*; the Right Rev. Bishop Claughton, his Eminence Cardinal Manning, the Rev. Canon Miller, D.D., the Rev. J. Thaine Davidson, D.D., the Rev. J. Kennedy, D.D., the Rev. Professor Marks, the Rev. J. Bowden, the Rev. J. F. Kitto, M.A., the Rev. R. H. Martin, B.A., the Hon. Reginald Capel, Sir Rutherford Alcock, K.C.B., Mr. Alderman Finnis, Mr. John Boodle, Mr. Herbert Brooks, Mr. R. Brudenell Carter, F.R.C.S., Colonel Francis Haygarth, Mr. James Hogg, Mr. J. G. Pitcairn, Dr. W. Sedgwick Saunders, Mr. A. G. Sandeman, and Mr. E. H. Scott. At the same meeting Mr. Edmund Hay Currie and Mr. Richard B. Martin were re-elected honorary secretaries, and Mr. Henry N. Custance secretary.

#### IRISH WAKES.

DR. GOLDIE, the medical officer of health for Leeds, lately reported that every one of thirty people who attended the wake of an Irish girl, who recently died in that town from typhus fever, have been prostrated by the same disease, and that no fewer than nine of the cases had already had a fatal termination.—The police reports of Thursday contain an account of a wake in London at which fifteen people were assembled in various states of intoxication around the body of a small-pox patient, while neighbours were frequently coming and going. We should like to enlist the powerful help of the Roman Catholic priests in arresting this source of danger to the public health. There is no doubt that it is a very common and very considerable source of infection.

#### DR. CLAYE SHAW.

IN lately reporting to the managers of the Metropolitan Asylums Board that Dr. Claye Shaw, medical superintendent of Leavesden Asylum, had resigned, Sir William Wyatt expressed his deep regret that the board was unable to offer Dr. Shaw such a stipend as would retain his services. Dr. Shaw, Sir William continued, had been elected by the Middlesex magistrates to the medical superintendentship of Banstead Asylum; and the managers could only anticipate for the late medical superintendent of Leavesden a most successful career, for he had shown himself to possess, with the highest medical skill, powers of organisation of no ordinary kind, and he had won the respect and esteem of all who knew him. The management of the asylum had been all that could be desired, and the Middlesex magistrates had in Dr. Shaw secured a gentleman whose talents were of the highest order, and who was singularly well fitted for the superintendence of a large asylum. All the managers joined with Sir William Wyatt in expressing regret that they could not secure the services of Dr. Claye Shaw. The successor to Dr. Shaw at Leavesden will be Mr. Case, who was at one time assistant medical officer at Leavesden, and lately medical superintendent at Hampstead.

#### MEDICAL PRACTICE IN TURKEY.

ACCORDING to Professor Landerer, the medical men and the pharmacists in Turkish towns work together in a way which is described by the *Pharmaceutical Journal* as being "not unknown in this country". The physician sees his patients at the pharmacist's establishment, and there gives his orders as to the medicines, etc., which they are to receive to the pharmacist, who has been awaiting the arrival of his medical friend sitting cross-legged on a bench and smoking his hookah. The prices of medicines are not regulated by law, and a simple quinine mixture costs from 30 to 50 piastres (5s. to 9s.) When such a medical man undertakes a more important case, a fee for the cure, inclusive of me-

dicine, ranging from 1,000 to 2,000 piastres (£9 to £18), is agreed upon, and one-half is paid in advance. If the unfortunate patient should die, the physician loses the other half of the fee, and the pharmacist may send in his reckoning in the Greek kalends. The object of such arrangements is presumably to ensure a special interest of the medical attendant in the recovery of the patient. It must be very doubtful whether any such barbarous theory in the least degree promotes the object in view; but, on the other hand, it would be interesting to know how it affects the patient suffering from a mortal disease. It must be a sore trial to the philanthropy of the doctor to be called to a patient palpably doomed to death, and from attending on whom he can expect to derive neither consolation, gratitude, credit, nor payment for services rendered. We do not doubt that such a patient would be ready to compromise his views in order to receive assistance and relief. In any case, we do not believe that any such system as Professor Landerer describes can really be carried out anywhere. The patient's only security is in the skill, honour, and humanity of the medical attendant; and any such artificial system of payment is based on such obvious misconception of the chief factors in human action, that it is certainly one which will be found, on examination, to have broken down in practice and to be only nominally in use anywhere.

#### SMALL-POX ON BOARD SHIP.

THE *Serapis* Indian troopship, which left Bombay on December 19th, arrived at Portsmouth on Sunday. Two men belonging to the troops from Delhi were attacked by small-pox soon after leaving Bombay, and were landed at Malta. Captain Davidson had all the usual precautions taken in the way of burning, isolation, and carbolicising; but, in spite of these steps, it was discovered, some time after Malta had been left, that the hospital orderly who had attended upon the patients, and the soldier who slept in the adjoining bed, were suffering from the infection. On the ship reaching Spithead, the sufferers were placed on board a tug and taken on shore, when they were conveyed to the infectious ward in connection with the Portsea Military Hospital.

#### UNATTACHED STUDENTS AT CAMBRIDGE.

THE statements which we made last week respecting unattached students at Oxford are corroborated by the experience at Cambridge. A careful computation made by the Rev. R. Somerset, the Censor, and given in the *Student's Guide to the University*, shows that the expenses of a student who lives frugally and keeps only the minimum residence in each term need not exceed £50 *per annum*, or £150 for the three years during which residence is required. A student who made no attempt to live very cheaply, or to reside the minimum number of days, stated his expenditure for a year, exclusive of travelling and clothing, to be £84. Several medical students have already taken advantage of this mode of connecting themselves with the University, and a greater number will no doubt do so when it becomes generally known. There is every reason to think that the unattached students will become more and more an important feature of the University. At any rate, it can no longer be said that students are withheld from obtaining University degrees by the cost entailed. The Universities have done their utmost in this respect to place their degrees within the reach of those who desire them and deserve to have them.

#### THE PARIS FACULTY PRIZES.

THESE prizes have been awarded as follows. The Trémont prize, of the value of 1,000 *francs*, has been equally divided between two meritorious students who fulfilled all the conditions required by the terms of the legacy; the Barbier prize to Dr. Paquelin, for his *Thermo-Cautère*; the Chateaufvillard prize to M. Topinard, for his *Manual of Anthropology*. The Corvisart prize was divided between M. Lucien Hirtz and M. Hippolyte Bateille. The Laennec prize of 10,000 *francs* has been awarded to M. Villemin, for his treatises on Tuberculosis and on the Propagation of Phthisis; the Montyon prize to M. Manouvriez.

## THE PRIZES OF THE FRENCH ACADEMY OF MEDICINE.

THESE prizes were awarded at the meeting of the Paris Academy of Medicine on the 10th instant, as follows. The Academy prize of 1,000 francs to Dr. Pize, for his memoir on the Treatment of Aneurism by the different Methods of Compression; the Portal prize of 2,000 francs to Dr. Hayem, for his Researches on the Pathological Anatomy of Muscular Atrophy. The Civrieux prize (900 francs) was not awarded as an entirety, but was divided between Dr. Guipon (500 francs), Dr. Marvaud, and Dr. Willemin (200 francs each), for their memoirs on Insomnia. The Capuron prize (3,000 francs) was awarded to Dr. Michel Peter, for his memoir on Pregnancy and Cardiac Disease. Of the Barbier prize of 3,000 francs, 1,000 francs were awarded to Dr. Moncoq for his Apparatus for Instantaneous Transfusion of Blood. The Godard prize of 1,000 francs was awarded to Dr. Charles Mauriac for his work on Psoriasis of the Tongue and the Buccal Mucous Membrane, with very honourable mention to Dr. Paul Olivier for his work on Osseous Tumours of the Nasal Fossæ and Facial Sinuses; the Lefebvre prize (3,000 francs) to MM. Auguste Voisin and Burlureaux, for their memoirs on Melancholia in its relations with General Paralysis. The Argenteuil prize (8,000 francs) was not awarded in its entirety, but 5,000 francs were awarded to Dr. Duplay for his work entitled Perineo-scrotal Hypospadias and its Surgical Treatment, 1,500 francs to Dr. Sayre of New York for his work on the Prostatic Vertebral Catheter, and 1,500 francs to M. Bénas of Paris for his Horsehair Filiform Bougies. The prize given by the Academy on the subject of Infant Mortality under one year of age was awarded to Dr. Bertillon; 300 francs and a silver medal were also awarded to Dr. Vacher of Paris for an essay on the same subject, and silver medals to Dr. Chrestien of Lille and M. Hérault of Grenoble. A large number of medals were also awarded to medical men who made reports on the various epidemics which prevailed in different parts of France in 1874, to the inspectors of the French spas, and to the public vaccinators for 1874. Medals of honour were also presented to nine of the most eminent members of the Society who had belonged to it for more than fifty years. The recipients were: M. Bouillaud, M. Bontron, Bussy, Caventou, Chevallier, Cloquet, Hervez de Chégoin, de Kergaradec, and Piory.

## THE PATHOLOGICAL SOCIETY.

THE following communications will probably be brought before the Society during the present session:—1. A contribution to the Intimate Pathology of Contagion; by Dr. Burdon Sanderson. 2. Contributions to the Life History of Contagion; by Dr. P. M. Braidwood and Mr. F. Vacher. 3. Communications on some of those Pathological Subjects with which his name is identified; by Mr. Lister of Edinburgh. 4. On the Early Changes in the Vessels in Bright's Disease with Contracted Kidney; by Sir William Gull and Dr. Sutton. 5. On the Changes which occur in the Blood-Vessels in Bright's Disease; by Dr. George Johnson. 6. On the Conditions which are compatible with, or fatal to, the Life of Bacteria; by Dr. Bastian. 7. The Minute Anatomy of Scarlatina; by Dr. Klein. 8. An Inquiry, experimental and anatomical, into the so-called Pig-Typhoid; by Dr. Klein. 9. Results of Anatomical Researches bearing on the Etiology of Cancer; by Dr. Creighton. 10. Certain changes in the Urine produced by Diet, having special reference to the Pathology of Scurvy; by Dr. Ralfe. 11. On certain unusual Coagulation-appearances in Mucus and other Albuminoid Fluids; by Dr. Creighton. 12. On the Pathology of Pectoral Changes; by Dr. B. W. Richardson.

## CLINICAL SOCIETY OF LONDON.

THE last meeting of the Clinical Society was also the annual meeting of that body. The officers elected for the ensuing year were those nominated by the Council for the past; the list of names has already appeared in the BRITISH MEDICAL JOURNAL. After the ordinary business of the evening, Dr. A. P. Stewart proposed in eloquent terms a vote of thanks to the retiring President, Sir William Jenner. He said that the Society, for the past two years, had been highly honoured

by having Sir William to preside at its meetings. Dr. Broadbent seconded the vote of thanks; which was enthusiastically carried by the meeting. Sir William Jenner returned thanks. Mr. Barwell proposed a vote of thanks to the Vice-Presidents and Council. This proposition was seconded by Dr. Hermann Weber and duly carried. The annual reports of the Council and of the Treasurer described the prosperous condition of this, the youngest of the metropolitan medical societies.

## THE LIVERPOOL ROYAL INFIRMARY.

THE mode of election of the honorary medical officers of our hospitals is a matter of great importance. At one of the largest provincial infirmaries—the Liverpool Royal—it is proposed, as we stated last week, to remove the election from the trustees and to place it in the hands of the Committee. It is not alleged that the present plan has worked badly. On the contrary, it is generally admitted that the appointments made to the Infirmary for many years past have been good; and that the interests of the charity, as an hospital and centre of medical education, have been well looked to in the selection of the staff. That the mode of election by the trustees is open to objection, in some respects, may be true; but, considering the way in which committees are often influenced by one or two of their number, and that practically they are self-elected bodies, it cannot be doubted that they might at times exercise their power rather in obedience to personal feeling than with due regard to the important interests at stake. Should the profession or the public at any time be led to believe that such influences were at work in any medical charity, their confidence in its electing body would be lost, and the welfare of the institution would seriously suffer. It is most important, therefore, that the trustees of the Liverpool Infirmary should pause before making the proposed change in its laws, especially as the whole of the Medical Board is opposed to it.

## QUININE, SALICINE, AND ALLIED DRUGS.

THE fluctuations in monetary value which these several drugs have undergone during the past year have been considerable. The wholesale price of quinine in January 1876 was 6s. 6d. an ounce; in January 1877, it is 11s. an ounce. Salicine a year ago was 1s. 10d. an ounce; it is now 10s. Salicylic acid in January 1876 was 1s. 4d. an ounce; it is now 1s. the ounce. The price of salicylate of soda was not quoted a year since; it is now 1s. 3d. an ounce. In all instances, it must be noted, the above are the *wholesale* prices of the several drugs. The value of quinine has probably been enhanced by the prospect of an outbreak of war in the east of Europe. Salicine has suddenly sprung into favour as a drug, and is made only from the willow bark, and that only at stated times of the year. Salicylic acid and its compounds, being made from carbolic acid, have not been increased in price by the late augmented demand for their use in medicine which has occurred.

## THE PUBLIC HEALTH.

THE mortality from all causes during the past week is reported by the Registrar-General to have been at the average rate of 26 deaths annually in every 1,000 persons living. The annual death-rate in London was 22, in Edinburgh 21, and in Dublin 33. Portsmouth was the lowest in the rate of mortality, and Salford the highest. The fatal cases of small-pox in the twenty towns were 113, against 146 and 128 in the two preceding weeks. The deaths from small-pox in London, which had been 116 and 100 in the two preceding weeks, further declined to 79 last week, of which 32 were certified as unvaccinated, 18 as vaccinated, and, in the remaining 29 cases, the medical certificates did not furnish any information as to vaccination. Distributing the 29 not stated cases in the proportion shown in the 50 cases stated as to vaccination, and assuming that 90 per cent. of the London population have been vaccinated, it may be estimated that but one death from small-pox was registered last week among every 114,000 vaccinated persons; whereas the proportion among the unvaccinated was one death in every 7,000 persons. Small-pox was, therefore, more



than sixteen times as fatal among unvaccinated as among vaccinated persons. The 79 deaths from small-pox included 30 in the Metropolitan Asylum Hospital at Homerton.

#### REPORTING OF INFECTIOUS DISEASES.

THE following resolutions have been passed unanimously by the Society of Medical Officers of Health:—1. "That, in the opinion of the Society, whenever a case of infectious disease occurs in any house or vessel, it should be the duty of the person in charge of the house or vessel, or of the person in charge of the case, to report the fact to the sanitary authority without delay." 2. "That it should be the duty of every medical practitioner in attendance upon any such case, to give immediate information respecting its nature to the occupier or other person responsible for reporting it to the sanitary authority." 3. "That the Council be requested to form a deputation for the purpose of bringing those views under the consideration of the Government, and to endeavour in other ways to promote the above views." 4. "That such deputation be desired to represent to the Government the generally unsatisfactory nature of the present legislative provisions for preventing the extension of infectious disease and the need for inquiry into the subject."

#### MORTALITY OF CHILDREN DURING THEIR FIRST YEAR.

ACCORDING to the researches of M. Kuborn of Belgium, the rate of mortality for children during the first year of life, in the principal countries of Europe, is as follows. Out of 1,000 children, there die in Sweden 153, in Denmark 156, in Scotland 156, in England 170, in Belgium 186, in Holland 211, in France 216, in Prussia 220, in Spain 226, in Switzerland 252, in Italy 254, in Austria 303, in Russia 311, and in Bavaria 372.

#### DEATH OF MR. JOHN ADAMS.

WE regret to hear of the death of Mr. John Adams, many years surgeon, and lately consulting-surgeon, to the London Hospital. Mr. Adams had been connected with that hospital for nearly half a century as demonstrator and lecturer on anatomy, and as assistant-surgeon and surgeon. He was for some time a member of the Council of the Royal College of Surgeons of England, and for five years a member of the Court of Examiners. He was the author of a well known work on *Diseases of the Prostate Gland*; and of the articles "Injuries to the Head" in Cooper's *Surgical Dictionary*, and "Urethra" in the *Cyclopædia of Anatomy and Physiology*. Mr. Adams died at Blackheath on the 18th instant, in the seventy-second year of his age.

#### POISONING BY CARBOLIC ACID.

ON Wednesday, Mr. Humphreys held an inquiry relative to the death of a labourer named John Padien, aged 78, who was poisoned by carbolic acid. The deceased, on Saturday night, provided himself with a bottle of beer for Sunday, and at seven in the evening of Sunday he requested his wife, who is upwards of 70 years of age, to give him some of the beer. She took what she considered beer from a bottle, and having warmed it, he drank some. He became very ill, and it was discovered that he had taken carbolic acid, which was contained in a bottle similar to the one holding the beer, and he died in two hours from its effects. The bottle which contained the carbolic acid, which is supplied for disinfecting purposes by the parish, was not labelled; and the jury, in returning a verdict of "Death by misadventure", requested the coroner to communicate with the authorities, in order that in future bottles containing poison be labelled to that effect.

#### PICTURES IN HOSPITALS.

MR. J. LAURENCE HAMILTON having written to the *Times* urging that further efforts be made to enliven the walls of our hospital wards by cheerful objects and works of art, the proprietors of the *Graphic* have intimated that they are always willing to respond to appeals from managers of sick wards for parcels of bright-coloured pictures, which they, with thoughtful liberality, distribute gratuitously for such pur-

poses. The work is a good one, and of course the whole burden of it should not fall on the shoulders of a few. But, no doubt, the managers of many workhouse infirmaries and hospitals will be glad to avail themselves of this liberality. Nor could there be a doubt that many may be engaged to show similar kindness by a little effort and energy in begging. Ladies' Committees, organised for the purpose, would soon be able to make the hospital wards beautiful. Much has been done in many hospitals, but no doubt still more remains to be done. The subjects, however, should be well chosen; bright, cheerful, and simple, appealing to the home sympathies and the affections, and to the love of beauty in nature and art. Funds for framing are also needed; and something like a cheerful and suitable colour on the walls as a background.

#### LIVERPOOL MEDICAL INSTITUTION.

AT the annual meeting of the Liverpool Medical Institution held Jan. 9th, 1877, the following office-bearers were elected. *President*: Dr. James Turnbull. *Vice-Presidents*: Dr. Glynn, Dr. Lyster, Mr. Higginson, Dr. William Carter. *Treasurer*: Dr. Dickinson. *Honorary Secretary*: Dr. Caton. *Honorary Secretary of Ordinary Meetings*: Mr. Chauncy Puzey. *Honorary Librarian*: Dr. Campbell. *Members of Council*: Dr. Adam, Dr. Armstrong, Dr. John Cameron, Dr. Pollard, Dr. Rawdon, Mr. George H. Snape, Dr. Alexander, Dr. Braidwood, Dr. T. D. Chalmers, Dr. Finegan, Mr. McCheane, Dr. Samuels. *Microscopical Committee*: Dr. Braidwood, Dr. Wm. Carter, Dr. Caton, Dr. Davidson, Dr. Glynn, Dr. Lupton, Mr. Newton, Mr. Rushton Parker. *Auditors*: Dr. Adam, Mr. Frederick W. Lowndes.

#### MORTALITY IN THE SOCIETY OF FRIENDS.

"J. F." writes to the *Scotsman*: Some of your readers may be interested in the following statistics of the society. According to the latest official returns, the number of Friends in the United Kingdom was 17,186. The number of deaths in 1876 was 330. Of these, 51 were of persons between sixty and seventy years of age, 86 between seventy and eighty, 45 between eighty and ninety, and four between ninety and one hundred. Thus nearly 57 per cent. of the deaths were of persons over sixty years of age; whilst the deaths under twenty-one were 19 per cent. I have heard it so frequently stated that the Quakers are not long lived, and that the mortality amongst their children is much higher than the rest of the population, that the above, together with the fact that the average age of Quakers for the past three years has been just fifty-five years, will dispel what seems to be a popular delusion.

## SCOTLAND.

As the fund for endowing the Convalescent Hospital at Dundee, erected by the late Sir David Baxter, is comparatively small, we understand that Miss Baxter of Ellangowan has generously contributed £5,000, in order to secure the benefits of the institution for a larger number of the suffering poor of Dundee.

In a report lately submitted at a meeting of the Greenock Police Board, Dr. Wallace, medical officer of the town, stated that, out of twenty cases of enteric fever brought under his notice, it had been ascertained that in thirteen families, including sixteen persons, the outbreak of fever was traceable to contaminated milk. Two of the cases proved fatal.

#### DROWNED IN A TUB.

LAST week a child aged one year and six months was accidentally drowned in a tub containing nine inches of water near her father's door, at the village of Dreghorn. She had been out of the mother's sight for only ten minutes, when she was found by her brother with her face downwards, and only the upper part of her body immersed in the water; she was quite dead.

A NUMBER of cattle have been recently poisoned in different parts of Scotland from eating oil-cake in which had been compounded a hitherto unused kind of bean, which, it was expected, would add to its fattening properties. The husk of the bean is found to be poisonous; many of the cattle have died, and others been seriously ill. We have not been able to learn the exact characters of the bean in question.

#### EDINBURGH ROYAL INFIRMARY.

AT a meeting of the contributors to the Edinburgh Royal Infirmary last week, it was announced that the total cost of the new Infirmary would be considerably above £320,000, and that quite £50,000 was still wanting to finish the building, which it was anticipated would be done in two years time. Unless the sum be paid off in the next two years, it will have to be borrowed, and the payment of the interest will materially cripple the resources of the institution. The annual expenditure of the present institution in 1876 exceeded the income by over £4,000.

#### SMALL-POX IN SCOTLAND.

A SINGLE case of small-pox imported from the north of England was observed in Edinburgh last week. Provision has been made at the hospital in Tolbooth Wynd for the reception of fifty or sixty patients of the poorer classes. The managers of the Royal Infirmary have decided not to admit any cases of small-pox within the walls of the institution, and the local authority are looking for some place where small-pox patients who can afford to pay a moderate sum for board and attendance may be received. One case has been received into the Greenock Infirmary.

#### PURIFICATION OF THE TEVIOT.

WHILE much discussion is taking place as to the pollution of rivers, and the citizens of Glasgow are on the eve of a Parliamentary campaign on the legislation necessary for the purification of the Clyde, it may be not uninteresting to know what is being done at Hawick for the purification of the Teviot from pollution both by sewage and by the refuse of manufactories. Hawick is a great centre of the boot-trade in the south of Scotland, and the manufacture of tweeds requires the use, and causes the pollution, of a large quantity of water; accordingly, the river is becoming very much defiled, the more, as at present it receives in addition the sewage of the town. To remedy this, the corporation have set about preparing a system of purification. The system adopted is the precipitation of the sewage in a series of tanks, assisted by certain chemical agents, and subsequent filtration of the effluent water. The sewage will be brought by gravitation to two large tanks, each capable of holding 100,000 gallons, in which the coarser particles will settle; from this it will pass, after being mixed with the proper proportion of chemicals, into one of six tanks, each having a capacity of 40,000 gallons, in which the noxious ingredients will be precipitated. The now comparatively pure "effluent" will be distributed over, and filtered through, four or five acres of gravelly land, which is to be drained six feet deep into a main outfall sewer discharging into the Teviot below the lowest mills on the river. The sludge or precipitate will be raised with the town's refuse and sold as manure. It is expected that this project, which is the first of its kind in Scotland, will be quite successful in accomplishing the object in view, and thus be a means of solving the problem of how to prevent the pollution of our rivers without injuring our manufacturing interests.

#### SANITARY WORK.

IN his report of the sanitary condition of Edinburgh during the past year, Dr. Littlejohn, the medical officer of health, after giving the yearly statistics, goes on to tell of the amount of sanitary work which has been done. During the year, sixty subjects of importance involving the health of the community have been reported on by the sanitary officials and burgh engineer, and the reports submitted to the Public Health Committee. These reports deal with tenements in a ruined or

dilapidated condition, and with nuisances of various kinds; all the points complained of had been rectified. Between January 1st and December 31st, the medical officer had received upwards of 240 letters and above 300 verbal communications as to unsanitary matters in or near houses. In every case the house or nuisance complained of was immediately examined, and much urgent improvement had been thereby effected. During the year, 104 patients with infectious diseases had been removed to the Royal Infirmary or Sick Children's Hospital; 272 houses, including upwards of 1,000 apartments, had been fumigated; and there had been upwards of 140 removals of bedding, etc., from houses in various parts of the city. There can be no doubt that prompt action in this way, with constant sanitary surveillance, had had a very beneficial effect. Thus, in 1874, there were 74 deaths from typhus in 34 weeks; in 1875, 24 deaths in 20 weeks; and, in 1876, 21 deaths in 18 weeks; 34 weeks being entirely free from the disease.

## IRELAND.

MR. HENRY GRAY CROLY has been elected Consulting-Surgeon to the Rathdown Hospital, Monkstown.

AT a meeting of the Council of the Royal College of Surgeons last week, Mr. Rawdon Macnamara was reappointed for the ensuing year the representative for that institution on the General Council of Medical Education and Registration.

THE medical officers of the North Dublin Union have applied for an increase of salary, and the matter is under the consideration of the Board of Guardians. The present emoluments of the six medical gentlemen vary, the highest receiving £254 *per annum*, and the lowest £224.

#### THE PROPOSED CONJOINT SCHEME FOR IRELAND.

THE Council of the Royal College of Surgeons have refused to entertain this scheme as a desirable one, and have thrown it overboard. It is stated that the majority of the Fellows of the College of Surgeons were strongly opposed to it, and were determined to show it every opposition.

#### HOSPITAL FOR DISEASES OF THE THROAT AND EAR.

ANOTHER special institution has been promoted in Dublin, under the above designation, being situated in York Street, and under the management of Messrs. Smyly, W. Smyly, and Franks, whilst Mr. Baker is the Honorary Consulting Dental Surgeon. These institutions have sprung up rather rapidly in Dublin of late, and soon we may expect additional ones devoted exclusively to cancer, consumption, skin-diseases, etc.; but whether they are urgently required with the present population of Dublin, is a question that requires consideration.

#### DUBLIN HOSPITAL SUNDAY FUND.

AT the third annual meeting of the members of this Fund, held at the Molesworth Hall last week, it was resolved that no new hospital be put upon the list of those hospitals in connection with the movement without a special resolution of Council. The mover of this resolution, Dean Dickinson, gave as his reason for this motion, that a number of hospitals for special diseases were continually starting up, diseases which were always thoroughly well treated in the ordinary hospitals. These extra hospitals, the Dean considered, were quite unnecessary.

#### SUPERANNUATION FOR POOR-LAW MEDICAL OFFICERS.

THE Council of the Irish Medical Association have addressed a circular to each Board of Guardians in Ireland, enclosing a copy of a petition which it is intended shortly to present to Parliament, praying that one half of the allowances granted to medical officers as superannuation may be paid out of the Consolidated Fund. The circular has been forwarded to obtain the co-operation of the Board of Guardians of each Union in Ireland in respect of this matter.



## BRITISH PHYSICIANS IN FRANCE.

FROM a document forwarded to us by the President of the General Medical Council, we are happy to learn that official communications have been exchanged between that body and the foreign minister, and between the English ambassador in France and the French ministry, on the subject of the proposed restriction of practice by British physicians in France. Lord Lyons states, in a recent despatch, that he had called the attention of the French Government to the suggestion that the Bill should be arrested, until an International Committee could consider the position of foreign medical men in England and France respectively. His Excellency had for long been earnest in pressing upon the consideration of the Minister for Foreign Affairs and for Public Instruction, objections to the illiberal restrictions contemplated by the Bill.

The Duc Decazes has informed Lord Lyons that the Minister of Public Instruction had thought it inexpedient to take in this instance the somewhat unusual course of resisting the simple consideration of a Bill, in opposition to the Report of the Initiative Committee; but that the Government had determined to offer a strenuous opposition to Monsieur Marvaise's Bill in its future stages.

Lord Lyons further communicated to His Excellency, both on his own account and by order of Her Majesty's Government, that there was no possible doubt as to the very serious objections entertained in Great Britain to this Bill.

## THREE DEATHS FROM CHLOROFORM-INHALATION.

THE following account of the recent death under chloroform at the Wolverhampton and Staffordshire General Hospital, has been supplied to us.

"Thos. Skitt, aged 43, a strong muscular man, came to the hospital on December 15th, suffering from a compound fracture of his left forefinger. He was in a very nervous state, but apparently quite sober. Having refused to submit to amputation without an anæsthetic, he was laid on a couch, and chloroform was administered on a piece of lint once folded. About half a drachm at a time was poured on the lint, which was held a short distance from the mouth and nose. He struggled a good deal while "going under", but not more than one would have expected in so muscular a subject. Soon after the third application of the chloroform, and just as the operation was about to be begun, it was noticed that respiration had ceased, and immediately afterwards the pulse in the temporal arteries could not be felt. Artificial respiration was at once started, the left external jugular vein was opened, the battery and every other means were used to restore animation, but without effect. Artificial respiration was kept up for three-quarters of an hour. At the *post mortem* examination, the heart was found to be contracted and empty, and its muscular substance in a state of true fatty degeneration. The valves were healthy. The brain and lungs were not congested, and the other organs were healthy. The deceased had a bronchocele involving the left lobe of the thyroid gland: he had taken a meal shortly before coming to the hospital, and was in the habit of drinking as much as three gallons of beer a day."

Mr. Joseph Harry Wilson, of Peterborough Infirmary, writes to us, with commendable promptitude:

"I have to record the death from chloroform of one of the out-patients of this institution. The patient was suffering from a strangulated inguinal hernia, and, after taxis unaided had failed, chloroform was given before again attempting reduction. The patient was brought fairly under the influence of chloroform; and as, during the manipulation of the hernia, he showed signs of returning consciousness, I administered a little more, whilst the surgeon who was assisting me, and who previously had taken charge of the anæsthetic, tried to return the bowel. Shortly afterwards, his breathing suddenly became shallow and irregular, and his radial pulse could not be felt. Although the usual means of resuscitation were promptly resorted to, the patient never rallied. The patient was fifty-two years of age, and had a history of rheumatic gout; but, unfortunately, no *post mortem* examination was allowed. The whole quantity of chloroform used was two drachms, and it was administered on a thin handkerchief held lightly over the face."

The following paragraph appears in the *Stalybridge and Dukinfield Standard* of Saturday, January 20th.

"It is with feelings of sincere regret that we announce the death of Mrs. Sykes, wife of Mr. Saville Sykes, watchmaker and jeweller.

Mrs. Sykes, it appears, had been afflicted with a tumour in the throat, which caused her intense suffering. Dr. Roberts-Dudley, Mr. Lund of Manchester, Dr. Dickinson, and Mr. Hopwood, were her medical advisers. On Sunday, they decided on performing an operation with the view of removing the tumour; and for this purpose the unfortunate lady was subjected to the influence of chloroform. Before the operation could be successfully completed, however, she was dead, all the efforts used to induce a return to consciousness having proved futile."

We have not yet received particulars of this case, but hope to do so next week. The correspondent who favours us with this extract states that not all the medical men named were present on the occasion.

## CORRESPONDENCE.

## MEDICAL DEFENCE.

SIR,—The following resolution was passed unanimously at the annual meeting of the South-Eastern Branch at Maidstone in June last:

"That it be a recommendation from this meeting to the Executive Council of the Branch, that an Ethical Committee be formed to whom all questions affecting the welfare and conduct of the profession may be referred."

At the meeting of the Executive Council on January 16th, the subject was discussed and the following resolution passed:

"That, in pursuance of the recommendation at the annual meeting, this Council do constitute itself an Ethical Committee for one year."

It is only necessary to add that the word "welfare" includes "medical defence" so-called, or the prosecution of unqualified practitioners; and it may interest other Branches to know what steps have been taken by this Branch in a matter which just now is agitating the whole Association.—Faithfully yours,

CHARLES PARSONS, M.D., *Hon. Sec. and Treasurer.*

2, St. James's Street, Dover, January 22nd, 1877.

## ANIMAL VACCINATION.

SIR,—A great number of English doctors have applied to me to know by what means they can procure animal vaccine from the Institut vaccinal de l'Etat, in Brussels.

In order to save them unnecessary trouble and loss of time, may I beg you most kindly to convey to them, through the medium of your JOURNAL, the following information?

1. The animal vaccine of the Belgian Institution is transmitted either in tubes or on points. One tube or one point is sufficient and necessary for the vaccination of one person, and is sold at the rate of two shillings a piece.

2. To procure tubes or points, it suffices to send a post-office order to Monsieur Evariste Warlomont, director of the Institut vaccinal de l'Etat, à Bruxelles. The vaccine is sent by post.

The Direction recommends in a special manner the points, and the operation by several scarifications.

Pray receive the assurance of my distinguished sentiments, and believe me, yours faithfully,

Bruxelles, January 19th, 1877.

E. WARLOMONT.

## MR. COOKE'S SCHOOL OF ANATOMY.

SIR,—Would you kindly do me the favour of inserting the following letter in your next issue (though it has already appeared in some of the daily papers), and further allow me to make two important quotations and add two remarks:

1. A nuisance was defined "anything annoying", "affecting the enjoyment of others", "offensive to the general idea of the public" (Mr. Besley, the counsel for the prosecution); "offensive to the senses, but not necessarily detrimental to health" (Sir Thomas Gabriel, the magistrate).

2. My rooms were screened from the gaze of all, except to trespassers on my roof, the staircase of my floor leading to no other rooms but mine, and therefore strictly private; well ventilated by a strong "up-current", and "there was nothing to find fault with" (Dr. Sedgwick Saunders, Medical Officer of Health for the City of London).

3. By sections 1, 12, 5, 3, and 2 of the Anatomy Act (2nd and 3rd William IV, chap. 75), the licence to practise anatomy is personal; the choice of the site rests with the licensee, who is simply to give one week's notice thereof to the Home Secretary; the "inspector of places where anatomy is carried on" is merely to "visit", "inspect" and "superintend" such places. No blame whatever attaches, there-

fore, to Mr. Hawkins with regard to the granting of the licence for New Bridge Street.

4. I believe myself justified, however in feeling aggrieved that Mr. Hawkins did not come to see my premises as soon as any dissatisfaction appeared to exist; a word from Mr. Hawkins would probably have dispelled the unenlightened prejudices by which I was assailed. Instead of that, Mr. Hawkins, without taking the trouble to acquire any personal knowledge of the facts, suddenly ordered me to remove a body (the only one I had) which was in a state of perfect preservation, and which he had previously authorised me to keep, if necessary, the full period of six months, instituted by order of Mr. Home Secretary Bruce.

This arbitrary decision appears to have caused the ruin of my school. It took out of my hands the best proof, the only absolute proof I had, that my school had been carefully conducted.

It further drove my friends to the stratagem of the empty coffin, about which you have doubtless heard. My friends thoroughly believed, as did also the City sanitary authorities, that all that the complainants had smelt was the smell of carbohc acid. And this turned out to be the case; since, in seeing an empty coffin brought in, and believing that there was a body in it, they again said, "they perceived the same smell as before".

I beg, sir, on account of the painful and most serious circumstances in which I had been placed, to crave indulgence for anything that was objectionable to science in this empty coffin stratagem, and also, for the future, the protection which would, I believe, certainly result from more frequent visits of the Government inspector.—I am, sir, your obedient servant,

THOMAS COOKE, F.R.C.S.

#### THE LATE DR. MERCER.

SIR,—As Dr. Mercer's medical attendant, I am in a position to state that the report of his having died from an overdose of chloral is incorrect. With the exception of one dose of ten grains, he did not take any chloral for four days previous to his death, which resulted from heart-disease.—I am, yours truly,

W. STEPHENSON.

Beverly, January 16th, 1877.

#### AURAL THERAPEUTICS.

SIR,—I beg to call the attention of Dr. Pierce of Manchester, and Dr. Cassells of Glasgow, to the heading under which the notes of the *clinique* at Guy's Hospital, in the JOURNAL of 9th December last, appear. By referring to it, they will see that these "Hospital Notes" occur as one of the "Reports of Medical and Surgical Practice in the Hospitals and Asylums of Great Britain"; and are, therefore, written by the private reporter of the JOURNAL. The gentleman who acts as your reporter visited the *clinique*, remained two or three hours, and has reported on cases which came before him during his visit. I thank him for the trouble he took to acquaint himself with the modes of treatment pursued, and the report he gave of them.

There is nothing set down in the report as a novelty or new proposal, though there are, I believe, several new methods of treatment described, which will be dilated upon at some future time.—I am, etc.,

W. LAIDLAW PURVES.

7, Hanover Street, Hanover Square, W.

## ASSOCIATION INTELLIGENCE.

### BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE next meeting will be held in the Examination Hall of the Queen's College, on Thursday, February 8th, 1877. The Chair will be taken at Three o'clock P.M.

*Business.*—To elect an Honorary Secretary to fill the vacancy caused by Dr. Foster's resignation.

JAMES SAWYER, M.D., *Honorary Secretary.*

Birmingham, January 24th, 1877.

### BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE third ordinary meeting of this Branch was held at Bristol on Thursday, January 18th, at half-past seven, P.M.; H. F. A. GOODRIDGE, M.D., in the chair. There were present fifty members and two visitors.

*New Members.*—Dr. A. Stevens and A. D. Talbot, Esq., were elected members of the Association and of this Branch.

*Discussion on the Treatment of Acute Rheumatism.*—Dr. SKERRITT opened the discussion by a short paper on the Treatment of Acute Rheumatism, in the course of which he instanced cases treated by salicylic acid, the cold belt, and various other remedies. Drs. E. L. Fox, J. G. Davey, Shingleton Smith, Beddoe, Cole, Fyffe, and Siddall, and Messrs. D. Davies, Thompson, H. Grace, and Stone took part in an interesting discussion. The President made some remarks and Dr. Skerritt replied.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### THE WANTAGE BOARD OF GUARDIANS AND ITS MEDICAL DISTRICTS.

THE Wantage Board of Guardians advertise the Ilsley District of that Union. We would draw attention to the fact that the Ilsley District, as described, is nearly four thousand acres larger than contemplated by the legislature. The limit of districts, as imposed by law, is fifteen thousand acres, a fact of which the Board of Guardians of the Wantage Union cannot, or at least should not, be ignorant. We would ask who is responsible for this ignoring of the law of the land? and whether the Local Government Board might not with advantage see that the law is carried out? There can be nothing very exceptional in the position and circumstances of the Wantage Union to warrant its taking an exceptional line of action; nor can there be any advantage, either to it or its paupers, in having a district larger than can be worked efficiently simply for the sake of cheapness.

### THE GUARDIANS OF ST. GEORGE'S, HANOVER SQUARE.

SIR,—At page 90 of your last issue, I find that my name is introduced, *à propos* of a case (which you appear to regard as *ad hoc sub judicé*) under the heading, "The Guardians of St. George's, Hanover Square, and Mr. Fenton".

May I ask you to give the same prominence to the statement which follows?

Firstly—I am not "the workhouse medical officer". Up to the year 1871, I was one of the visiting medical officers to the Mount Street Infirmary; but since then have had no connection with that institution. I abstain from quotation from my evidence, because I deem it unfair *pendente lite*, but shall be happy anon to furnish you with it *in extenso*.

Secondly—The statement that "for Dr. Bloxam's attendance at the *post mortem* examination, and for his subsequent attendance at the inquest, the Board voted £5:5", is incorrect.

Thirdly—Permit me to say that my attendance and opinion were sought for reasons which I would rather leave to others to explain. As to the manner in which my intervention was conducted, I cannot do better than leave Messrs. Fenton and Price to speak, and content myself by saying that we parted most amicably and agreeably.—I am, sir, yours very obediently,

WILLIAM BLOXAM, M.D.

21, Mount Street, W., January 23rd, 1877.

## MILITARY AND NAVAL MEDICAL SERVICES.

SURGEON-MAJOR A. N. FOX, M.B., has been appointed principal Medical officer of the African Medical Service, *vice* Surgeon-Major A. F. Elliott, M.D. retired upon half-pay.

The second Professorship of Military Hygiene at the Army Medical School, Netley, vacated by Surgeon-Major De Chaumont, M.D., on appointment as Professor, is not to be filled, but an assistant professorship has been created, the duties having been assumed by Assistant-Surgeon J. L. Notter.

THE appointment of an additional medical officer to the flagship on the China Station, now held by Fleet-Surgeon G. B. Hill, for special service in connection with the Lock Hospitals in Japan, is, the *Army and Navy Gazette* believes, likely soon to be abolished. It is proposed to hand over the charge of these hospitals to the Japanese Government, and it is probable that a higher class of native medical practitioner than hitherto employed in this department will be placed in charge in future.



## OBITUARY.

### EDWARD WILLIAM MURPHY, A.M., M.D.

DR. MURPHY, who died on the 11th instant, was born in Dublin in 1802. In 1818, he became a pupil of the Royal College of Surgeons of Ireland; and, in 1819, entered Trinity College, Dublin, where he graduated as B.A. in 1825, M.A. and M.B. in 1832, and M.D. in 1853. He became a Licentiate of the Royal College of Surgeons of Ireland in 1827. He early turned his attention to midwifery, and about 1830 was an assistant-physician in the Rotunda Lying-in Hospital in Dublin, during the mastership of Dr. Robert Collins. In 1840, he settled in practice in London; and in 1842, on the death of Dr. D. D. Davis, was appointed Professor of Midwifery in University College. This post he occupied until 1865, when he resigned it.

His contributions to medical literature were *Lectures on the Principles and Practice of Midwifery*, a second edition of which appeared in 1867; *Lectures on Natural and Difficult Parturition* (1845); *Lectures on Preternatural and Complex Parturition, and on Lactation* (1852). He also contributed a paper on Rupture of the Uterus to the *Dublin Medical Journal* in 1835, and essays on Chloroform to the same journal in 1848, and to the *Edinburgh Medical Journal* in 1849. He was, indeed, among the very first to use chloroform in midwifery in London, following the example of Sir James Simpson.

In 1853, Dr. Murphy delivered one of the earliest courses of Lettsomian lectures before the Medical Society of London, taking midwifery as his subject. The lectures were published in the *Association Medical Journal* for that year. In 1858-59, he was President of the Metropolitan Counties Branch of the British Medical Association.

Dr. Murphy married, in 1830, Miss English, eldest daughter of Mr. William English of Dublin. He had eight children, of whom three—a son and two daughters—survive.

He has been prevented by failing health from attending to professional duties since 1870, and died on January 11th, in the seventy-fourth year of his age.

### HENRY HOLMAN, M.R.C.S., HURSTPIERPOINT.

On January 20th, at Hurstpierpoint, died Henry Holman, aged 83. Thus is simply told the end of him who had laboured as a medical practitioner in one place for sixty years. He was one of the few surviving pupils of Astley Cooper and Cline, and a contemporary of Aston Key.

Mr. Holman was apprenticed to the Messrs. Weekes of Hurstpierpoint in 1809; and, after studying in London at the united hospitals of Guy's and St. Thomas's, and at the University of Edinburgh, he bought a horse in the North and rode back through England to join his old masters in partnership in 1817.

A remarkable knowledge of his profession for those days, unwearied assiduity in work, and a manner and appearance singularly confidence inspiring, soon gained him a large circle of patients. His skill in midwifery was much trusted, and he has often stated that he had attended four thousand cases with but one single death from causes immediately resultant upon the confinement. He turned twice successfully for contracted brim of the pelvis, many years antecedent to the publication of Sir James Simpson's observations on the subject. Amongst the very earliest, he began to use antiphlogistic treatment with great caution, recognising in the cases he was called upon to visit the necessity for rest, warmth, and moderate support. He is gone; and loving memories of the good old man, who never spared himself when duty called, will long live after him in the hearts of all classes amongst whom he lived, and worked, and died.

### DAVID ARROTT, M.D., F.R.C.S.E.

DR. DAVID ARROTT died suddenly at his residence, in Arbroath, on December 27th, 1876. Rather more than two years ago, he was seized with hemiplegia of the right side, from which he partially recovered, and was able to move about a little and visit a few of his old patients. On the day of his death, he had gone out as usual; but, while finishing dinner, was suddenly seized with pain in the region of the heart, and, in spite of remedial measures which he himself directed, he peacefully expired.

Dr. Arrott was a native of Arbroath, and had completed his sixty-seventh year. He received his medical education first at Edinburgh

and afterwards at Berlin. On the completion of his studies, he commenced practice in Arbroath along with his father, the late Dr. William Arrott. In addition to a very good private practice, he held the offices of certifying factory surgeon, medical officer of health for Arbroath, and parochial medical officer for the parish of Arbrirlot.

Dr. Arrott was a man of great and varied accomplishments. Well versed in ancient and modern languages, he had a thorough acquaintance with English literature, and his original compositions in prose and verse were characterised by great elegance and beauty. His readings and recitations, rendered with much dramatic power, and his racy, polished, and effective speeches, were much relished in public and private gatherings. His gentlemanly manners, his genial exuberant humour, his inexhaustible fund of joke and anecdote, and, above all, his warm kind heart and ready sympathy for all suffering and sorrow, made him a favourite with all classes. To the poor, his services, freely and unselfishly rendered, made him specially dear. He was a noble-hearted gentleman, to whom everything mean and malignant was completely strange.

As a practitioner, he took a high place as an accoucheur of rare success; he was a wise and thoughtful physician, and, at a time when heroic treatment was in vogue, he was very much in advance of his age.

## MEDICAL NEWS.

**ROYAL COLLEGE OF SURGEONS OF ENGLAND.**—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on January 18th; and, when eligible, will be admitted to the pass-examination.

Messrs. Francis T. Wilkinson, Harry Hine, Charles H. Haycroft, William W. Leigh, Philip James, George H. W. Jones, Walter Gray, Alfred H. Burton, and Charles J. Parke, students of Guy's Hospital; Thomas S. Dyson, Henry S. Thorpe, John W. Stone, John Protheroe, and Hugh Redmayne, of St. Bartholomew's Hospital; George E. Weston, Arthur C. B. Jones, Thomas G. Jenkins, and James L. A. Hope, of St. George's Hospital; Thomas Crisp, Edmund D. Maddick, and John P. Jeffreys, of St. Thomas's Hospital; Charles G. Stein, Richard A. S. Chard, and Henry J. J. Lavis, of University College.

Thirty-five candidates out of the one hundred and twenty-seven examined, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months.

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on January 22nd.

Messrs. W. M. Frobisher, Leeds; James Brett, L.S.A., Leamington; H. S. Stone, M.B. Edin., New Brunswick; J. E. Looker, Altrincham; C. F. Dizzle, L.S.A., Manchester; W. T. Ward, M.D. McGill, Stanhope, Canada; J. H. L. Macintire, L.S.A., Richmond Road; E. K. Mansell, L.S.A., Upper Norwood; F. S. Goulder, Norwich; Thomas James, L.S.A., Aberdare; and John Kirkpatrick, M.D. Toronto, Toronto.

The following gentlemen were admitted members on January 23rd.

Messrs. William Rhodes, Birmingham; Richard Davies, Birmingham; Edward Law, Sheffield; William Armstrong, Manchester; Charles A. S. Ling, L.S.A., Gorleston, Suffolk; Wilhelm Devenish, Trinidad; A. T. Winterbottom, Manchester; William E. Luscombe, Porteous Road; P. M. Richards, L.S.A., Fennant, Denbighshire; John Morgan, L.S.A., Strata Florida; A. W. Green, L.R.C.P. Lond., Lee, Kent; W. G. Archer, M.B. Cantab., Edgbaston; T. N. Griffith, L.R.C.P. Ed., Oakley Square; and H. E. F. Cross, L.R.C.S. Ed., Craven Street.

The following gentlemen were admitted members on January 24th.

Messrs. G. B. Longstaff, M.B. Oxon., Wandsworth; Herbert Bland, Ryde, New South Wales; H. D. Stewart, St. James's Gardens; R. L. Stokes, Redmarley, Worcestershire; T. H. Gillain, L.S.A., Weaverham; D. D. Malpas, Sevenoaks; E. H. Howlett, Stafford Place; W. F. Hopwood, Staleybridge; W. P. Davey, L.S.A., Leyton, Essex; A. P. Green, St. John's Wood; T. E. Hayward, Tewkesbury; J. F. Steele, L.S.A., Stoke Ferry, Brandon; C. W. C. Fletcher, Leicester; J. S. Clowes, Merrick Square; A. R. Anderson, L.S.A., Plymouth; C. P. Creed, Greenwich; L. A. Barrow, Camden Town; W. O'C. Tarrant, Clapham; T. H. Craddock, Finsbury Park; and J. R. Ogle, L.R.C.S. Ed., Newport, Shropshire.

**APOTHECARIES' HALL.**—The following gentleman passed his examination in the science and practice of medicine, and received a certificate to practise, on Thursday, January 4th, 1877.

Wood, Edward Joshua, Higham, Kent

The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, January 18th, 1877.

Earle, Joseph Herbert, Brentwood, Essex  
Joynes, Victor Alexander, Hucclecote, Gloucester

The following gentleman also on the same day passed his primary professional examination.

Middleton, Charles Frederick, University College



## OBSERVATIONS

ON THE

GROUNDS OF BELIEF IN MEDICAL EVIDENCE  
TOUCHING INSANITY.\*

By JOHN CHARLES BUCKNILL, M.D., F.R.S.,

Late Lord Chancellor's Visitor.

I HAVE been led to invite the attention of the members to this subject by a recent and remarkable charge made to a jury by that usually sound and able judge, Lord Moncrieff, the Lord Justice Clerk of Scotland.

On the trial of one James Macklin at Glasgow for murder in May 1876, Lord Moncrieff denounced and condemned that old test of irresponsibility on account of unsound mind, which legal ingenuity has invented and long upheld against medical opinion; namely, the incapacity of distinguishing between right and wrong. "As in point of fact," said Lord Moncrieff, "except in acute mania or idiocy, there are very few lunatics who do not know right from wrong, in the sense of being capable of forming and even acting on the distinction, much unreasoning inhumanity had been the result of this unscientific maxim."

It will be curious to observe how long this northern light will take to penetrate the sublime regions of English judicature; but, in the meanwhile, we doctors need not be very thin-skinned when we find judges speaking of each other's opinions and practice in such terrible terms of condemnation. Having thus broken loose from this unscientific maxim, which has been the cause of much unreasoning inhumanity, Lord Moncrieff proceeded to suggest to the jury "what he thought a far safer and a more constitutional, and a more reasonable ground" for their judgment. "Soundness or unsoundness of mind," he said, "was a fact which had to be judged of, not as a question of law or science, but in the ordinary rules which are applied in daily life. One took the assistance of legal or scientific views; but the jury were as good judges as any lawyer or doctor of whether a man whom they met in daily life was sound or not. If it turned out that he was able to conduct himself with propriety in the ordinary relations of life, not excluded from the confidence of his fellow-men by reason of distrust of his sanity, they had advanced not the whole of the journey, but nine-tenths of it, towards their conclusions." "The tenth part of the journey," Lord Moncrieff proceeded to say, "was whether the man laboured under an insane delusion," etc.†

This dictum, so well expressed by Lord Moncrieff, has been called *the habit and repute test*. Now, the inquiry which I desire to moot this day is whether or not soundness or unsoundness of mind is a fact to be judged of, not as a question of science, but according to the ordinary rules of daily life, so that twelve common men impaneled as a petty jury may, from their own experience and knowledge, be as good judges as any expert whether a certain man is of sound or of unsound mind. The idea is not a new one, but has been very strongly expressed by other eminent authorities—by Lord Shaftesbury, for instance, before the Select Committee on Lunatics in 1859, in his reply to Question 192, and also with great force by the late Lord Westbury, in the debate upon the third clause of his Lunacy Regulation Bill on March 26th, 1862, by which he attempted to exclude medical opinion in inquiries of lunacy. "An evil habit," he said, "had grown into a precedent with judges and juries, of assuming that insanity was a physical disease, and not a subject of moral inquiry, and, therefore, that they were bound to accept medical testimony in reference to it. If there were any process by which a man's skull could be cut into, and the different coats and linings of the brain exposed, so as to exhibit whether they were too much gorged, or the circulation impeded, there might be something in the plan. But medical science had not obtained that pitch of development, and medical men imagined external things to be the indices of things unseen."‡

\* Read before the Public Medicine Section at the Annual Meeting of the British Medical Association in Sheffield, August 1876.

† At the subsequent trial of Thomas Barr for murder, the Lord Justice Clerk used almost the same words in his charge to the jury. "The question of sanity or insanity," he said, "soundness or unsoundness of mind, is simply a question of fact, to be judged of by you upon ordinary rules, and the intercourse between men and men in daily life. It is not a question of law, as I said, or a question of science: it would be most unfortunate if it were either the one or the other. The tendency of the lawyer would be to find all men sane, and the tendency of the medical man might be to find all men insane."

‡ It seems to have been overlooked by Lord Westbury, that all men, whether they be ignorant or expert, must in questions of insanity accept external things as the indices of things unseen, unless it can be shown that a state of mind can itself be seen.

Lord Westbury, however, proceeded to adduce two instances in which his supposed plan of cutting open a man's skull would have given no answer, one being that of "a celebrated Scotch judge who administered justice for many years with great skill and knowledge of the law, and, after his death, which took place suddenly, a *post mortem* examination was held, when it was proved that he had been subject to excessive softening of the brain, and that it had been going on for several years". Another similar case, he said, had happened recently in the person of one of our own judges; the inference being drawn that lunacy is not a physical disease, nor medical evidence of its existence of any worth, seeing that it is absurd to suppose that administrative skill and knowledge of the law can coexist with unsoundness of mind, which, if medical men are right, must be the result of extensive softening of the brain.

To return to Lord Moncrieff's dictum, which is temperate and not intentionally hostile to us, and seems worthy of serious discussion, the fallacy of it appears to be in the admission that soundness or unsoundness of mind is a patent and simple fact, and not a matter of opinion founded upon groups of facts which are oftentimes by no means obvious to the apprehension of unskilled persons. Complex perceptions are constantly, but most erroneously, described as matters of fact, although they are in truth woven into shape by a tissue of inference, and are notional assents or generalisations; that is to say, opinions as to resemblance and relation of real things or of sensations of things. Nothing, indeed, deserves to be called a simple matter of fact which is not either an act of consciousness or a sensation referable to an individual phenomenon or event. And it seems impossible to entertain so complex an idea as the mode of life of a man, be he sane or insane, and the estimation in which he has been held by other men, without multiplied inferences and judgments, that is the formation of opinion. The appreciation of the conduct of a supposed lunatic, therefore, towards other men must be a tissue of fact and of opinion, respecting which I must venture to differ from Lord Moncrieff in thinking that the ordinary rules applied in daily life by common men to common things are less likely to be a safe and reasonable guide than the skilled observation and trained inference of those who have made such matters the subject of earnest and laborious research.

With regard to the repute for insanity which a man may have among his fellow-men, the remembrance that there was once One of whom it was said, "He hath a devil and is mad", might well bid us hesitate in accepting such grounds of prejudice and passion in aid of any serious judgment.

No doubt, there are men whose habit of life obviously indicates insanity to the lowest understanding, and whose repute as madmen among their fellow-men is the natural result of their condition and conduct; but such glaring instances do not frequently come before a jury either in a criminal or civil court. The habit of life is very often shown in lunacy trials to have been orderly, and nothing is more disputable than repute; and, if learned doctors differ upon scientific grounds, ignorant laymen cannot agree upon superficial ones.

But the jury has to form its opinion, and to say positively Yea or Nay, or, to speak more accurately, each jurymen has to form his individual opinion and to agree to a common verdict in conformity therewith. It is a curious blunder we are apt to make that a jury has a collective mind; on the contrary, the truth must be that, in every trial, every individual jurymen forms his opinion on somewhat different grounds from his fellows; for no two minds are alike in their ability and disposition to appreciate evidence; and Mr. Hicks's good story of the Cornish jury is true in principle in every trial, be the verdict good or bad.

Now, what is the point that the individual common sense jurymen will be able to satisfy his mind in a question of lunacy by the ordinary rules of daily life, and without the aid of skilled evidence? In these days, lunatics do not run loose about the country like mad Toms of Bedlam in the olden time; nearly all of them are under care and control, and it is by no means improbable that, of twelve shopkeeping and farming jurymen, a large proportion may have never been brought into close contact with a madman of any kind or description; and it is very certain that the notions of insanity entertained by such people are extremely exaggerated and fanciful. Left to themselves, they would find no man insane who was not as mad as Nebuchadnezzar. They could no more distinguish a somewhat obscure case of insanity than they could make an almanack, yet they would very rightly trust to an almanack, and as rightly trust to a skilled opinion on insanity, if they believed it to be really skilful and honest. Unfortunately, medical science is very far from being as mature and certain as that of astronomy, but, such as it is, it must be used both in daily life and in the courts. A grocer or farmer finds difficulty in making water. He goes to his surgeon, who, having touched something with a steel bar, informs him that he has a stone in his bladder, and that a large



and dangerous wound must be made in his body, in order to remove it; and the man places his life in the hands of the surgeon, because he accepts the authority of his opinion. There is to him the local pain and sudden stoppage, which are facts, and the skilled opinion as to the nature of those facts, and to which he submits. The same man acting on a jury has the fact of a homicide brought before him, and is compelled to arrive at another momentous decision, and again the chief solvent of his doubts will necessarily be the skilled opinion of a medical man; of one this time who has not devoted his life to the study of surgical disease, but to that of mental disease, and nothing which the judges can say to the contrary can prevent it. On both occasions, he submits to an influence to which all mankind must yield in varying degrees and circumstances; namely, to the influence of authority in matters of opinion, and by authority I mean the influence of one man's opinion upon the belief of another who does not comprehend the proof. That for which the jurymen is justly responsible is the proper choice of his authority and the due weight which he attaches to it. If he went with his disease to a quack water-doctor, or at the trial confided in an ignorant pretender, he would incur the risk of losing his own life or of unjustly taking the life of another. In weighing and accepting the opinion of an expert, he deliberately exercises his reason, and, in doing so in the judicial case, he has the best help which learned and acute intellects can provide; for the hostile counsel is or ought to be a sharp test of hollow pretence, and the presiding judge is or ought to be a sound critic and a sure guide. Still, the jurymen determines for himself to what extent he will give credence to the opinions of a witness. "Authority is opposed to reasoning", says Sir George Cornewall Lewis, "if by reasoning we understand the process of appropriate inquiry conducted by the person himself. But between authority and reason there is no opposition, nor does the one exclude the other."

The tests of authority which are habitually and with moderate efficiency applied in courts are the possession of special knowledge, honesty and veracity in imparting it, freedom from bias, prejudice, and interest, and the consensus of scientific or professional opinion. Time will not permit me to dwell upon these marks of the value of evidence; but the very able author I have just mentioned may well be consulted thereupon in his admirable work on *The Influence of Authority in Matters of Opinion*.

Passing from the jurymen to the witness, let us now inquire in what logical form his evidence must be conceived. The form, indeed, may seldom be expressed, but the potentiality for its use must always be accepted and understood, as the banker does not weigh every coin which passes over his counter, though the balance is at hand. In affirming insanity, the syllogism will be:

1. All men who present any one of certain groups of signs of mental states are of unsound mind.

2. This man presents one of these groups of signs.

3. Therefore, he is of unsound mind.

In affirming the opposite proposition, the syllogism will, of course, be:

1. All men who do not present any one of certain groups of signs of mental states are of sound mind.

2. This man does not present any one of these groups of signs.

3. Therefore, he is of sound mind.

The *major* premiss here is a generalisation, and involves only a notional assent. It would not be untrue if there were no madmen in the world, but it is, nevertheless, founded upon the expert's own observation of individual cases, assisted, indeed, and directed by the recorded observation of others and by the funded knowledge of mental disease which is in the possession of our profession. The rules of judicial procedure will very properly not permit this fund of borrowed or inherited knowledge, which has not been derived from the expert's observation, to be used in evidence as if it were his own. It is at best second-hand evidence, which is always admitted with great caution and reluctance. We must, indeed, use the knowledge of others in the pursuit of knowledge for ourselves, otherwise we should ever remain in the very infancy of science; but we have no right to use such knowledge as witnesses as if it were verily our own; and I think that a laxity of practice in this respect has gone far to foster the prevalent feeling as to the vagueness and uncertainty of medical testimony. If an expert, however, at his experience may be on other matters, have no personal knowledge on the very matter in question, I venture to think that his presence in the witness-box is not desirable. An expert witness may, indeed, be fairly asked whether the generalisations he makes of the knowledge he has acquired by observation are such as are made by other labourers in the same field; whether, in fact, there is a consensus of skilled opinion in the notional assents which he has formed, seeing that this consensus of opinion is one of the strongest and most accepted marks of authority.

A court of justice is not exactly the best place for the promulgation of the results of novel research; and the man who attempts to be original in the witness-box often obtains, if he do not deserve, a *mauvais quart-d'heure*; and yet the generalised knowledge which is needed for the support of the major premiss in the syllogism must be that which the witness has himself acquired, or which he has first learned from others and has himself verified. Such knowledge possesses authority in itself in direct relation to the repute, the honesty, and disinterestedness of the witness, and it gains rapidly increasing authority, according to the agreement and support which it receives from independent observers. At present, in the matter of lunacy, this consensus of opinion is far from being universal; still, I think that no candid and well informed person will be bold enough to deny that a vast store of knowledge on the subject of insanity has during many years been accumulated by numerous true and trustworthy labourers in all civilised countries, upon which there is a positive consensus of opinion, and which, having been verified by the witness himself, becomes very properly the basis of his generalisation and the grounds of his major premiss. Notwithstanding Lord Westbury, the alienists of England, France, Germany, and America have learned with certainty that, even in their department of study and research, external things are the indices of things unseen upon which a diagnosis may be most rationally established, and they possess the proof that their knowledge is scientific in the fact that they are able to foretell events. They can very frequently foretell the course and termination of the disease which is their peculiar study with quite as much exactitude as those of many other diseases can be predicted; and, notwithstanding all that has been objected against the laxity of their evidence, not many sane men are in existence in this country who have escaped punishment for crime in consequence of their mistakes, and still rarer instances have occurred in which sane men have been found insane by civil courts on their testimony.

But, referring again to Lord Moncrieff's dictum, I think we may say truly that the consensus of opinion about insanity in the class from which petty juries are struck only exists in a rudimentary state, and is only applicable to extreme cases, just as such men will agree in believing that arsenic will destroy life, but need to be informed in what manner and with what symptoms.

The gross proof that one man has given another half an ounce of arsenic needs no more science than the gross proof that a raving madman has knocked another man's brains out; but, when it comes to minimum doses and obscure symptoms and delicate analysis, how much would the "ordinary rules" which the common jurymen "applies in daily life" assist him in either case in the awful duty of deciding to send a fellow-man to a shameful death? The intricate difficulties of the question must ever compel the jurymen, and even the judge, to require skilled guidance in determining this often unsaid but always understood major, and it is but a weak argument that this proposition can as yet only be stated with modest reservations and admissions of imperfect knowledge. The reason why it is imperfect is because it is difficult of attainment, and not because those who have devoted themselves to its acquisition have been indolent, careless, or unskilful; yet, such as it is, the relative knowledge of a skilled expert in insanity, compared with that of a petty jurymen, does not, I think, deserve all the depreciation to which it has been exposed by legists, and which is now forcibly, though perhaps not intentionally, expressed in the recent dictum of this eminent judge. But to relegate a question to the uneducated because the learned and skilful have found it difficult, is to place a burden upon the ass because the horse has stumbled with its weight, a folly which even a petty jurymen would not commit.

The *minor* of the above syllogism is, as usual, the practical point which must always be expressed and, if possible, proved. It differs from the *major* in being a matter for real in contradistinction to notional assent, in being applicable and referable to a person or a thing in contradistinction to a state of mind; that is to say, to a concrete individual case, instead of a generalisation of knowledge. The *minor* is: This man presents one of these groups of signs of a mental state. I use the word "signs" in preference to the medical term "symptoms", as being more general and less misleading.

With signs we have to do with our own sensibility; that is to say, with sensation; and indeed we cannot affirm this proposition without immediate reference to our senses. We have in some way felt the signs of insanity in another, and the madman has been an object to us, while assent to the truth of the *major* may be purely subjective, having no reference to any particular object. Professor Clifford has attempted to show that the states of mind of other men are to us something between *subject* and *object* which he proposes to call *effect*; but I think the distinction too subtle, and that we know the states of mind of other men only by sensible signs. Medical men in this matter are apt to fall



into a confusion of expression, if not of idea, by making no distinction between the sign and the thing signified, by speaking, for instance, of incoherence of speech, which is a sign, as if it were the vagabond and unassociated flow of ideas, which is the thing signified. It is not strictly and constantly enough remembered by medical men that the object of the legal inquiry is always and only the state of mind, and that all our evidence of sensible fact has reference to that which we cannot touch, or see, or hear, and which we can only infer from the signs which it manifests, the things which are seen being merely the indices of the things which are unseen.

Let me, as an example, refer to a group of signs of a state of mental alienation which an expert might look for in the individual man submitted to his examination. The usual signs of anything are causes and effects, and the surest signs of insanity are states of bodily disease which are known to cause insanity and conduct speech and bodily conditions which are its consequences. General paralysis and epilepsy are the most obvious instances of causal signs, and can it be doubted that the skilled observation of a medical man as to the symptoms of these bodily disorders is not of more worth than all the rude and crude guesses of common men? Let us take the former disease as an illustration. As long ago as 1855, I pointed out, in the *Medico-Chirurgical Review*, vol. xvi, p. 384, that, "on more than one occasion, I had detected the early symptoms of general paralysis in persons accused of theft"; and my observation has since been most fully confirmed by my professional brethren, so that, among well informed alienists, general paralysis is now acknowledged to be a very sure sign of an unsound state of mind in which the commission of theft is highly probable. But the existence of general paralysis in its early stages—that is, of the sign—is by no means an obvious fact, but needs all the skill of an expert for its detection, and, when detected, it needs the knowledge of an expert for the inference which connects it with the offence. A most instructive case will be found in the twentieth number of last year's *Lancet*, in which a man with general paralysis was convicted at Doncaster of stealing a gold watch in a railway train, at a trial (if such ignorant proceedings merit that name) where my friend Dr. Crichton Browne gave evidence. "I shall not easily forget," writes Dr. Browne to Dr. Maudsley, who reports the case, "the smiles of incredulity which pervaded the Doncaster Court House, from the recorder downwards, when I described the inequality of the pupils, the slight tremor of the tongue, and other *little* symptoms, which enabled me to recognise the justice of your diagnosis of general paralysis. I shall not easily forget the derision with which my prediction that the robust healthy looking man standing at the dock would not live above eighteen months was received at all hands." The prediction, however, was fulfilled; for the man, after conviction, died raving mad in less than a year.

Time will not permit me to give other illustrations; but I think the principle will not be gainsaid by any honest, intelligent, and instructed man that, in a multitude of instances, the signs of an unsound mental state which would be admitted to be valid by the consensus of skilled opinion in this and in all other civilised countries are not such as can become known to petty jurymen from the daily experience of common life. If it were otherwise, *use* which gives facility would be a futile waste of labour, and the saying of the man that he did not know whether he could play the violin, because he had never tried, would not be so absurd as it seems.

That the jurymen has to decide is true, and I am one of the last men to wish it otherwise; for I am old-fashioned enough still to hold that twelve honest men in a box are the palladium of English liberties; I quite concur also with Lord Westbury that it is always at bottom a moral question which the jury has to decide, and not a physical or scientific one. It is the question whether this man ought to be punished or not for this crime, or whether he was capable of making this will, or whether he is capable to manage himself and his affairs. These are all moral questions, but they all hang directly upon the physical and scientific one of whether the man's brain can or could perform its healthy mental functions or not. And my argument is that, on this, except in rare instances, the common jurymen must needs require scientific information and guidance, which he may partly understand, but which he must mainly accept upon good authority.

What is good authority? That is the question which it is the bounden duty of the jury, with the assistance of judge and counsel, thoroughly to sift. If it be not good, it will be misleading and mischievous; for

"Authority, although it err, like others,  
Hath yet a kind of medicine in itself  
That skins the vice o' the top."

If it be false, it hides the sore of ignorance, but will not cure it. Mental pathology is certainly no mock science, though it be yet in that

stage of immaturity which lays it most open to the invasions of enemies and of pretended friends, of hostile critics and of charlatan supporters. Of the latter, none are more mischievous than the enterprising speculator who heavily discounts real knowledge to gain credit for remote probabilities. But we mental pathologists are not bound to know more than we can know by painstaking and laborious study. Let us firmly stand upon the generalisations of knowledge upon which we are agreed, and upon the facts which we have ourselves carefully observed, and confining our opinions to the scientific question of the existence of sound or unsound mind, leave its moral corollary entirely to the courts, whose duty it is to infer and enforce it. The judges may decide, as indeed they have done, that one kind of madman shall be punished for crime and another excused; and, with the aid of the legislature, they might even decree that madness shall be no excuse for crime, as drunkenness is not; but, to decide the scientific question of what madness is, is beyond the province of the courts. "A court of justice," says Cornwall Lewis, "which was highly esteemed for its judgments on questions of law, would render itself ridiculous, and shake its authority, even within its own sphere, if it attempted to determine questions of science".

## REPLY

TO

### DR. LEARED ON THE MECHANISM OF THE SOUNDS OF THE HEART.

By CHARLES J. B. WILLIAMS, M.D., F.R.S.,

Physician Extraordinary to the Queen; Consulting Physician to the Hospital for Consumption, Brompton; etc.

ALTHOUGH Dr. Leared has taken his time in replying to my remarks on the mechanism of the sounds of the heart, which appeared in the *JOURNAL* on September 30th, 1876, he does not appear to have mastered the subject; for his misunderstandings and misquotations are something unusual. For example, he quotes me as saying: "The case is one of striking through a space at a tight barrier", etc.; whereas my expression was: "The case is *not* one of striking through a space at a tight barrier", etc. This reversal of the sense makes nonsense, which he proceeds to deal with accordingly.

Again, seeking for further support for his notion that sounds are caused by the movements of liquids *per se*, he "places the matter before Dr. Stone", and quotes from his reply the following oracular sentence: "Any person, whatever his scientific position, who declares the impossibility of sounds being produced in fluid alone states a fallacy." Either Dr. Leared misquoted, or his oracle misunderstood, my words, which were: "I conclude, then, that the sounds of the heart are not produced by any motions or collisions of the blood, because I find that no *such* sounds can be produced in fluids alone."

Dr. Leared then cites another authority, Amédée Guillemin, in proof that liquids alone can produce sounds; but this instance—that of the water-siren—I had expressly specified as deriving its notes from the motions of a solid. This instrument, by the revolution of its perforated disc, causes a rapid succession of openings and shuttings of holes through which a current of air or of water passes. The rhythmic puffs or spurts thus produced, when rapid enough, cause a continuous note, the pitch of which is in proportion to their frequency. This is a case of current-sound, the vibrations being produced by the motions of the revolving disc.\* But neither in its working nor in its results has it the slightest analogy to the normal sounds of the heart.

So likewise, in the other case mentioned by Dr. Leared, a whistling results from the wind passing through a keyhole, or from a person blowing into a key or through his lips, because the air is thrown into sonorous vibration by the resistance of the edges and hollows of the keyhole, the key, or the lips respectively. These sounds have an affinity, not with the natural sounds of the heart, but with the morbid sounds or murmurs; and, so far as I know, I was the first to point out the analogy between them. Nearly fifty years ago, I expressed my belief that an improved knowledge of the laws of sound would prove that liquids as well as air could be thrown into sonorous vibration by

\* It may be questioned whether the nature of the seven orifices in the perforated disc or in the current which it divides, and which certainly approximates and conveys the sound. They probably vibrate too short; and the movement of the disc must be considered as much the cause of the note as the motions of the wings of insects are of their hum, which we hear through the air.



passing through tubes of particular forms; and that cardiac murmurs, instead of depending, as Laennec conjectured, on a fancied spasm of the arteries, were really produced by the motion of the blood through partial obstructions or modifications in its course.\*

"In fact, all these murmurs are produced by the passage of liquids through solid tubes or apertures, in the same manner as analogous sounds are produced by the passage of air through pipes or holes of different kinds. They are the music of water-instruments, as the latter are of wind-instruments. There are only these differences between them: that liquids, being more sluggish than air, are less susceptible of the sudden motions which constitute sonorous vibrations; and, not differing so much in density from the solids in which they move, liquids will have little of those reflected or echoed vibrations which increase the sounds produced in air-filled tubes. Holding in mind these qualifications, we may explain the murmurs heard in the heart and arteries by referring them to parallel instances of the tones of wind-instruments; nay, we may find parallel phenomena in the rhonchi, respiratory and vocal sounds of that most complete and diversified wind-instrument, the windpipe and its branches. Like in these, there are varieties of sound, in generating which the solids and the current have different shares; thus, in sawing, grating, and the stronger droning murmurs, the vibrating resistance of the solid is chiefly concerned, and its vibrations are transmitted to the adjoining parts as well as to the current, so as to produce in them a thrill, which may sometimes be felt by the hand. Being in the rhythm of the heart's motion, this thrill resembles that felt on the back of a purring cat, whence Laennec called it the *frémissement cataire*. These have their parallels, in the case of sonorous rhonchus, in reed-instruments, and in those imitations of these murmurs which we can produce by forcibly breathing through the nearly closed teeth, tongue, and lips, which in like manner communicate a sensible vibration to the solids, as in ringing the letter R in a whisper. Again, in the blowing, hissing, whistling, and cooing murmurs, the vibrations are more those of the current reflected by the solid, in the manner of cavernous breathing, the sibilant rhonchus, blowing or whistling with the mouth, or of the flute class of musical instruments. Here, there are no perceptible vibrations in the solids; they are less actively concerned in the production of these sounds, which are rather transmitted in the direction of the current.†

Such is my explanation of current-sounds or murmurs; but, I repeat, the normal sounds of the heart are totally distinct from murmurs; they are produced by the intrinsic action of the heart and its valves as it propels the blood; and all the varieties which they present in health and in disease admit of an easy explanation. When murmurs are present from disordered mechanism, the normal sounds of the heart may be modified by the murmurs in a way which I will presently explain; but I must first endeavour to correct the curious and ingenious misapprehensions into which Dr. Leared has fallen in commenting on passages in my former communication.

His omission of the word "not" in the passage before quoted naturally throws Dr. Leared into a state of confusion, and it may be well to restate the argument in other terms. Dr. Leared holds that the first sound of the heart is caused by the impact of the blood issuing from the ventricles on the blood in the arteries, "which, supported by the semilunar valves, had attained a state of momentary repose". To prove that sound could thus be produced, he made the experiment of forcibly squeezing water from an India-rubber bottle through the side of a reservoir containing water; the result was a bellows-murmur at the orifice. On substituting glycerine for water, the bellows-sound was not heard, and there was difficulty in producing any sound; but, when the India-rubber bottle was compressed very strongly, a faint sound, resembling the first sound of the heart, was heard near the mouth of the tube. When, however, the moving column was allowed to strike the stethoscope, a loud sound, exactly resembling the heart's first sound, was heard.

My comment on this is, that the sound produced in the water being a bellows-sound, proves nothing but that a current issuing from

an orifice into water causes a current-sound, which we knew before, and have referred it to the vibration of the edges of the solid orifice. The experiment with glycerine proves my statement of the difficulty of producing sounds in liquids, especially in those that are viscid; but, when the moving column struck against a solid (the stethoscope), the sound was loud enough.\* Doubtless, the viscosity of the blood renders it less susceptible of the motions which constitute sound. It was to this property I alluded when I used the word sluggish, meaning not slow in motion, but somewhat cohesive, and less liable than thinner liquids to be thrown into vibration. When the heart propels this cohesive liquid into the arteries, the motion is one of silent displacement, and, however forcible, is kept silent by the fulness and equal distension of the arterial column, allowing no space for shock or impact. The interior of the heart and arteries is likewise peculiarly smooth, to render the onward passage of the blood as easy as possible in this, the most forcible part of its course. In the auricles and auricular portions of the ventricles, there are the projections and irregularities of the tendinous cords and muscular network; the blood pours slowly over these during the diastole and rest; but the arterial portions are quite smooth and funnel-shaped, to permit the onward passage of the blood during the mighty systole to be as free and unresisting as possible. All this points to the silent movement of the blood as most consistent with normal action, and contrasts strikingly with the friction and noise developed in the same parts by obstructive disease of the aortic orifice.

Another subject on which we differ relates to the noise caused in a long water-pipe descending from a cistern when the tap at the bottom is suddenly closed. I endeavoured to show that this phenomenon has no analogy with the heart-sounds, being a simple case of succussion in a rigid tube from the momentum of the current being suddenly stopped. Dr. Leared, on the other hand, considers this water-tap noise to represent the manner in which the second sound of the heart is produced; it is not surprising, then, that he should object to my view of the matter. But, as he has quite misunderstood the too concise explanation which I gave, I think it necessary to compare the two cases more fully.

The noise in the water-pipe occurs only when there is a descending pipe of several feet in length, which gives the current a powerful momentum; and, where the length is very great, the descending force is so strong as to bulge out or burst the pipe above the tap.† But there is no such backward momentum in the arterial trunks, nor can any analogy be found in "the pressure on the blood in vessels sufficiently rigid for the purpose". At the end of the ventricular systole, the only backward motion of the blood is limited to a few inches above the valves, which are immediately expanded and tightened by it, thereby stopping further reflux, and, by their sudden tightening, producing the second sound. Instead of a long back current in a rigid tube suddenly stopped, the movement in the large arteries consists of a strong forward pulse during the systole, alternated with a very short backward motion from the arterial distension at the beginning of the diastole, immediately stopped by the closing of the semilunar valves, both movements being regulated by the equalising pressure of the arterial tension. The whole mechanism of the circulation exhibits an admirable combination of efficient force with gentle steadiness of action, which contrasts strongly with the jarring violence of the downward rush of water in a rigid tube, to which Dr. Leared would assimilate it.

In my former paper, I mentioned that, in some instances, the concussion on stopping a running water-pipe is repeated two or three times; and that this seemed to me due to rebounds of the column of water, which implies a momentary separation of the surfaces at the closed end of the tube, the interstice being a quasi-vacuum, but really containing such rarefied air or vapour as ordinary water gives out *in vacuo*, and which, on the return of the column, is as quickly recondensed.‡

\* Dr. Leared seems not to be very successful in his experiments. He says (page 11, note): "I have laboured hard to produce an artificial circulation which should fulfil all the requisite conditions for the formation of sounds like those of the heart, by means of an India-rubber apparatus, but hitherto without success as regards the first sound."

† As Dr. Leared mentions, this can be prevented by introducing into the pipe a small tube communicating with an air-chamber, which serves as an elastic buffer, softening the shock and preventing the noise. Dr. Leared proposes to insert a similar diverticulum in the aorta of a living animal (rendered insensible), expecting to extinguish both sounds of the heart, and thus to demonstrate his explanation of their cause. I venture to prophesy that this will prove another of his unsuccessful experiments.

‡ Disregarding my expression "momentary separation", Dr. Leared erroneously supposes me to mean that palpable or permanent air is evolved, and proceeds to attack this man of straw. It is unnecessary to follow him through his mistaken argument; but it may be remarked that his statement, that the presence of air in the arteries destroys the second sound, is readily explained by its interfering with the action of the semilunar valve, which is adapted for liquids only. It is thus that injection of air into blood-vessels destroys life.

\* *Rational Exposition of Physical Signs*, etc., 1828. It was not till after this date (I write from memory, not having access to books here) that Cagniard de la Tour invented the syren, which exactly verified my prediction, by producing sound in water as well as in air. Dr. Hope and subsequent writers adopted the same view of the cause of cardiac and arterial murmurs; but its demonstration was not complete till the appearance of the second report of the London Committee of the British Association for the Advancement of Science in 1837, in which it was proved that every description of murmur could be exactly imitated by the flow of water through India-rubber tubes.

† *Pathology and Diagnosis of Diseases of the Chest*, fourth edition, 1840, p. 216. When I wrote the first edition of this work in 1827, acoustics were very little understood; and not finding the requisite information in scientific works, I had myself to study it by experiment and reflection, to enable me to compose a chapter on sound to explain the phenomena of auscultation. I was thus led to the knowledge of the properties of sound, which were subsequently more fully explained in the writings of J. Herschell, Wheatstone, and others.



I conclude, then, that Dr. Leared has failed to establish any instance of the production of sounds like the normal sounds of the heart by liquids alone, the cases which he has cited depending on the agency of a solid as well as a liquid; and, in most examples, the result being a current-note or murmur instead of a shock-sound, like those of the heart. The case of the water-pipe I have shown to have no analogy with that of the heart in either factors or results.

Having negatived the liquid solution of the question, I revert to my positive proofs that the solids are the essential cause and seat of the normal sounds of the heart. I before alluded to the facility with which sounds can be made with solids, as contrasted with the difficulty of producing them in liquids. Let anyone take a large basin or tub of water, and, plunging the cone of an ear-tube, listen to motions made under the water; for example, by forcibly compressing an India-rubber bottle (without air). No sound will be heard, except from the muscular action of the hand, or when the current grates on the edges of the orifice or strikes against the ear-tube, and then nothing like the heart-sounds. Then let the experimenter try any sudden motion of a solid, whether by knocking, scratching, or tightening it near the orifice of the tube, and he will hear sounds distinct enough, however gentle the motion be. As I before said, the sudden tightening of a piece of tape, cloth, or membrane, makes a noise most like the heart-sounds, the second sound being exactly imitated by tape or ribbon, and the first less perfectly by a thicker fabric, such as woollen cloth.

If we extend our observations, from inanimate solids suddenly stretched by external force, to muscles which tighten by intrinsic power, we find that their movements also yield sounds, when sufficiently brisk and strong. Slow and weak contractions cause little or no sound, but those that are abrupt and vigorous are abundantly sonorous; the quality of the sound varying with the thickness of the muscle and the duration of its action. Thick muscles, as those of the thigh, give a dull and prolonged sound, like that of a thick-walled heart. A thin expansion of muscle, as the platysma myoides in the neck, or the panniculus carnosus in quadrupeds, yields sounds loud enough and sharp enough to imitate the sounds even of a dilated heart. But, in any case, if the muscular contraction be continued, the sound becomes more dull and rumbling, such, in fact, as that described by Dr. Wollaston in the *Philosophical Transactions* of 1810. The best imitation of the normal first sound of the heart that I have obtained was in the abdominal muscles. By using a flexible stethoscope, anyone may make this experiment on himself in a sitting or lying posture; the conical end being firmly applied to the bare abdomen, the muscles are to be started into sudden momentary contractions, and this can be so varied as to imitate several phases of the systolic sound of the heart.

It being thus shown that muscular action is adequate to produce the first sound of the heart, I need only refer to my experiments to demonstrate that this is in reality its essential cause. In the donkey (quite insensible), the chest being laid open, the hard tightening of the ventricles of the exposed heart was felt to correspond with the first sound so exactly in sensation as to carry conviction that it was the same movement. We noticed a like correlation of motion felt, and sound heard, over the arterial valves at the instant of the second sound. In both instances, we seemed to *feel* the sound.\* And this double sensation enabled us to localise the source of the sounds more exactly than we could do by hearing alone. Thus the systolic shock as felt, was more distinctly limited to the ventricles than the sound, which was heard also in the arteries, but not so loud; the second sound was loudest about the valves of the arteries, where alone its shock was felt; on the ventricles, this sound was weaker and without shock. So far as regards the first sound, these observations are opposed to the views of Dr. Leared, who places the seat of this sound at the arterial orifices. As I argued more than forty years ago, "if this were true, the large arteries rather than the heart should be the principal seat of the sound, and the sound would be increased by an hypertrophied heart and diminished by a dilated heart; yet the reverse of these is presented in Nature". (*Rational Exposition*, etc., second edition, 1833, p. 166.)†

\* The capacity of feeling sounds by the fingers applied to the sounding part, is familiar in the purring thrill which occurs in cases of diseases of the heart and arteries, in venous murmurs in the neck, in some cases of friction sound and bronchial rhonchus, and in natural and morbid vocal vibration. I have found its indications in many cases instructive; and in teaching, I used to advise students to educate their fingers as well as their other organs of sense. Dr. Isidor Heim of Vienna draws attention to this subject in a paper "On the Relations between Perceptions of Touch and Hearing" (see *BRITISH MEDICAL JOURNAL*, December 10th, 1876). In 1833, I wrote this description of my first observation on the ass: "When the pericardium was laid open, and the large heart exposed, vigorously pulsating, the eye watching it, the hand grasping it, and the stethoscope applied to it, gave perfectly corresponding impressions, inasmuch that on substituting touch for hearing, it was difficult to banish the impression that one still heard the double sound."

† I have just seen Dr. Broadbent's "Observations on Dr. Leared's Reply", etc.,

But the most conclusive proof that the walls of the ventricle, and not the blood, are the seat of the systolic sound, is found in those observations in which the sound was heard when the heart contained no blood. The sound was feeble, it is true, but quite distinct. Dr. Leared replies to this: "When a stethoscope is applied directly to a contracting heart, it is absolutely impossible to distinguish the sound caused by friction of the heart's surface from any allied sound." Dr. Broadbent's testimony in contradiction to this assertion is most valuable; he says: "I maintain, from large experience of auscultation of the naked heart when assisting Dr. Sibson in his experiments, that it is both possible and easy; the sound heard during the contraction of an empty heart is not frictional, but muscular." This was the clear result of my experience also. When the heart is kept moist and the stethoscope is carefully and steadily pressed on it, to prevent the entrance of air, there is no friction or any other extraneous sound, but simply a weak repetition of the usual systolic sound. That it should be weaker than in the heart entire, with valves and blood, is only what might be expected. The contraction (change from slack to tight) was strong enough to produce sound, but not so strong as when reinforced by a body of blood, with the auricular valves tightening behind it. The muscular contraction is the only essential cause of the sound; but both the blood and the valves contribute to increase it; the blood, not by any collision or impact, but by forming a body around which the walls and valves tighten more tensely; and the valves, both by their completing the enclosure of this body and by the additional vibrations of their own tightening cords and membranes. In my work before quoted, I have explained how variations in these several elements contribute to produce the variety of the first sound which we meet with in practice. It would take up too much space to detail these here; but I will advert to the case mentioned by Dr. Broadbent, that of the impairment of the first sound by a high state of tension of the aortic system, which is quite contradictory of Dr. Leared's views. I would explain this in the same way as I explain the diminished loudness of the sound in sthenic plethora. The arterial tension being increased, whether by fulness, by increased tonicity, or by both, the heart's systole is resisted in the arterial column by a more constant and prolonged pressure than usual; the sound is also prolonged, but less abrupt, and therefore less noisy. In a more empty or flaccid state of the heart and arteries, on the other hand, the ventricular systole is abrupt, the transition from slack to tight more sudden, and the sound is shorter and louder. So likewise with dilated hearts, the systolic sound, like the motion that produces it, is loud and short, as contrasted with the duller and longer sound and motion in hypertrophy.

I now have to reply to Dr. Leared's concluding question and challenge: "Why is it that, in anæmia, the first sound of the heart only and the second never becomes replaced with a murmur, unless it be that, according to the views stated, the blood loses in this disease one of the conditions necessary for the formation of the normal sound; namely, sufficient viscosity? If Dr. Williams or any one else will explain this one point in accordance with any muscular or valvular theory of the first sound, I shall begin to feel doubtful about the conclusions herein set forth."

Like Dr. Broadbent, I begin by disputing the fact. With him, I assert that, in anæmia, the normal sounds are not *replaced* by a murmur, but that, in all cases, the natural sounds continue; but, in some, they are *accompanied* by a murmur at the base and in the course of the arteries. I can further add from my own observations that, in some cases of anæmia, I have found a short murmur preceding the second sound.\* In all these instances of anemic murmurs, thinness of the blood is their principal cause. When the blood is thin, from deficiency of albumen and corpuscles, it is more readily thrown into sonorous vibrations in its course. This was illustrated in our experiments on the production of sound in tubes.† Every description of murmur could be readily imitated by a current of water passing through an India-rubber tube; but, when the water was made glutinous with size, the sounds were less easily produced and more force was required in the current. So it is quite intelligible how thin blood squirted through the arterial orifices is readily thrown into vibration, especially when the heart's action is excited, and thus a murmur or current-note is added to the normal ventricular sound. But, with the second sound, there is not the same facility to produce an accompanying murmur. The semilunar valves close so simply and quickly, that, if they permit any reflux

in the *BRITISH MEDICAL JOURNAL* for December 1876. Among other able objections to Dr. Leared's views, he restates the above argument. It would not be difficult to point out other pathological facts which are opposed to them.

\* Anæmic murmurs accompanying the first and second sounds may be described phonetically as *diastolic*, or *diastolic*, instead of the normal *systolic*.

† Second Report of the London Committee of the British Association for the Advancement of Science on the Motions and Sounds of the Heart. 1857.



current at all, it can only be in the act of closing, thereby changing the normal second or flap-sound in the manner just described. In many cases of anæmia, the second sound is not altered, and, in not very few, neither is the first sound, except when the heart is excited; these differences point to slight normal varieties of structure which become evident only under the test of disease. But, in all cases of simple anæmia, the normal ventricular sound may be heard distinctly in the cardiac region, and in many accompanied by a murmur, loudest at the base.

In certain cases of extensive disease of the valves, both obstructive and regurgitant, I admit that murmurs are produced which, to a great degree, supersede the natural sounds of the heart. This is when the lesions so much derange the mechanism of the heart as to convert the normal shock-sounds into vibrating current-sounds. For example, in obstructive disease of the aortic orifice, the systolic action meets with such a vibrating resistance to the blood which it expels as to react on the tightened ventricle and make it vibrate in unison with the obstacle and current in front; thus the normal shock-sound originating in the walls and valves merges in a noisy current-sound or murmur, whose vibrations pervade the whole cardiac region, but still are loudest in the direction of the current. In extensive regurgitant mitral disease, a like vibrating current goes back through the mitral orifice, masking or superseding the normal first sound by a loud murmur transmitted through the cords to the apex below the left breast. In more moderate degrees of this lesion, the normal double sound may still be heard at the base and over the right ventricle.\*

In regurgitant disease of the aortic orifice, the normal second sound is absent or impaired, being replaced by a diastolic murmur. The reason is obvious, the valves can no longer tighten; but even then the simple flap of the pulmonary valves is often still heard to the left of the mid sternum. In that remarkable and not uncommon lesion, button-hole contraction of the mitral orifice, which is both obstructive and regurgitant, the long systolic and presystolic murmurs often supersede all normal sounds at the apex, but at the base the normal sounds are usually still more or less distinct.

In conclusion, I have only to repeat the inferences with which I terminated my former communication; and, to make them more intelligible, I will adopt some expressions borrowed by Dr. Leared from French writers.

The normal sounds of the heart are of the nature of *shock-sounds*, which can be neither produced nor imitated in liquids alone. These sounds can be readily imitated by the tightening of woven fabrics or animal membranes under water. Similar sounds constantly accompany the forcible contraction of various muscles in man and other animals. It has been demonstrated by experiment that a similar sound continues to accompany the contractions of the ventricles of an insensible animal without the presence of blood and without the action of the valves. Although it is thus proved that the essential cause of the first sound of the heart is the muscular contraction of the ventricles, it also appears from experiments, and is conformable to reason, that the presence of the blood and the action of the auriculo-ventricular valves contribute to its loudness and clearness by increasing the strength and extent of the sonorous vibrations.

The second sound of the heart has been clearly proved by experiment to be caused by the tightening of the arterial valves by the recoil of the blood in the great arteries at the moment of diastole.

Murmurs are essentially *current-sounds* produced by some modification of the direct and usually silent course of the blood in the heart or blood-vessels. As they can be exactly imitated by the flow of water through an India-rubber tube, there is no reason to doubt that they are produced in a similar manner by the passage of the blood through or across a form of solid, which throws it into sonorous vibrations. This may occur at any of the orifices of the heart or in the blood-vessels. When in the heart, a murmur may either accompany or replace the normal sound. In cases of moderate disease and of anæmia, it merely accompanies it; but, if the lesion causing it be such as seriously to damage the structures, it may impair the normal sounds, both valvular and muscular. Further, a strong grating murmur at an orifice may not merely mask the normal sound, but may assimilate its vibrations to its own and convert the whole sound into a loud murmur.

\* Dr. Broadbent says: "I have long been in the habit of noting the occasional presence of a first sound, together with a systolic mitral murmur, as a favourable element in prognosis." My experience is the same, and extends, as a general rule, to most structural diseases of the heart and lungs, to this effect: lesions are serious, not in proportion to the new signs or symptoms which they cause, but more in proportion as they supersede the signs and symptoms of normal structure or function. I referred to this inference in a paper on the "Prognosis and Treatment of Organic Diseases of the Heart" in the *London Journal of Medicine* for April, 1850.

## AN ADDRESS

ON THE

### EXPERIENCE AND EXPECTATION OF CLINICAL RESEARCH.

*Delivered before the Clinical Society of London, on Friday, January 26th, 1877.*

BY GEORGE W. CALLENDER, F.R.S.,

Surgeon to St. Bartholomew's Hospital.

GENTLEMEN,—If an earnest desire to promote the exact observation of clinical facts should largely influence me as a member of this Society, that earnestness should be intensified by the responsibility I have incurred in venturing to accept office as your President—intensified by the knowledge that your friendly judgment has placed me in a position which demands that, by precept and example, I should plead for precision in clinical research.

If I had only to speak to you in words of thanks, my duty would soon be ended; for I can but say that I value most highly the honour you have conferred upon me. In recalling your confidence, I shall be encouraged in the endeavour, so far as I can, to do it justice.

It has, however, become a custom of the Society that your Presidents should venture from time to time to offer suggestions as to how the objects we have in view may be best promoted; a custom which it grows more difficult to observe as its novelty wears off, and yet—having in mind changes in the grooves of thought, in the method of pursuing investigations, the gradual accumulation of facts tempering and consolidating the knowledge with which we begin each new session of work—one which it seems to me most desirable to conserve. In addresses which have been given from this chair, your Presidents, in a practical way, and with the force of experience (all the more forcible from the clear and thoughtful words in which it has been spoken), have described the duties we owe to a Society which is founded expressly for "the cultivation and promotion of practical medicine and surgery": words which express as could scarce any other the character and scope of our task, for they foreshadow an increase of knowledge; but, however far in advance of the past, a present knowledge which in its future must always be capable of cultivation and promotion. Our work is, indeed, bounded by a horizon which recedes before us; but, in our pursuit of it, as we ascertain and establish facts, and, so far as we can, as we eliminate sources of fallacy, we shall find that we are making progress and are strengthening our position for a further advance.

If I diverge in any way from the steps of my predecessors, who have spoken chiefly on the manner in which the objects of the Society may best be attained, it will be to take advantage of the experience we have thus far acquired, not only for the evidence which it gives of the extent to which we have acted up to the expectation of our founders, but as showing the direction in which we are being carried, and in which our future work promises, I think, to give the best clinical results.

We began by setting up for ourselves a high standard, and, if we have not quite attained to it, we can trace through our *Transactions* an honest endeavour to do so; and we can be sure that we have encouraged—I would venture to say we have practically established—a precision and order in the observation of clinical facts, which by itself is a substantial gain. If we look away from our more immediate proceedings, and if we remember that those who were interested in the formation of the Society are largely responsible for clinical research in our hospital wards and elsewhere, we shall recognise in every direction that an effort is being made to observe disease and its treatment in a more critical and accurate manner than heretofore. In the treatment of wounds, for example, whatever plan is followed (and many are and have been advocated), all have in common the care which conducts them, and which insures that every detail shall be scrupulously attended to. If I may single out one fact in illustration of this, I would remind you that, after being present at, and taking part in, our debate on pyæmia, Mr. Cadge effected a revolution in the results of the treatment of wounds in the Norwich Hospital; above all things, by seeing that the nursing, the cleansing, and the dressing were strictly, and hence successfully, directed. I say work is more precise in hospital practice and elsewhere; for, in using the latter word, I would recall the fact that there are points, such as those of history and of affinity, and the close watching of disease through the course of many



years, which are undoubtedly more fully and more surely elucidated in private than they can be in hospital practice; and I think the Society would gladly welcome the renewal of reports, as they may be termed, such as those brought before us by Mr. Prescott Hewett, and drawn from such experiences. Let me mention, too, in passing, and with reference to precision of observation, that, by close watching of the sick, we are constantly gaining information, as it were, in the by-ways of practice; not, it is true, respecting details of essential importance, but yet information which helps occasionally to stand us in good service. Of such is the fact that a rapid rise of temperature, after, for instance, an operation, may be due to emotional causes of an evanescent, and consequently of a comparatively unimportant, character; and of such is the knowledge of the exact rate of the repair of wounds, by which we can tell the time which a given surface will take to heal. Such, too (and I take shame to myself for being unable to speak with certainty on the subject), should be our knowledge respecting the asymmetry of parts, to which attention has recently been directed in America, with reference more especially to the length of limbs, a detail which, all students of art are aware, received attention from the ancient sculptors.

But, if medicine and surgery are being cultivated with greater care and precision, can it be added that we are thereby promoting our knowledge of the treatment of disease? I turn, perhaps with an undue bias, to surgery. I find that the careful supervision of operations and other wounds has proved, if rest and cleanliness and constant attention are combined, that the most serious hurts are repaired with an absolute certainty (not merely through a precarious convalescence), injuries being recovered from which some years ago would have been considered irremediable. If erysipelas, despite precautions, attach itself to a wound, the close watching of the case now enables us to detect the earliest symptom of the disease, and, twelve or twenty-four hours before the outcome of a rash, to commence the treatment of the affection. Pyæmia has been proved to be a preventable disorder. Skin-grafting—to name some of the facts brought more directly under our notice—has been introduced; Esmarch has described to us his plan for operating without loss of blood: the use of torsion as a hæmostatic; that of various antiseptics for the dressing of wounds; the subperiosteal resection and the subcutaneous section of bones; the surgical treatment of aortic aneurism; the removal of tumours by caustics and by the elastic ligature; the surgical treatment of neuralgia and of local paralysis, have been before us, among other subjects, for consideration, and surely some of them may be regarded as representing distinct gains to our means of treating surgical affections. In nearly every instance, the gain, if any, in treatment has been due to precise observation of the cause and nature of the trouble to be remedied, and to the direction of natural forces for its relief; and, as in most instances of real progress, the means used for controlling these forces, when put before us, are found to be of the most simple kind.

Precise observations of the conditions which cause disease must always be a subject of great clinical importance for critical research. In this direction, the study of material pathology, to a certain point, has been cultivated with success. There are, probably, no facts of greater practical moment than are such, for example, as taught us the connection between rheumatic fever and various changes in the covering and lining of the heart; or those which throw light upon that form of embolism which results from the setting free in the circulation of small particles of fibrine. But there are inquiries beyond those which are satisfied by the examination of diseased structures—those which reach to the causes of disease—inquiries which, amongst others, come within our province where we join hands with pathology in its experimental researches. Why, for instance, should such a degeneration of tissue arise as occurs when cancer is developed? and why should such degenerate cancer exhibit active growth? Or, what are the causes which determine the presence of tubercle? No higher duty can be ours than that which leads our inquiries in this direction, for of such causes at this time what do we really know? And how can we look—discuss each malady how we may, backwards or forwards—for any better treatment of these diseased conditions (save such as comes to us by hazard) until we have learnt more about the causes of those errors of nutrition which lie, in all probability, at the root of the mischief? By inquiries, too, directed to the causes of disease, we may expect to advance in our knowledge of that best of treatment, the preventive—the controlling of the forces of nature, so that disease may be avoided.

There is also good work to be done by the study of the natural history of disease: a part of our programme which will, I trust, be attended to in our future as fairly as, perhaps even more thoroughly than, in our past proceedings. This study is, in truth, that of disease as observed under the most careful supervision, with rigid exclusion of complications from preventable external influences; that is, free from

errors of management—all, in a word, that due watching, rest, cleanliness, temperature, and suitable nourishment can do, and seeing (so far as we can without risk to the patient) how disease comport itself under such conditions: clearing, in fact, the ground for precise observations of the medicinal action of drugs, and for gauging their exact effects.

And this it is which must always be the great feature in our prospective work—the attainment of that knowledge of therapeutics of which, one of our Presidents told us, as a trustworthy science we have only the expectation; and of which he also said that he often wondered how vaguely, how ignorantly, how rashly drugs are often prescribed. I am far from saying that the Society might not have done more with reference to the study of the action of drugs; and yet our *Transactions* are not barren of laudable endeavours to obtain more knowledge of their influence upon disease. If it is a lesser function to discharge, we have at least sifted the reputed powers of various medicines, and have reported them as untrustworthy; and such inquiries have been illustrated by valuable experiences, and have led to interesting discussions. We may remember, indeed, that to this Society we owe the introduction of a discussion extending over several meetings, and setting an example which has been elsewhere followed, and if it have not been so here, it is because it is in the nature of the ordinary work of the Society that the subjects brought forward at its meetings should be freely discussed; and interesting as have been many of our communications, they have often been supplemented by most valuable comments from those who have spoken upon the subjects which they illustrate.

But our *Transactions* show a long list of trials carefully conducted to test the action of various remedies. Amongst such may be mentioned notes on the local effects of opium upon the bladder, the influence of ipecacuanha upon diarrhoea, the value of quinine in pyrexia, the use of salicylic acid and of other antiseptics, the employment of copaiba in ascites, the local effect of the hypodermic injection of strychnia, the use of bromide of potassium in epilepsy, of nitrite of amyl in angina pectoris, the action of iodide of potassium upon tumours, the employment of salicylic acid in rheumatism, cold affusion in rheumatism, and cold baths for pyrexia in phthisis. If, then, we may not have attained to much, I think these examples—and others might be added—show that an attempt is being made to investigate the action of drugs.

When we reflect upon the difficulties inseparable from the work we profess—work which is strictly limited to the record of facts, and of which mere opinions form no part—when we consider the varied phases of disease, and the variable soil in which it acts, it is clear that it can only be by slow degrees that we shall attain to any fulness of knowledge of the means for combating disorders by the use of medicines. Were it not for the encouragement given by the facts thus far ascertained, which prove the influence over disease of certain remedies, and the potent action of drugs upon the healthy organs and tissues of the body, we should, I fear, be disheartened by the cloud of difficulties with which an empirical system, continued through ages, has been allowed to envelope the relations between disease and remedies for its cure. It is to remove this—to base our treatment upon facts—that we are trying to make therapeutics not an expectation but a trustworthy science. If I may point to an example of the system on which each one of us should work, I would instance the recent appointment, by the Council, of committees for collecting on definite subjects an array of facts from which definite conclusions will be drawn. We can each, individually, cast our work in a similar mould. It must be precise, and it must be matter-of-fact. In this spirit, we must try to learn more about the causes of disease, and we shall have a better knowledge of preventive treatment. We must endeavour to learn more about the action of drugs, and we shall know better how to cure disease. Even now there is so much of which we are ignorant, and the field of inquiry is still so vast, that there can be no question as to any dearth of material upon which to enquire our work. That work must, indeed, have led to an infinite advance beyond our present knowledge of the art of healing, before the time shall come when we may slacken in our efforts for the cultivation and promotion of Practical Medicine and Surgery.

It is announced that Dr. Henry Muirhead, of Bushyhill, Cambuslang, has offered to the University of Glasgow the sum of £2,100 as an endowment of a Demonstrator of Physiology in connection with the Chair of Institutes of Medicine. The object of the endowment is the promotion of medical science by the training of young men of suitable capacity to become teachers and investigators of physiology; and, as this training is best attained by actual work in the laboratory and by practical experience in the art of teaching, the demonstrator will be regarded as a teaching assistant to the professor, while he will also be encouraged to pursue independent original investigation, and will be aided by the use of all the laboratory appliances.



## THE RESPIRATOR-INHALER.

By WILLIAM ROBERTS, M.D., F.R.C.P.,

Physician to the Manchester Infirmary; Professor of Clinical Medicine to the Owens College; etc.

THE respirator-inhaler is designed to facilitate the use of topical applications to the respiratory tract, and the administration of remedies by absorption through the pulmonary surfaces. It consists of a shallow tin box, of the size and shape of the ordinary respirator. The top and bottom are perforated with holes like the lid of a pepper-box. The box is fitted with some porous material (tow, oakum, or very open flannel), and the top lifts off with a hinge, to permit the renewal of the porous material and the addition of whatever drug the prescriber may wish the patient to inhale. Five, ten, or more drops of some volatile drug are dropped on the porous material, and the box is closed and fastened on, like a respirator, by means of elastic bands drawn round the ears.

The instrument, thus charged, is worn for fifteen, thirty, or sixty minutes several times a day; and additional quantities of the drug are introduced into the porous material from time to time as may be deemed necessary. The porous material also requires renewing occasionally.

The object aimed at is to obtain the effects of small quantities of the drug, slowly and continuously applied, either for the purpose of a topical application to some part of the respiratory mucous membrane, or for direct absorption of the drug into the blood. Of course, only volatile remedies can be used in this way. As the patient continues to breathe to and fro through the drug-charged porous material, the contents of the box become warmed, and the volatile ingredient is vaporised and passes with the breath into the air-passages, and comes into contact with every part of the breathing surfaces.

The following are the substances I have hitherto used to charge the respirator-inhaler, according to the effects it was desired to obtain: Turpentine, oleum pini sylvestris, spirit of camphor, the oils of sandal wood and eucalyptus, compound tincture of benzoin, creasote, carbolic acid, iodine, and chloroform.

My experience is, as yet, too limited to enable me to formulate conclusions as to the probable value of the instrument; but I will relate a few examples in illustration of the way in which I have used it.

1. An apyrexial patient had a patch of congested lung under the right shoulder-blade, from which he continued to spit blood, in spite of sundry remedies, for some weeks. He was directed to inhale six drops of oil of turpentine from the respiratory inhaler for an hour three times a day. This was almost immediately followed by the cessation of the hæmorrhage. When the dose was increased to ten drops, the patient complained of a transient feeling resembling intoxication. In a second case of hæmoptysis, of tuberculous character, cessation of the hæmorrhage almost immediately followed the inhalation of turpentine in a similar manner.

2. A phthisical patient with cavities in both lungs, from which he expectorated large quantities of pus, inhaled four drops of creasote for an hour three times a day, with the apparent effect of reducing the quantity of pus to less than one-half.

3. Another phthisical patient inhaled, in a similar manner, six drops of the liquor iodi (*P. B.*), with great apparent benefit.

4. A patient with advanced laryngeal phthisis, under the care of my former pupil Mr. Hunt, appeared to derive relief from the inhalation of fifteen drops of a mixture of equal parts of chloroform and oil. The pain in swallowing and the tickling cough were markedly alleviated by the application.

5. In several other cases of advanced phthisis, with profuse purulent expectoration, I have failed to observe any good effects from the inhalation of carbolic acid and of iodine by means of the respirator-inhaler.

6. In cases of bronchitis, I have seen the best results follow the inhalation of the compound tincture of benzoin and the oleum pini sylvestris. Coal-tar and wood-tar would appear likewise suitable for cases of chronic bronchitis.

In apportioning the dosage, I have sought to avoid provoking cough or catching of the breath, using only such small quantities of the drug as the patient could inhale without a feeling of irritation. It is otherwise manifestly impossible to obtain a prolonged contact of the remedy with the respiratory surfaces.

The advantages which this method of inhaling appears to have over the ordinary methods consist in its being less burdensome to the patient, and in the prolonged contact of the remedy with the affected surfaces. The instrument may likewise be worn for the purposes of an

ordinary respirator, and it is sufficiently cheap to be within reach of the humblest patient.

The respirator-inhaler may be had from J. and W. Wood, surgical instrument makers, King Street, Manchester. The instrument is made either plain or mounted with velvet. The plain instrument is the more useful, as it can be washed and cleaned in hot water; the mounted instrument is chiefly for outdoor use, as its appearance is scarcely more conspicuous than that of an ordinary respirator. The price of the former is three shillings and of the latter five shillings and sixpence.

The Messrs. Wood have also constructed a modification of this instrument, with an upward prolongation, to cover the nose as well as the mouth, like a chloroform-inhaler. This modification is designed for the use of children, and for persons who find it inconvenient to breathe for a long time through the mouth.

## LARYNGOTOMY IN CHLOROFORM ASPHYXIA.

By J. T. CLOVER, F.R.C.S.

THE deaths under chloroform, recently reported, induce me, without further hesitation, to report a case in which death seems to have been prevented by laryngotomy; and to make some remarks as to the precise time when that operation ought to be performed.

A gentleman, aged 60, suffering from a large epithelioma of the tongue, had this removed last October, by Mr. Marshall, by means of the galvanic *écraseur*. A mixture of chloroform and ether induced sleep in six minutes. The patient was then kept breathing with light stertor five minutes longer before the face-piece was removed. From this time, chloroform without ether was given by covering the nose with a cap, supplied with vapour as the face-piece had been. In spite of this, the patient recovered suddenly, during the arrangement of the *écraseur*, to become unsteady at the moment when the wire was heated by the galvanic current. I gave more chloroform-vapour by the mouth, also supplied from the same source as that which supplied the nose. In a minute or more, the patient was quiet and continued so, breathing steadily, for ten minutes. At this time, the patient moved his wrist, as if trying to get it away from my grasp. I slightly increased the strength of the chloroform, without, however, producing either cough or swallowing; and when the wrist became quiet, I decreased the supply of chloroform. Soon after this, I observed a pause in the breathing, and removed the chloroform-tube from the mouth; but, as his pulse was good, and as it was very important he should not struggle at this stage of the operation, I continued the supply by the nosecap for a few seconds longer. The pause in the breathing was of short duration, but, as the succeeding respirations were feeble, I took off the nosecap. There were but two or three respirations during the next thirty seconds, and they were feeble, and accompanied by a sound in the throat. Finding that his pulse remained steady and firm, and believing that one single gasp of fresh air would restore him as much as was desirable, I desisted from moving the chest until I perceived a lessening of the strength of the pulse. I now pressed upon the chest and abdomen, the patient being already lying on his back. As the pressure was removed, there was a sound of air passing through the larynx; but this sound gradually changed to a faint hiccough and then ceased. The tongue had been secured by a ligature at the beginning of the operation, and had been drawn forcibly forward, in order to apply the loop of the *écraseur*. We now tried the Silvester method, with a similar failure; for although the air passed through the larynx, at first audibly, after a few movements the sound became a short hiccough, and then ceased. After persevering for perhaps two minutes, in endeavouring to produce artificial respiration, but in vain, Mr. Marshall and I thought it prudent to have recourse to laryngotomy. The radial pulse could not be felt. After the laryngeal tube was inserted, the Silvester method answered admirably. Air immediately entered, and escaped freely through the tube; some hæmorrhage from the wound in the neck necessitating repeated cleansing away of frothy blood from the external aperture of the tube. At this juncture, it was evident that the *artificial respiratory acts*, produced by the persistence in the Silvester method, were now rendered serviceable in emptying and filling the lungs through the tube, instead of failing to do so, as before, through the glottis. This was the turning point in the condition of the patient. Very soon, however, perhaps in a minute or more, a gasp through the glottis occurred, followed by another in ten seconds. From this time, breathing went on without the mechanical assistance of the Silvester method; but both inspiration and expiration through the glottis were visibly supplemented by the free simultaneous entrance and escape of air through the laryngeal tube.

The operation was then continued, the patient in three minutes be-

gunning to move so as to require more chloroform, which was given through the nose and through the laryngeal tube, until the tumour, and also a small independent and suspicious nodule at the tip of the tongue, were removed. During this time, the laryngeal tube was in full action, admitting air to pass both ways. Except a few drops of blood from the puncture of the tongue, there had been no bleeding into the mouth.

The tube was now taken away, and the edges of the wound in the neck were brought together by plaster. The after-progress of the case was as satisfactory as could be, the patient leaving town on the seventeenth day.

The interest of this case relates to the question of opening the larynx. The results of this operation in chloroform accidents have not hitherto been favourable. Not only have most of such cases died in spite of it, but a large proportion of cases of chloroform asphyxia are restored by other means. It is probable that, in most of the unsuccessful cases, chloroform had produced cardiac syncope, and the circulation had ceased before the windpipe was opened.

In this case, however, I suppose that, when the first pause in respiration took place, the saliva, mucus, or perhaps a small clot of blood, got over the glottis and impeded, without altogether stopping, the passage of air during the respirations which followed; and further that, as the chloroformed air had not been removed from the nose, the small quantity of air which did pass contained enough chloroform to paralyse the actual movements of breathing. The rule which I should follow in any case where I did not fear the consequences of reflex movements, is to take away the chloroform during any intermission of respiration which is not evidently the result of voluntary effort.

The state of the glottis when asphyxia from an anæsthetic is impending is very different from its normal one. The muscles which dilate the opening are paralysed, and its sides lie closely together, so that a very little mucus or blood lying over that aperture would close the way. Probably, if a gasp had occurred, such as we noted a minute or so after the larynx was opened, this would have been associated with renewed action of the dilators of the glottis, and enough air would have entered to begin to restore the patient. Such gasps do, fortunately, generally occur several times when an animal is being nearly killed by chloroform; and, if the heart have not ceased beating, it usually recovers.

Drawing forwards the tongue has sometimes had the credit of producing these gasps, when, in fact, it merely preceded them. In the particular instance before us, both Mr. Marshall and myself were at the time, and are now, so impressed with the complete and sufficiently prolonged absence of all response to the persevering efforts to produce artificial respiration through the glottis, as to make us more than doubt whether it would ever have taken place. In truth, we despaired of its occurrence.

In an emergency of this kind, laryngotomy is, of course, a much simpler operation than tracheotomy. In this case, an incision was made by Mr. Marshall an inch long in the mesial line down to the cricothyroid membrane, and then a second short transverse cut through that membrane, when I immediately pushed through the opening a curved pointed trocar and cannula or tube. The size of the laryngeal tube employed in such a case need not be so large as when laryngotomy is performed for obstruction due to disease. The one used was of the size of a No. 11 catheter, and might have been smaller.

Although it is certain that laryngotomy in this case was an important factor in the patient's recovery, and most probably an essential one, I should regret if this record were to lead any one to open the larynx without sufficient necessity. I have never used the cannula before, although it has been my companion at some thousands of anæsthetic cases; and I should never use it so long as air could be made to pass by artificial respiration through the glottis, or so long as the pulse could be felt. Whilst the circulation goes on, the patient will almost certainly gasp, and, in gasping, I believe the larynx opens sufficiently to make laryngotomy unnecessary; but when, under artificial respiratory movements of the thoracic walls, *glottidean respiration ceases and no pulse can be felt*, the prompt admission of air through an opening in the larynx, coupled, of course, with perseverance in the Silvester method, appears to us an imperative duty, especially as the operation is so exceedingly simple, free from risk, and cannot do any direct harm.

Mr. Marshall and I have consulted about the incidents and the bearings of this case, and we entirely concur in opinion as to the practical inferences to be drawn from it. As remarked by Mr. Marshall, artificial respiration, so called, is not artificial respiration unless air enters and passes out by the glottis; and the sounds produced by the air should, therefore, in all cases be carefully listened for. He also wishes me to add that, in a certain number of cases of asphyxia from

other causes than anæsthetics—as from carbonic acid, drowning, etc.—laryngotomy, performed as an accessory or even as a precursor to the Silvester method, could do no injury and might save life. Mr. Marshall promises to have a *résumé* of the results of laryngotomy or tracheotomy in chloroform or other asphyxia prepared for publication.

## EIGHT CASES OF EXCISION OF THE KNEE-JOINT, TOGETHER WITH A DESCRIPTION OF A NEW MODE OF PERFORMING THE OPERATION.\*

By WILLIAM KNIGHT TREVES, F.R.C.S.,  
Surgeon to the National Hospital for Scrofula, Margate.

EXCISION of the knee-joint has got into bad odour of late. I believe the explanation is to be found in the fact that operating-surgeons either do not always sufficiently secure perfect immobility of the limb in the putting up, or leave the after-dressing to dressers or house-surgeons of limited experience.

It has been our custom not to remove the limb from the splint in which it was placed on the operating-table, till the wound is healed and union is believed to have taken place; measures being taken to prevent the soiling of the splint, so that removal may not be necessary. The splint has generally been left on for three months. In all these cases, the limb has been secured to the splint by gum and chalk or silicate bandage, so as to render rebandaging unnecessary. The splint used has consisted of moulded leather thigh and leg pieces, with iron interruption at the knee; the leather splint being put on damp, and secured by the fixed bandage at the time of operation. Sufficient slices have been taken off the bones to permit the excised ends to lie easily in a good position, and not to exercise any pressure against each other. All the cases have had an excision-bed, that is, two short mattresses separated by a square air-pillow, which is emptied for the use of the bed-pan, or to change the sheets. The limb has in each case been swung in a Salter's cradle. They have all, except the fatal case and one still in the hospital, been kept in till the wound has entirely healed, and they have been able to walk, run, and use the limb freely. Their average stay has been about six months after the operation. I have mentioned these particulars at the commencement to avoid repetition.

1. R. M., aged 17, female: disease of two-and-a-half years' standing; acute pain on movement, with partial dislocation outwards; excised March 17th, 1871—usual operation. The cartilages were found eroded, and there was grumous matter in the joint. This patient has remained perfectly well up to the present time. She walks long distances and leads an active life.

2. E. A., aged 11, male: disease of seven years' standing; complete dislocation of tibia backwards and perfectly useless limb; excised October 12th, 1871. In this case, I for the first time tried the side-incisions; but, difficulties arising from the malposition of the bones, I completed the incision and performed the ordinary operation. The result was good; he could run and play leap frog before leaving the hospital, and remained quite well a year afterwards.

3. H. B., aged 11, male; disease of two-and-a-half years' standing; operation August 29th, 1872; side-incisions and patella left. There were ulceration of cartilages and total disorganisation of the joint. The result was good, with a movable joint.

4. M. B., aged 23, female; disease of eight years' duration; operation October 19th, 1872; side-incisions; patella sliced. There were gelatinous degeneration of the synovial membranes and ulcerated cartilages. The result was good. She was leading an active life up to last Christmas.

5. G. W., aged 8, male. His knee had been excised at a London hospital, and he came down with the tibia completely dislocated backwards, the leg hanging like a flail to the thigh, without any bony union. I excised again, with a perfectly good result, as shown in the photograph.† This dislocation, I found reason to believe, might have been brought about by the muscular throes attending masturbation, to prevent which vice I removed the foreskin.

6. M. S., aged 20, female: operation August 20th, 1874, by side-incisions; gelatinous degeneration of the synovial membrane, with erosion of cartilage. This was a most promising case; but the patient died a fortnight afterwards from pyæmia, and there was reason to fear that she had been infected by a sponge which had been used in a case of septic poisoning. I have never used a sponge since.

\* Read at Margate, at a meeting of the East Kent District of the South-Eastern Branch.

† Photographs were shown of all these cases, except the fatal one and that last excised.



7. E. H., aged 8, female: disease of three years' duration; excised September 22nd, 1875, by side-incisions. The bone-surfaces were carious, with numerous sinuses about the joint. Some of the sinuses were difficult to heal, and this patient is only now leaving the hospital. She has a perfectly sound limb.

8. W. S., aged 9, male; excised July 18th, 1876, by the ordinary operation. I did not use the side-cuts in this case, as the patella was much diseased, and there were sinuses and wounds about the front of the joint. The ends of the bones were found carious. The wound has healed, and he is now getting about on crutches, wearing the splint applied at the time of operation.

I will now, with your permission, describe a new mode of performing the operation, which I may fairly call my own, and which, I venture to think, has in suitable cases certain decided advantages over the usual plan. The object of this operation is to leave the tissues in front of the joint uninjured, to preserve the natural covering of the joint, and to keep intact the extensor tendon with its attachments. The bones are sawn *in situ*.

*First.* I make a semilunar incision about three inches in length on each side of the joint, the lowest point of each incision being thoroughly dependent for the exit of pus or serum.

*Secondly.* I divide the lateral ligaments on each side, and reflect the tissues till the synovial cavity in front is well opened. If there be adhesions in front, they are divided. A wide director is passed behind the joint in front of the posterior ligament, and with a narrow bistoury the crucial ligaments and any adhesions there may be between the bones are divided.

*Thirdly.* A metal retractor is inserted in front of the bones to secure from injury the tissues in front and the skin and tissues loosened from the sides, whilst the bones are being sawn. The blade of a Butcher's saw is passed behind the joint; and, this being connected with its frame, a thin slice is sawn from the joint-ends of each bone. The sawn surface of this slice is the exact counterpart of the surface left behind; and if, on examination, it appear to be healthy, I pass on to the patella, which is left if healthy, or sliced if its cartilage be ulcerated. I formerly used a chain-saw for the sections, but have relinquished it in favour of Butcher's.

The following are the chief advantages to be derived from this mode of operating.

1. Decided improvement in the after-appearance of the limb. The front view shows little difference from the other limb.

2. Greatly increased power of extension. After ordinary excision, extension is often feeble from the divided and shortened extensor tendon; the leg is inclined to drag, and the patient catches his toe in walking. With this operation, they are able to lift the leg even before union is firm; and they get increased advantage from the additional power and handiness of the limb.

3. The extensor tendon being still attached to the tibia in front, whilst the posterior ligament is intact behind, the bones are not so loose and the tibia is not so likely to become displaced.

4. This mode of operating partakes of the nature of a subcutaneous operation. The sawn surfaces are still left under their natural covering; they are not exposed under an extensive wound, which will sometimes gape in spite of care; but, being well protected, they unite, I believe, more kindly and readily than with the usual operation. I may add that this is, after a little practice, a very easy operation.

## THERAPEUTIC MEMORANDA.

### TREATMENT OF RINGWORM BY CASSIA ALATA.

I SHOULD like to say a word upon the subject of Dr. Foulis's remarks on the use of cassia alata in ringworm. Just ten years ago, my attention was called to the reputed value of the powdered leaves of this plant in ringworm; and, through the kindness of the late Mr. Daniel Hanbury, I procured a supply of the plant, together with some of the seeds, from the Botanical Gardens at Peradenia, Ceylon. I think there is a specimen in the Pharmaceutical Society's Museum, which I presented to it; but of this I will not be quite certain. At all events, Messrs. Sandford and Blake of Piccadilly have in their possession a small quantity of the powdered leaves, with which they prepared me an ointment, and a portion of the original supply of unpowdered leaves which I obtained in 1866. In addition, a certain number of plants were raised in the Apothecaries' Society's Garden at Chelsea, from seeds which were given to the Curator by myself. Cassia alata has long been known in India as a remedy for ringworm and some other affections. In Redwood's *Supplement* of 1857, p. 269, the following description of it occurs. "*Cassia Alata* (Linn.) *C. Herpetica* (Jacq.)

*Ringworm bush.* Warm parts of America. India. Flowers used to cure tetter; bruised leaves and expressed juice used against itch, tetter, and ringworm. (G) The Telinga and Tamul physicians say that this plant cures all poisonous bites and venereal outbreaks, and also strengthens the body; fresh leaves often employed to cure ringworm."

As the result of my experiments, I was led to regard the remedy as of some value in ringworm, but as offering no advantages over parasiticides in more common use; and I may take this opportunity of saying that this is the conclusion I have arrived at in regard to Goa powder, so much vaunted at the present time as a remedy for ringworm.

TILBURY FOX, M.D., F.R.C.P., Physician to the  
Department for Skin-Diseases, University College Hospital.

### TREATMENT OF RINGWORM BY GOA POWDER.

In 1866, my friend Mr. Ransford, of the Peninsular and Oriental Company's service, who shortly afterwards went down in the *Carnatic*, sent me some Goa powder from India and asked me to try it in cases of ringworm. I did so with the very best results, and ever since have considered it a specific. I have used it at the Samaritan Hospital with satisfactory results, and take this opportunity of recording my experience.

PERCY BOULTON, M.D.,  
Physician to Samaritan Free Hospital for Women and Children.

### SOURCES OF CHRYSOPHANIC ACID.

I OBSERVE, in the last issue of the BRITISH MEDICAL JOURNAL, a memorandum from Mr. Balmanno Squire, in which he states that he has reason to judge from the numerous authorities he has consulted, that chrysophanic acid has not been found in the senna plant. If he had consulted *Pharmacographie*, p. 193; Royle's *Materia Medica*, p. 650; or the *Pharmaceutical Journal*, third series, vol. ii, p. 221, he would have found that the weight of recent evidence goes to prove that senna leaves do contain chrysophanic acid, although in small proportion. The name Cassia lata, which, I presume, is copied from Dr. Foulis's previous memorandum, is incorrect, as may be seen by reference to Decandolle's *Prodromus*, vol. ii, or to the *Pharmacopœia of India*, p. 77, the correct name being Cassia alata, L.

From the statements made in the *Pharmacopœia of India*, it would appear that Cassia alata was introduced into India from the West Indies, and that it has been favourably noticed by several resident physicians in India; also, that the leaves of the following species have been stated to possess similar virtues, viz., Cassia Sophora, L.; C. occidentalis, L.; C. Tora, L. It would be interesting to determine whether these leaves owe their properties to chrysophanic acid, or to some other ingredient.

E. M. HOLMES, F.L.S., Curator  
of the Museum of the Pharmaceutical Society.

### SUGGESTIONS FOR THE SAFE AND RAPID CURE OF ANEURISM.

I WISH to submit to the consideration of surgeons a simple suggestion for the safe and rapid cure of aneurism. It is, to stop the circulation above and below the aneurism, and substitute for the fluid contents of the sac a substance insoluble in blood, solid at the temperature of the blood, fluid at a temperature low enough to allow of its being safely brought into contact with living tissues, and changing from liquid to solid without fail and with great rapidity, and which at the same time is light, innocuous, and unirritating. All these conditions are completely answered by either spermaceti, melting at 120 deg., or stearin, melting at 130 deg.; and I submit to the consideration of surgeons whether there is any practical reason why an aneurism should not have its fluid contents withdrawn by an aspirator and their place filled by melted spermaceti or stearin. Either of these substances would so rapidly and permanently solidify *en masse* as to be absolutely free from the danger inseparable from either "active" or "passive" clots being washed away when the blood-current is again allowed to flow; and the time occupied in their solidification would be so short as to remove all danger of damage from arrested circulation in the parts below the aneurism. I need scarcely add that the subsequent blocking of the artery above and below the aneurism will, of course, go on as usual.

HORACE DOBELL, M.D.

BEQUESTS, DONATIONS, ETC.—St. Mark's Ophthalmic Hospital has received £90 from the Trustees of the late Bishop Stearne's Charities; the Rev. Arthur Pakenham has given £50 to the Belfast Royal Hospital; and the Rev. T. J. Welland a similar amount to the same hospital. "Anonymous" has given a donation of £100 to the Hospital for Incurables, Dublin.



## REPORTS OF SOCIETIES.

## CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 26TH, 1877.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

*President's Address.*—MR. CALLENDER (the President) delivered the annual address, which is published at page 130.

*Cases of Subcutaneous Section of the Neck of the Thigh-Bone.*—MR. B. E. BRODHURST contributed a paper in which two cases were fully reported, and seven others also operated upon by himself were referred to. In each of the two cases, the right thigh was flexed upon the pelvis, and the knee was crossed over the opposite thigh in such a manner as to close the vagina and to interfere with the evacuation of the bladder. As a consequence of this position, excoriation of the thighs with considerable discomfort constantly occurred; whilst the shortening of the limb, in one instance to the extent of seven inches and in the other to the extent of four inches, rendered it necessary that artificial support, such as sticks or a crutch, should be used in walking. In the first case, the patient's age was eighteen when she came under Mr. Brodhurst's care in 1864. As the result of an accident at eight years of age, hip-joint disease had been established, followed by suppuration, and eventually by bony ankylosis, with the thigh flexed and adducted. Mr. Brodhurst divided the neck of the femur subcutaneously. The external wound was an inch and a quarter in length, and the knife was then passed down to and over the neck of the femur; it was then withdrawn, a small strong saw was introduced, and the bone divided immediately above the trochanter. The saw was then reapplied, and a small portion of bone removed. The wound healed by first intention. The limb was placed, semiflexed, on an interrupted splint. In six weeks, the patient walked with help, and bore some weight on the foot. Fair motion of the limb in all directions resulted, and still remained twelve years after the operation. In the second case, the girl, aged 16, was treated in 1872, and had bony ankylosis at the hip-joint, with great flexion and inversion of the thigh. Inflammation had commenced nine years previously, and was followed by abscess. Mr. Brodhurst made the external wound only just large enough to admit the small saw with which the neck of the femur was divided. The bone was exceedingly solidified and thickened, felt like ivory, and twenty minutes were occupied in completing the section. There was some hemorrhage. After section, the limb could be fully extended, but extension was painful, and consequently, for several days, the thigh was kept slightly flexed. Suppuration took place, and an abscess formed at the junction of the upper with the middle third of the thigh. The splint was removed, and extension was then made by means of weights. In about three months, the patient could walk and bear her weight on the limb. Mr. Brodhurst had done eight similar operations, some with the smallest possible opening, others with an opening about an inch in length, and he "had always found that where the opening was small, and there was, in consequence, stretching and bruising of the adjacent soft structures, suppuration followed; but that, where more room was allowed for the necessary movements in dividing the bone, healing took place very rapidly". A large opening was, therefore, desirable to prevent injury to the soft structures, but it need not be placed so as to correspond when the operation was complete with the section of the bone. "The subcutaneous character of the operation did not depend so much on the size as on the position of the wound." In some cases which had been recorded after operation, the deformity had remained. The wound should then have been enlarged, and either a wedge-shaped or circular piece of bone removed, or the operation of Mr. Gant of division below the trochanter should have been chosen. Where the bone was very hard, it should be divided with the saw; the chisel of Volkmann, as used by Mr. Maunder, should be reserved for cases where the bone was tolerably soft. Where the ankylosis was fibrous, the bone was soft and divisible with the chisel; but it was undesirable to resort to a cutting operation when deformity might be removed without the use of a knife.

*Ankylosis of Hip-joint: Subcutaneous Section of Shaft of Femur.*—MR. CROFT exhibited a patient whose case, he said, bore upon the question of the respective merits of dividing the femur above or below the trochanter. The man was a clerk, aged 22. In June 1875, he first felt pain at the hip. Until then, he had felt quite well, except that three months previously he had contracted gonorrhœa. The discharge ceased soon after the pain at the hip began, and never reappeared. Two months before the pain commenced, he fell from a height of about five

feet on to his hip. There was swelling about the hip and thigh at the end of June; and in the groin at the end of July. In August, there was great pain on moving the hip, but no starting pain at night; at the end of that month there was a large abscess. In October, the abscess was punctured, and a large quantity of greenish pus was let out. The discharge lasted until February 1876; it then ceased, and a sound scar formed. In March, he walked about with the help of a chair. On May 29th, he was admitted into St. Thomas's Hospital; he had never had rigors nor cough. On admission, he was thin and perspired easily; his appetite and secretions were natural. The thigh was rotated outwards, so that the neck of the thigh-bone touched the rim of the acetabulum. On June 23rd, the thigh formed with the middle line of the trunk an angle of 140 degrees. On July 3rd, the patient was examined under chloroform by Mr. Croft and Mr. MacCormac. No motion could be produced, and it was concluded there was bony ankylosis. On July 12th, the shaft of the femur was divided below the trochanter by Mr. Croft, in the presence, amongst others, of Messrs. Adams and Gant. This operation was chosen because, had section of the neck of the femur been adopted, the incision must have been made through old scar-tissue, whilst there were also adhesions in front of the bone which would have formed obstacles to the use of the saw at that spot. Further, Mr. Croft did not wish to obtain any movement of the limb. The operation was an antiseptic one; the opening in the skin was as small as possible, and the wound was dressed antiseptically. A good deal of suppuration at first occurred at the site of operation, but a free drainage was established, and the patient then continued to improve. Now, there was firm bony union at the line of section. The case was interesting from the nature of the operation. It was unique in being an operation done with the saw below the trochanters in an adult. Probably, if the wound had been closed hermetically directly after the operation, there would have been no suppuration. The saw and knife which were used were both dipped in carbolic solution before the operation; the spray was used during, and antiseptic gauze applied after, the operation.

MR. BARWELL said there were very many points for discussion: that of chisel *versus* saw, the antiseptic treatment, etc. He had not had a case in which it had been necessary to divide the neck of the femur, but twice he had divided the shaft below the trochanters. One was a case operated upon the day previously, and so far doing very well. Another was that of a girl with ankylosis at a very acute angle. Mr. Barwell, in her case, operated antiseptically and with the chisel. The girl, after the second hour following the operation, was free from pain. There had been no suppuration. He thought the saw must leave "sawdust" of bone, which must irritate the wound. In Mr. Adams's twenty-two cases, three died. These operations were to be classified amongst those of convenience; and a death-rate of 9.9 per cent. was high for operations of convenience, and would render them almost unjustifiable. But by the use of the chisel, avoiding saw-dust, and with antiseptic treatment, the death-rate might be considerably lowered. A wound, accompanied by the removal of a wedge-shaped piece of bone, could not be considered to be subcutaneous; but, with the antiseptic treatment, the admission of air to the wound was of no consequence. As regarded the site of the operation, Mr. Croft was in the right in his case. Division of the femur had been first done in America by Dr. Rhea Barton of Philadelphia; and in New York, Dr. L. Sayre in 1864 took out a block of bone subperiosteally, but had suppuration in both of two cases. Whatever the result otherwise, the value of the operation was to be fixed by the presence or absence of suppuration. The control of the case as to life or death was scarcely within the surgeon's hands, if deep suppuration ensued; it was so very terrible an occurrence. By using the antiseptic treatment, it might best be avoided.—MR. GANT said that the most important point had not yet been touched upon, viz., the position to be chosen for the operation. There were two classes of cases not eligible for the operation through the neck of the thigh-bone, as performed by Mr. Adams. These were those in which the neck of the bone had disappeared from scrofulous disease; and, secondly, those of an enlarged neck of the bone, with a large surrounding accumulation of arthritic deposit. Consequently, in 1871, he had divided the bone below the trochanters. Before altering the position of the limb, after the withdrawal of the saw, he was accustomed to slide a dossil of lint over the wound. There was no discharge and no bleeding, and good bony union had resulted in his first case. As to the presence of *débris* in the wound after sawing, it was mythical. One must test the cases by the presence or not of suppuration. Rhea Barton's operation was not subcutaneous; the external wound measured eight inches by five. It was followed by Sayre's operation, in which bone was also removed, with the view of bringing about a ball-and-socket joint. In the first case, the result was good; in the second, a failure occurred. With an in-



cision an inch and a quarter long, the operation was not subcutaneous. He had had no experience with the chisel. The operation devised by him had been done by several other surgeons with good results, recently by Professor Pancoast of the Philadelphia.—Mr. MAUNDER said the subject under consideration had great interest for him, he having devoted much attention to it during the last few months. He would remark first upon Mr. Brodhurst's two cases now before them, and must take exception to the title of the paper, because an operation performed through a wound an inch and a quarter in length did not come under the common acceptance of the term "subcutaneous". At the present moment, a rivalry existed between the saw and the chisel; a rivalry which might, however, be a wholesome one, provided our object was, as the President suggested it should be, "to establish facts". One chief question is, when to use the saw and when the chisel; and his opinion was, that the saw would be generally employed for the section of the neck of the thigh-bone when it was proposed to attempt to establish a false joint—as in Mr. Lund's very successful cases—by a simple linear section of the bone in this locality. Under all other conditions, he believed the chisel would be the safest instrument. He expressed surprise that Mr. Gant should speak of the evidence then before them as favourable to the use of the saw. Of Mr. Brodhurst's two cases, one had suppurated freely; while, in Mr. Croft's case, the man's life had been seriously endangered by suppuration. He believed that, while the saw might in the majority of instances be used at the neck of the bone without suppuration resulting, still the necessary *débris* could not be other than a source of anxiety and occasionally of suppuration. He had himself divided the femur nine times with the chisel at different points; below the lesser trochanter, above the condyles, through the shaft; and in two of the earlier cases only was there slight suppuration (from causes preventable in the future, as detailed in the *Transactions of the Society*, 1876), while in seven the wound healed absolutely by primary union, as after the operation of tenotomy.—Mr. FURNEAUX JORDAN had been one of the first four surgeons who in this country performed section of the neck of the femur. The neck of the bone in that case was shortened. By the operation, he had necessarily made a punctured wound, coupled with a compound fracture of the thigh—the requisite wound was not altogether subcutaneous—and no antiseptic precautions were adopted; yet, in spite of all these adverse circumstances, the case did very well. If it were now to come before him again, however, he would make the section below the trochanter, whether with the chisel or saw he would not say.—Mr. BRYANT said that Mr. Brodhurst had not quite done himself justice in his paper. His first case must be excluded from consideration as a case of subcutaneous osteotomy. The second case, done in 1872, followed carefully Mr. Adams's directions. But how about Mr. Brodhurst's six other cases; were they like his first case, or the second case related in his paper? That second case, he would allow, was one of subcutaneous osteotomy; and to that case he would confine his remarks. In four cases, he (Mr. Bryant) had done the operation, the result being what he desired. No antiseptic measures were used. In no case was there any suppuration, whilst rapid recovery resulted in each. In a fifth case, in which he had been obliged to do the operation, the shaft of the bone was divided. Where there was anything of a neck to the femur, Mr. Adams's operation was the better one; if not, Mr. Gant's or Rhea Barton's operation came in. In a boy with ankylosis of both femora, something had to be done to put the boy on his legs. The shaft of each femur was divided. But the boy had a bedsores, and pyæmia from the bedsores killed him five weeks after the operation. As regarded the instrument, the operation was performed with equal facility with the chisel or the saw.—Mr. BRODHURST said the Society was not agreed as to the term subcutaneous surgery. He could not agree with the remarks of Mr. Furneaux Jordan. He did not think the character of the operation was modified by the size of the external wound, be it half an inch, or one inch, or one and a quarter inches. Of his two cases, the first one was a case of resection, the second one of subcutaneous osteotomy. The first case had now been done for twelve years, and had motion. With regard to his other six cases, three were done with small openings, three with incisions through the skin, measuring an inch or thereabouts in length. When the external wound had been free, there was never any suppuration in his cases; when the opening was small the parts were more bruised, and suppuration ensued. In the case in St. George's Hospital, the wound suppurated, and the patient was ill for months. He believed that in all the cases the operation was subcutaneous. If the bone were never exposed, the case was a strictly subcutaneous one. Nor did it matter if a piece of bone were taken away or not. The saw in such a case was simply removed and reinserted in the bone in another direction, and the piece of bone included by the two sawings was then removed. He believed the time would come

when surgeons would prefer the large to the small opening. The title of his paper need not be altered until one knew more precisely what was intended by the term subcutaneous incision.—Mr. CALLENDER suggested that the term valvular would perhaps be preferable for such an incision as that made by Mr. Brodhurst. Surgeons were already familiar with that mode of opening which was in use for the removal of loose cartilages from joints, etc.

## MEDICAL SOCIETY OF LONDON.

MONDAY, JANUARY 29TH, 1877.

WILLIAM ADAMS, F.R.C.S., President, in the Chair.

*Diphtheritic Paralysis.*—Dr. DOWSE read a paper on diphtheritic paralysis. He spoke in reference to the history of this disease, its etiology, diagnosis, prognosis, treatment, and pathology; he collected from more recent authors their various opinions, and explained by numerous examples how insidious the attacks of this form of paralysis really are. Sometimes it involves the muscles of the throat alone; at other times, merely the muscles regulating the ocular accommodation are affected; whilst, in some cases, every muscle of the body is brought under its influence. Dr. Dowse said that in his experience it was impossible to state with any certainty in what patients paralysis was likely to supervene an attack of diphtheria, and *vice versa*; neither had he been able to trace in the constitution of patients any especial idiosyncrasy which rendered them more prone to the paralytic influence. He first spoke of the altered condition of the blood in diphtheria, and the relationship of the paralysis to albuminuria; the periodicity of the paralysis, its nature in reference to motion and sensation, the migratory character of the latter, which made it resemble in some respects hysterical paralysis. He considered, although the disease was one which usually terminated favourably, that there were four remedies of great value in treatment, viz., nutrition, rest, the injection of strychnine, and the use of the galvanic continuous current. In bad cases, he invariably fed the patient repeatedly through the day by means of the nasal tube; this gave what was of the highest importance—rest to the palsied muscles. One-twelfth to one-sixth of a grain of strychnine was injected subcutaneously every day, and the continuous current applied to the spine and the palsied muscles. Lastly, Dr. Dowse spoke of the pathology of this disease. For his own part, he quite agreed with MM. Charcot and Vulpian, that the paralysis was more or less reflex than central; that an advancing neuritis extended from the nerve periphery throughout its trunk; and he thought the theory quite admissible in reference to the palatine muscles, and that its extension would be accounted for by the direct anatomical connection between the sphenopalatine, otic, and Casserian ganglia.

## PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, DECEMBER 16TH, 1876.

THOMAS HAYDEN, F.R.C.S., President, in the Chair.

*Myxoma of Breast.*—Dr. J. W. MOORS exhibited a large myxomatous sarcoma, which his colleague Mr. Porter had removed from the left breast of a pluriparous woman aged 35. The tumour was of six years' growth. It had caused her a certain amount of pain, chiefly from its weight. Hæmorrhages had taken place from it. The lymphatic glands were not affected. It was a tumour of the connective tissue series, resembling in its structure the mucous tissue met with in the funis. Histologically, it was composed of cells of different forms, round, oval, fusiform, and stellate, the oval and fusiform cells predominating. The juice (mucin) drew out into threads—*filant*, as the French call it. A lipomatous tumour lay in the centre of the mass.

*Fibrous Tumour of Uterus.*—Mr. F. T. PORTER exhibited a large fibroma of the uterus.

*Fatty Degeneration of the Heart.*—Dr. H. KENNEDY presented a specimen. A man, aged 26, "lived" upon porter. At the back of the left lung, dulness on percussion and puerile breathing existed. The heart and pulse were weak. At the necropsy, pericardial effusion was discovered. The right heart had long been adherent to the pericardium. The cardiac valves were all healthy. There was some fatty degeneration and the liver was enlarged and fatty.

*Enteric Fever and Pseudo-Enteric Fever.*—THE PRESIDENT showed specimens. In the first case, a man aged 50 was admitted to hospital in what appeared to be an attack of enteric fever. Rigor and other febrile symptoms, followed by an enteric range of temperature, vomiting, diarrhoea, tenderness in the ileo-cæcal region, and ultimately localised tenderness in the right hypochondrium, bore out this diagnosis. The vomiting became stercoraceous, and the man died. On *post mortem*



examination, an old abscess was found in the lower border of the right lobe of the liver, the substance of which was hardly engaged. This abscess had burst into the peritoneum; but, as it had contracted adhesions with the surrounding parts, the resulting peritonitis was localised. There was no typhoid affection of the intestinal glands. In the second case, a woman aged 25 was admitted with a crop of rose-spots. Intestinal hæmorrhage occurred; the temperature ran up to 106.6 deg.; and she rapidly sank. The spleen was enlarged, and Peyer's patches were diseased, although not in proportion to the intensity of the constitutional symptoms.

*Peculiar Fractures of Femur and Humerus.*—Dr. E. H. BENNETT exhibited a series of fractures from a fatal case of tram-car injury to a young man. He bled from both ears after the injury, was admitted to hospital collapsed but conscious, and died in four or five hours. A very extensive fracture radiated from the base of the skull, and involved the petrous portion of both temporal bones. There was a comminuted fracture of the thigh; the fragments being also impacted. The periosteum was extensively stripped from the injured bone. The humerus on the same side was likewise comminuted; the fracture involved the epiphysary line, beyond which there was no detachment of the periosteum.

*Hypertrophy of Tibia consequent on Osteitis.*—Mr. TYRRELL exhibited casts illustrative of the peculiar deformity caused by hypertrophy of the bones of the left leg after osteitis of the tibia. The affected limb was two inches longer than the sound one, and presented a very grotesque appearance. It was also covered with downy hair. The increased afflux of healthy blood during the osteitic attack had produced these effects through hypernutrition.

*Subacute Cerebro-Spinal Fever.*—Dr. JAMES LITTLE showed the brain and spinal cord of a girl aged 15, who died after two months' illness. Towards the end of last October, she came into hospital prostrate, and with marked head-symptoms. It was found that she was an overworked milliner's assistant, and had been ailing for some time, the chief symptoms being headache and dyspepsia. On October 11th, a rigor occurred. High temperature prevailed at first (106 deg.), and the pulse was 150. Purpuric spots appeared on the body, and sloughed, notwithstanding every care. After death, the brain was found to be very firm, with its lobes agglutinated and the arachnoid opaque. Similar changes had taken place in connection with the spinal cord.

*Fracture of Seventh Cervical Vertebra.*—Mr. H. G. CROLY showed the spinal column and spinal cord of a man who had tripped in walking across a room. In falling, he had jerked back his head and fractured the vertebra prominens. He complained of pain in the nape of his neck. There was soon hyperæsthesia of the left forearm. Retention of urine and priapism were also present. He died on the third day. A fracture ran through the body of the seventh cervical vertebra, and here the cord had been tightly nipped, so as to become indented and hyperæmic.

## SELECTIONS FROM JOURNALS.

### SURGERY.

*TRAUMATIC TETANUS CURED BY STRETCHING THE NERVES OF THE BRACHIAL PLEXUS.*—Professor Vogt, of the University of Greifswald, reports this case in the *Centralblatt für Chirurgie*, No. 40, 1876 (abstracted in *New York Medical Journal*). A labourer, aged 63, sustained an injury of the right hand from a falling stone. At the end of two weeks, the palmar wound was healed, and on the dorsum, opposite the lower end of the third metacarpal bone, a healthy granulating surface existed, when trismus was observed. Severe opisthotonos and clonic convulsions of the lower extremities followed, in spite of the free use of opium. There was no tenderness in either wound, nor over the course of the nerves in the arm or forearm; but the brachial plexus in the neck was very tender, and pressure gave rise to spasms of the muscles. The operation was performed and the treatment conducted with all antiseptic precautions. The brachial plexus was exposed on the right side of the neck, in the triangle enclosed by the trapezius, omo-hyoid, and scaleni muscles, its sheath opened, and the separate trunks drawn out and well stretched. The sheath, appearing strongly injected, was loosened from the surrounding tissues as far as the spinal canal. In the hand, the palmar cleavity was separated from the depth of the flexor tendons by a crucial incision and subsequent dissection, and the cicatrising edge of the dorsal wound was excised. Immediately on waking, the patient could open his mouth and protrude his tongue, and all symptoms disappeared except some slight spasms of the muscles of the neck, which followed vomiting (on the second day). On the

tenth day after the operation, the wounds were nearly healed. The patient had had no other medicine than opium, for restlessness at night, and felt no morbid sensations beyond occasional pricking in the fingers.

*PARALYSIS TREATED BY NERVE-STRETCHING.*—The *Aerztliches Intelligenz-Blatt*, No. 8, 1876, reports the following case. The patient, a Polish gentleman, aged 35, had for eleven years suffered from paraplegia, the result of an injury in the sacral region. There had been an almost total loss of sensation, while voluntary motion was completely annihilated. The bladder and rectum were affected, and incontinence of urine followed. After administering chloroform, the following operation was performed. A curved incision was made in the right groin, over and along the course of Poupart's ligament. The fascia was divided, and the anterior crural nerve exposed and separated from the vein and artery. The operator hooked his finger under the nerve, and raised it with such force that the foot was moved. He then seized it between the thumb and finger, and made traction downward, until it appeared to be elongated. The inguinal wound having been carefully dressed, a longitudinal incision was made on the same side, midway between the tuber ischii and the great trochanter, so as to expose the sciatic nerve, which was also elevated from its bed and pulled forcibly upward and downward. These operations were followed by the immediate cessation of the spasmodic movements with which the limbs had been affected since the time of the accident, on the side on which the operation had been performed. The wounds healed rapidly, and the operation was repeated on the left side in a fortnight, with the most satisfactory result. The relief afforded was complete, and the patient, who for years had been confined to his bed, was subsequently able to get up and move about on crutches, the paralysed limbs being furnished with mechanical support.

### THERAPEUTICS.

*TREATMENT OF PITYRIASIS VERSICOLOR.*—Mr. J. Ritchie finds the following treatment very efficacious. He recommends (*Edinburgh Med. Journal*) that the skin be washed with soap-and-water to free it from grease, and thereafter that there be applied daily to the affected spots a lotion consisting of equal parts of acetic acid and glycerine; also that the clothes worn next the skin be dipped in vinegar and water, in order to free them from any of the spores which might be lodging about them.

*THE APPLICATION OF THE NITRATE OF SILVER TO ULCERS.*—Dr. James Cuthill says that, when solid nitrate of silver is freely applied to an ulcer, a tough film is immediately formed, and the ulcerated surface is for the time being apparently sealed up. The benefit to be derived from such a proceeding, however, as most surgeons who have seen a little practice well know, is only temporary, the pellicle becoming detached by the ulcerative process, leaving a sore frequently larger than the original one. A better plan, which he has practised in some cases with excellent results, is merely to score the ulcer with a finely pointed pencil of the nitrate, or only to dot it lightly at intervals on the surface. The discharges getting free vent from the non-causticated points, no sloughing occurs, and a healthy pellicle spreads from the touched portions, just as ice forms on a pond of water.—*Edinburgh Med. Journal*.

### MIDWIFERY AND DISEASES OF WOMEN.

*USE OF THE FORCEPS IN DELIVERY.*—Dr. Jurney, Professor of Obstetrics in Ohio, believes the ordinary method of using the obstetrical forceps a very frequent cause of laceration of the perinæum. He makes little or no traction during the pain; but, in the interval of the pains, he uses traction enough to prevent recession of the head of the child, holding it firmly against the perinæum. This prevents a recontraction of the perinæum, and converts a violent intermittent distensive force into one which is slowly acting and persistent. Under this moderate but constant pressure, the perinæum surely and safely dilates, and laceration is avoided. The reversed rule, therefore, in the use of the forceps, will stand thus: make no traction during the pains; let the traction be made in the interval of the pains.—*Ohio Med. and Surg. Journal* and *Pract. Med. Journal*.

*GELSENIUM AS A MEANS OF PRODUCING CERVICAL UTERI.*—Dr. James A. A. reports (17 *Brit. Med. J.*, 1876) three cases in which he has employed gelsemium as an adjunct to mechanical means for dilatation of the cervix uteri. The first patient upon whom he tried gelsemium had retroflexion of the uterus. The cervix was small and conical; the os was at the apex of the cone, and was so nearly closed



that he could not introduce the smallest laminaria-tent. He had two conical bougies made by an ingenious blacksmith, the little end of the smaller bougie being not larger than a knitting-needle. Even this small instrument could not be introduced. While sheathing a bistoury for the purpose of incising the lips of the external os uteri, the influence of gelseminum over sphincteric action occurred to him, and he determined at once to try it. He gave ten drops of the fluid extract of gelseminum every ten minutes until thirty drops had been taken. Immediately after the last dose, without the slightest difficulty he passed successfully the bougies and a No. 1 sponge-tent to the point of flexion. On the fourth day thereafter, he failed in every effort to introduce a No. 2 sponge-tent until the fluid extract of gelseminum had been given as before. After this was given, the tent was readily passed up to the point of flexion; and, to his great satisfaction, after a little manipulation, it passed this point, and there was no further trouble in the operation of dilatation. He has tried gelseminum in two other cases with equal success.

#### PATHOLOGY.

**SPINDLE-CELLED SARCOMA.**—Dr. Satterthwaite, in a memoir in the *New York Medical Journal* for July 1876, on the Development of Connective Substances, explains the histology of spindle-celled sarcoma in the following way. After isolating the seeming spindle-cells in Müller's fluid or ten per cent. salt-solution, he introduced a current between the glasses and caused them to roll over. "It may then," he remarks, "be seen that they are long, flattened, and of irregular size, appearing, on profile view, to be spindle-shaped; and yet we may often press off the nuclei by pressing the cover upon the slide, showing conclusively that such spindle-cells are really the intercellular substance at an early stage of fibrillation." This is an application to pathological histology of the belief, now held by a considerable number of authorities, that a spindle or fusiform cell is always a flat epithelial-like cell seen edgewise. Dr. Satterthwaite, however, does not make the principle of universal application, as he further remarks that "we sometimes see them where they appear to be composed of real spindle-shaped bodies closely packed together, and where each body contains within it a smaller flattened body".

## REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

#### GRANULAR EFFERVESCENT SALICIN.

MESSRS. SAVORY AND MOORE have forwarded to us a preparation which affords a convenient and palatable means of administering salicin, which is now much used in rheumatism and other hyperpyretic diseases.

In this preparation, the salicin is combined with the citrates and tartrates of potass and soda. These are selected so as not to interfere with the febrifugal action of salicin. They are often combined in prescribing, either as adjuncts or as correctives. Each drachm (or about one teaspoonful) of the granules represents five grains of salicin, so that five, ten, fifteen, or twenty grain doses of salicin can be easily administered.

This preparation will probably be a favourite one. An equally convenient method of administering full doses of salicylic acid is a *desideratum*.

#### HOOPER'S PEPTONE OF BEEF.

WE have recently had occasion to employ, and have pleasure in calling attention to, a valuable dietetic preparation which is supplied by Messrs. Hooper (Probyn and Co.) of Grosvenor Street. The *peptone* of beef is a fluid preparation, by partial digestion with pepsine, of rump-steak divested of fat, etc. It is, in fact, not "an extract of meat", from which the albuminous and nutritive parts are therefore removed, but a soluble and digestible preparation of meat, which is highly and wholly nutritive, and which calls on the stomach for little or no work. It only needs absorption. In conditions of extreme debility, or of ulceration of the stomach, in apæsia, during convalescence from acute or exhausting illnesses—in fact, under a great variety of circumstances—the prepared peptones of meat are of great value to the practitioner. They are more agreeable than beef-tea, and in every way superior to it.

#### BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, FEBRUARY 3RD, 1877.

#### THE MILK OF SULPHUR QUESTION.

##### II.

PROCEEDINGS have been taken against three other druggists at Run-corn for the sale of milk of sulphur; and, in spite of a strenuous defence, they have been convicted and fined. Six martyrs are, therefore, now awaiting the final settlement of the matter in dispute by an appeal to the Quarter Sessions. Our contemporary (*Pharmaceutical Journal*, January 12th, 1877) publishes a most elaborate account of the proceedings, and justly condemns their unnecessary prolixity, as well as the irrelevancy of much that was put forward in the defence. We agree in thinking that the solicitor to the Chemists and Druggists' Trade Association has unwittingly brought out, by his cross-examination of the witnesses, a strong case for the prosecution of all druggists who sell "plastered sulphur" for sulphur, under the misleading and antiquated name of "milk of sulphur".

We have anticipated much of what was urged in the defence. Some important facts, however, were elicited, which it is desirable to note. The member of a Liverpool firm of druggists stated that in 1874 they sold about *four tons* of the milk of sulphur (the impure article) to six hundredweight of the pure (precipitated sulphur). Thus it appears that about *two tons* of plaster of Paris are sold yearly by one firm of wholesale druggists under the name of, and for the medicinal purposes of sulphur! The impure mixture is said to be more eagerly sought for by the poorer classes—doubtless because it is cheaper, and in ignorance of its real nature. It is the preparation of sulphur with which they are most familiar.\* In the course of these proceedings, another reason was assigned for this popular preference. It was stated by the professional witnesses, that the plastered sulphur could be mixed more readily with water than the pure or precipitated substance. This is true, owing to the readiness with which sulphate of lime mixes with water. Considering that precipitated sulphur may be easily mixed with water by the use of treacle, syrup, or mucilage, this furnishes but a poor excuse for selling an impure article to an ignorant woman who may require a laxative for her child. No person competent to prescribe, would in such a case advise for a child, in place of sulphur, a mixture consisting of two-thirds plaster of Paris. Ignorance on the part of the purchaser and the greed of gain on the part of the vendors, are, we believe, at the bottom of this system of selling a mixture which has been excluded from all trustworthy pharmacopœias for more than a hundred years.

The surgeon from Birmingham who appeared in the previous cases stated, on the part of the defence, that the presence of sulphate of lime moderated the laxative properties of sulphur, and rendered the stools softer and more liquid. On the first point, he was properly asked whether it would not be better to lessen the dose, rather than to lower the action of the medicine by adulteration; and, as to the second point, we do not understand how a mineral which has a remarkable tendency to combine with water, and actually in one state to form a solid with it, can have any effect in liquefying the stools. This surgical witness further

\* The witness above referred to, stated that the wholesale price of milk of sulphur was fivepence per pound, and of precipitated sulphur eightpence. In charging the same price for the two, the milk of sulphur yields a larger profit to the druggist.

stated that the pure article (precipitated sulphur) was calculated to produce irritative diarrhoea. We should like to know on what kind of evidence this statement is based. When given in proper doses, we do not believe that any such effect would ever follow the use of a mild laxative like sulphur. The witness would have been nearer to the truth, if he had stated that the use of an indigestible mineral like plaster of Paris, might possibly lead to concretions or deposits in the bowels, and thus cause irritation, especially in infants and children, for whom sulphur is so frequently prescribed.

Professor Redwood gave his opinion that sulphate of lime in sulphur rendered it more efficacious as a remedy, thereby leading to the inference that the constructors of our national pharmacopœias during the last century, have been under a complete delusion in substituting pure sulphur for plastered sulphur, and in excluding the latter altogether! We trust that the Committee engaged in constructing the new *Pharmacopœia* will not act upon these views and restore this substance, as it has been retailed by the Runcorn druggists, to the materia medica. Unless such a defence of impure medicinal compounds be authoritatively repudiated, we may find the admixture of 30 or 40 per cent. of chalk with scammony justified, on the ground that the purgative properties of the drug are moderated by the presence of chalk, and that some purchasers prefer the scammony with chalk to that which contains none!

We have already indicated the chief point for decision in these cases. It is not whether, in the opinion of Mr. Pemberton and Professor Redwood, the poorer class of purchasers are supplied with a better or worse article than that for which they ask. They ask for *sulphur*; and no doubt, disregarding the term "milk", they believe that they are supplied with sulphur, and not with a mixture containing useless plaster. It is also apparent from the evidence that they are charged the price of sulphur for this impure compound. We deny the truth of a statement made by a contemporary, that "every one knows that the article commonly sold as milk of sulphur always contains, and must, from the way in which it is prepared, contain sulphate of lime". This may be correct so far as it refers to druggists and medical men; but it is, we believe, wholly untrue as applied to the poor and non-medical public. They do not know that, in asking for milk of sulphur, they are purchasing in large proportion an useless ingredient, and are supplied with an article other than that which they intend to purchase.

It may be well to state, for the purposes of a defence, that milk of sulphur and precipitated sulphur are distinct substances; but by the best writers on materia medica, they have been for many years treated as synonymous. Dr. Nevins, in his translation of the *London Pharmacopœia* (page 742), under "Precipitated Sulphur", thus expresses himself: "Synonym, Milk of sulphur." Dr. Neligan, in his *Materia Medica* (page 132), gives, under "Sulphur Precipitatum vel Lac Sulphuris", the same formula for the preparation by which sulphate of lime is entirely excluded. In the *Pharmacopœia* of the United States, they are treated as one and the same compound; and lastly Professor Redwood, in his second edition of *Gray's Supplement to the Pharmacopœia* (1848, p. 885), gives under one head, "Lac Sulphuris, Precipitated Sulphur"; and the formula for them is one and the same—i.e., without the possible production of any sulphate of lime.

In a later edition of this work, Professor Redwood agrees with Dr. Nevins and other authorities, that *lac sulphuris* is the synonym of precipitated sulphur. It is satisfactory to find that this is also the view of some practical pharmacutists. One of these, writing to a contemporary journal (*Pharmaceutical Journal*, January 27th, 1877, p. 628), thus strongly expresses the feeling of the honest members of the trade: "I venture to say that a prescription taken to any first-class dispensing pharmacy, either metropolitan or provincial, containing *lac sulphuris*, would almost certainly be dispensed with pure precipitated sulphur"; and he further adds, "in nineteen cases out of twenty, it (the impure compound) would not be found on the premises". We hold, therefore, with the late Dr. Pereira and other authorities, that the presence of sulphate of lime or plaster of Paris in *lac sulphuris* constitutes an adul-

teration of the sulphur sold. The formula now given for its preparation by Professor Redwood and others, necessarily excludes sulphate of lime, and thus takes the compound out of the fourth exception to the sixth clause of the Act. The article sold is not and cannot be of the nature, substance, and quality of the article demanded, unless the purchaser expresses a wish to have the *lac sulphuris* specially prepared according to the formula in the *Pharmacopœia* of 1746. Assuming that *lac sulphuris* is made and sold according to this exploded formula, it cannot by any stress of language be said to be sulphur either in substance or in quality.

#### QUEEN CHARLOTTE'S LYING-IN HOSPITAL.

THE Governors of this Institution are to be congratulated upon having decided, at their last half-yearly meeting, to retain a resident medical officer.

A feeling of dissatisfaction seems to have sprung up amongst the governors against this office, which appears to be partly due to the frequent change of officers. These changes led to unpleasant collisions with the paid officials, and acted, it was thought, prejudicially to the patients. This fault was easy to remedy, and it was one which could have no validity in deciding the important questions involved. The hospital has been closed, owing to an outbreak of puerperal fever, which has cost fifteen lives, and which occurred during the abeyance of the office of resident medical officer. When the hospital is reopened, we hope this cause of complaint will cease to exist, and that the appointment will be properly remunerated. The duties of a resident medical officer, in a lying-in hospital, are necessarily very monotonous, although they require scientific knowledge for their proper fulfilment. A fair salary may be properly expected; and, as a paid officer, his position in the hospital is enhanced, which, for the well working of the hospital and for the safety of the patients, is very essential.

Another ground of dissatisfaction has been that the mortality has not sensibly diminished since the institution of this office; but, as it had really been only fifteen months in full working, the time is far too short to draw any deductions that can be of value. Moreover, mortality is not always of itself an adequate test of the healthiness or unhealthiness of a hospital. It may happen that there may be a continual succession of cases of septic poisoning, year after year, in a lying-in institution, indicated by pelvic cellulitis and pyæmic abscesses, diarrhoea and occasional peritoneal mischief, and yet comparatively few deaths; nevertheless, all these women affected have been more or less maimed, some for life; or it may occur that, after a prolonged immunity from any cases of septic poisoning, out of comparatively few persons attacked a large mortality may take place. In the one case, out of some hundreds of patients admitted, twenty or thirty per cent. may have had their lives endangered, and leave the hospital more or less injured; in the other, out of an equal number, two per cent. only may go out ill or weakly, and yet there may have been a mortality of four per cent.

The presence of a house-surgeon, although of essential importance in every lying-in hospital, still is but one factor in a sum, of which the internal management and nursing, the hygienic character and special suitability of the building, and the authority with which the resident medical officer is invested, are not less important factors. It is as absurd to suppose that the mere presence of a house-surgeon can diminish the mortality of a lying-in hospital, as it is to suppose a campaign can be conducted to a successful issue without a properly constituted staff and *matériel*, and by the mere presence of a general. This hospital admits so large a proportion of single women in first confinement, that it was considered, from a moral point, to be injurious to the parturient women to have a young medical officer supervising the labours. It was wished to place them under the more immediate care and superintendence of a matron, who would, it was thought, exercise a moralising influence over them. Whatever may be said on this subject, it should be stated that the duties which the matron is called upon to perform are far too numerous to admit of her attempting to undertake the



serious and highly responsible duty of the moral improvement of the patients. Before attempting to turn such dangerous institutions as lying-in hospitals into reformatories by means of the executive medical staff, it is incumbent upon the governors to see that the lives of those upon whom they bestow their charity should be properly protected, and not endangered. A lying-in hospital is a medical charity; and, although it does not admit persons suffering from disease, yet the natural physiological process of labour, if the greatest care and constant skilled supervision be not exercised, often speedily becomes a pathological one. If every appliance and care be thought necessary to restore the sick to health, how much more so is it necessary not to allow disease to be engendered, and thereby destroy the lives of persons who have, from a politico-economical point of view, one of the greatest public duties to perform in the rearing of their offspring?

It seems difficult for persons without medical knowledge to understand that the mere aggregation of puerperal women under one roof materially affects the natural physiological process. Lying-in hospitals are apt to be regarded by them merely as convenient places of retreat for parturient women, where they can obtain greater comforts, more care, and, what is concurrent in the minds of the public, greater safety in childbed, than in their own oft-times miserable homes. Such hospitals, however, if the greatest care and medical skill be not used, easily and often become means of destroying life—not saving it. The almost universal condemnation which these institutions receive from the heads of the profession, is based upon the excessive published death-rate of the lying-in hospitals. For any deductions to be of final value, it should be granted that the internal management of these hospitals were perfected as far as human forethought, medical skill, and active sanitary supervision can effect. If the internal arrangements of Queen Charlotte's be any criterion of the other London lying-in hospitals, it is perhaps chiefly surprising that the rate of mortality does not stand higher. In a statement, issued by the physicians to the governors, we read that, until quite lately, the hospital authorities seem to have handed over the entire hospital to the matron. "The housekeeper, matron, mistress, midwife, instructress of nurses and midwives, besides having to conduct a large correspondence in connection with pupils," had also charge of a large wet-nurse department, and supplied ladies with monthly nurses. The physicians go on to say: "There is not a skilled or trained woman in the hospital to assist her, yet there were, in the course of ten months, nearly five hundred cases under her charge." "The patients are nursed by ignorant probationers (often single women) remaining only one month in the hospital, and nursing six mothers, with their children." This happens in an hospital which admits more than two-thirds primiparæ, persons entirely ignorant of maternal duties, and whose nursing, from these labours being frequently complex, requires more than ordinary care.

The proper nursing of puerperal women is one of the most important matters in childbed. Upon this depends, not unfrequently, the safety of the patient, as well as her speedy return to convalescence. The high fees paid by ladies to secure highly-skilled nurses mark the high and just value which the public place upon these functions.

How is it possible that one person can properly superintend the nursing of upwards of thirty mothers, with their children, and at the same time deliver, on an average, ten women per week? If her duties were only confined to these two subjects, they would be beyond ordinary human power; but that other still more onerous duties should be placed upon her, is a gross injustice, both to the matron and to the patients concerned. Occasional assistance appears to have been given in the dispensing of drugs, and the medical care of patients, by "medical pupils, who come upon payment to learn midwifery under the matron. When there were none to be had, the administration of drugs, and also, during the absence of the physician, the medical care of the patients, were entrusted to the matron", who was, we are informed, allowed to give a few favourite formulæ of the different physicians when symptoms arose which, according to her *experience*, were likely to be relieved by them.

We are not surprised that the physicians, in their circular, should pungently allege that "if any charge could be brought against this hospital, it is this, that it admits patients only for pupil nurses and midwives to practise on." We might add, to the pecuniary benefit of one person, who receives from fees, exclusive of salary (£70), about £200 *per annum*.

Considering the immense amount of work thrust upon this person, we do not consider her overpaid, and great praise must be due to her for having performed it creditably. As to whether it was right that such functions should be combined in one individual, that is a different matter; and we imagine that all thoughtful persons will concur in condemning it. The public regard the honorary physicians as the persons professionally responsible for the lives of the persons upon whom they bestow their medical care. Nor could any excuse altogether exonerate them from this responsibility. Some of the governors, with the assistance of two medical men, would have gone against the unanimous opinion of all the leading accoucheurs in London, and would have forced the staff to carry out a system which their professional knowledge told them was to endanger, if not to sacrifice, lives. To turn a lying-in hospital purely and simply into a training-school for midwives and nurses, without first providing for the proper nursing and protection of life, is a grave matter. It is a moral breach of trust on the part of the authorities not to employ every means within their power to secure safety for the persons whom they advertise to take under their care and protection. Those who subscribe funds for supporting a hospital propose to obtain for the poor something like the same comforts, medical skill, attention, and security which their wealth can purchase for them in their own homes. The same view is accepted by the profession.

We regret to find that lately, at Queen Charlotte's Hospital, by a resolution moved by Lord Leigh, and seconded by Mr. John Morgan, a well-known practitioner in Paddington, it was resolved to abolish the recently instituted office of resident medical officer, as well as to remove the honorary medical officers from off the committee of management, and to replace the matron as chief, with a midwife under her, to be assisted by a medical pupil in taking medical notes on the administration and dispensing of drugs. Happily, at the confirmation of the minutes, these resolutions were negatived, and it was decided to retain the resident medical officer, as also to leave the medical officers upon the managing committee. At this second meeting, the resolutions which we have condemned were, we understand, supported by Mr. Henry Lee, the consulting-surgeon. Those who negatived these resolutions seem rightly to have felt that if skilled medical attendance be *not* required for unfortunate women, more subject than any other class to the perils of childbed, and placed under conditions of peculiar dangers, there is no reason why the wealthier class of women should employ eminent accoucheurs at high fees to superintend them in their labours under circumstances of much less risk.

The suggestions at the end of the document issued by the physicians we consider very good, and trust they will be carried out without delay; but they must go further if they expect to receive the support of the profession.

We regret that space does not permit us to enter upon two most important questions, viz., the common confusion of *experience* with *knowledge* which underlies the chief faults in the management at this hospital, and the habit of treating "hospitalism" as a mere question of construction apart from nursing and sanitary precaution.

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At Bolton, on Thursday week, Robert Foulds, "M.D.U.S." and "eclectic physician", was fined £5 and costs for illegally practising medicine.

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THE Asylums Board received on Saturday a deputation from Limehouse, and informed them that everything would be done to offend as little as possible the feelings of the inhabitants in regard to the temporary small-pox hospital.

THE vacancy in the professorship of Experimental Physiology in Florence, caused by the removal of Professor Schiff to Geneva, has not yet been filled.

So far as can be ascertained, the number of persons attended at the London hospitals for injuries due to the gale of Monday last, exclusive of those injured in the scaffold-accident at Lambeth, is about thirty.

THE Home Secretary has acquainted the guardians of St. George's, Hanover Square, that, in compliance with their request, he is taking steps to procure a return of the rate of mortality in all metropolitan institutions where infants are received.

AT the annual meeting of the Brighton and Sussex Eye Infirmary on January 25th, Mr. J. Jardine Murray, who had resigned, after fifteen years' service, the appointment of acting honorary surgeon, was unanimously appointed honorary consulting-surgeon to the institution.

LAST Sunday was Hospital Sunday in Sheffield, and collections were made in all the churches and chapels. Last year, the sum was £2,141. Hospital Sunday has been in existence in Sheffield ten years, during which time about £14,500 has been obtained for the medical charities of the town.

MR. DONALD McALISTER, of St. John's College, Cambridge, the Senior Wrangler in the Mathematical Tripos which has just been announced, in 1874 took a first-class in the First Bachelor of Science Examination and in the Preliminary Scientific Examination for Degrees in Medicine at the University of London.

FOR having wilfully disobeyed and obstructed the execution of an order for the removal of two children suffering from small-pox to the Hampstead Hospital, a man was, on Friday, January 26th, fined £5 by the Hammersmith police magistrate, with the alternative of two months' imprisonment.

WE would strongly recommend those of our readers who are interested in studying the relations of medicine to the use of or abstinence from alcohol to peruse the monthly numbers of the *Medical Temperance Journal*. The number for January 1877 is particularly interesting.

A NEW monthly review appears with the new year in France, which is undoubtedly destined to hold a high place in scientific medical literature. It is entitled *La Revue Mensuelle de Médecine et de Chirurgie*, and appears under the editorial auspices of MM. Charcot, Chauveau, Ollier, Parrot, and Verneuil. It opens with a remarkable article by MM. Charcot and Pitres on "Localisations in the Cortex of the Hemisphere of the Brain".

THE prize of 500 lire (£20), given annually by *Lo Sperimentale* to the author of the most meritorious paper published in that journal during the year, has been awarded by the Medico-Physical Society of Florence to Professor Ranieri Bellini, for his essay entitled "Clinical Studies in Toxicology, illustrated by Experiments on Animals". The adjudicators refer also in terms of commendation to a paper by Professor Pacini on Artificial Respiration.

#### ROYAL COLLEGE OF SURGEONS OF ENGLAND.

PROFESSOR WILSON, F.R.S., has commenced the delivery of his annual course of lectures on Dermatology, and will bring them to a close on February 12th. On the following day, Sir James Paget will deliver the Hunterian Oration, on which occasion he will be honoured with the company of His Royal Highness the Prince of Wales, being his first visit to the College of Surgeons. At the sister College in Pall Mall we think he has been present on two or three occasions. In the evening of the same day, the President and Council will entertain him at dinner in the library of the institution, with H.R.H. the Duke of Cambridge and several illustrious and distinguished visitors. Cards

have been issued for upwards of one hundred guests. The lectures of Professor Parker on the Osteology of Birds will be commenced on Monday, the 16th instant, to be followed by those of Professor Flower on the Comparative Anatomy of Man, in conclusion of his course of 1873. The lectures by Messrs. Carter and Lowne will be delivered some time in June. The preliminary examinations in Arts, etc., for the diplomas of fellowship and membership of the College, will take place some time in March, instead of in June as heretofore.

#### LECTURES ON THE LAWS OF HEALTH.

A COURSE of twelve lectures on the Laws of Health is being delivered by Dr. Corfield, Professor of Hygiene and Public Health in University College, London, at the Society of Arts, John Street, Adelphi (by permission of the Council of that Society), on consecutive Saturdays, commencing Jan. 27th, at 8.30 P.M. A preliminary course on Physiology, by the same lecturer, has been delivered during the winter. At the lecture last Saturday, the chair was taken by the Very Rev. Dr. Stanley, Dean of Westminster. The following are the subjects of the lectures:—1. Personal Health; Explanation of Constitution; Temperament; Idiosyncrasy; the various periods of Life; Diseases belonging to each Period; Precautions to be adopted during Infancy. 2. Feb. 1st (Thursday). The periods of Life, continued; Special Precautions during Youth, Manhood, and Old Age; Hereditary Diseases: great importance of knowledge about them; Care of Persons recovering from Fevers, etc.; Use of baths, exercise, etc.; Occupations. 3. Feb. 10th. The Air we breathe: its Composition and Physical Properties; Variations in the Composition of the Air, produced by Animals and Plants; Quantity of Air required by each Person; Results of breathing Air which has been breathed before; Overcrowding. 4. February 17th. Warming and lighting of houses; Impurities introduced into the Air by Fires and Lights; Gas, and the products of its Combustion; Dust in the air; Unhealthy employments. 5. February 24th. Ventilation; Principles to be followed; Simplest methods of Ventilating Rooms and Houses; Artificial Ventilation of large buildings. 6. March 1st (Thursday). Foods; Classes of Food Substances; How each is disposed of in the Economy; Quantity of Food required; Milk the only perfect food. 7. March 10th. Animal Foods; Vegetable Foods; Bread, etc.; Alcoholic Drinks; Tea, Coffee, etc.; Digestibility of different Foods; Arrangement of Meals. 8. March 17th. Water: its Sources, Qualities, Distribution, Cisterns, etc.; Cholera, Typhoid Fever, etc., caused by drinking Impure Water; Use of Filters. 9. March 24th. Damp and Dry Soils; Consumption, Ague, Rheumatism, etc.; Drainage; Choice of a place to live in. 10. April 14th. Sanitary Arrangements in Houses; Sewers, Drains, etc.; Disposal of Refuse Matters; Sewage Farms, etc. 11. April 21st. Small-pox; Vaccination and Revaccination. 12. April 28th. Prevention of Scarlet Fever; Typhus; Enteric or Typhoid Fever, etc.; Disinfection. Tickets (ten shillings each) for the course of lectures are sold at the office of the Society of Arts; or at the office of the National Health Society, 44, Berners Street. The price of admission to a single lecture will be one shilling.

#### TWO PROVIDENT DISPENSARIES.

WE have received the annual reports of the Battersea Provident Dispensary and of the Kilburn Provident Medical Institute for the year 1876. Both these institutions are of recent origin, and have arisen out of the movement in favour of provident dispensaries which has taken place during the last few years. The Battersea Provident Dispensary, after having been carried on since 1844 as a free dispensary, was placed upon a provident basis at the commencement of last year. The Kilburn Provident Medical Institute was established *de novo* a year earlier. Both Battersea and Kilburn are suburbs which are peculiarly well suited for the development of such institutions; for in each there is a large population of the industrial class. The reports which are now before us are far from being unsatisfactory, and we shall expect to find these two institutions growing in popularity and prosperity from year to year. The Battersea Provident Dispensary has enrolled during



this its first year 3,634 members, and, after paying all expenses, a balance of £112 9s. 4d. has been divided among the medical staff. The Kilburn Provident Medical Institute during its second year numbered 1,576 members, and £233 4s. 9d. were divided among its medical officers.

#### REVACCINATION.

THE Prince and Princess of Wales and the royal children have been revaccinated recently. At the desire of their Royal Highnesses, all the members of the household at Marlborough House and Sandringham have also been revaccinated.

#### SIR WILLIAM FERGUSSON.

SIR WILLIAM FERGUSSON has lately been suffering from a return of distressing symptoms resulting from his chronic renal disease. There has been of late increasing weakness with difficulty of breathing, and consequently disturbed and restless nights. These symptoms, we regret to learn, are now causing much distress to the patient as well as considerable anxiety to his numerous friends. Sir George Burrows and Dr. George Johnson are in constant attendance upon their friend.

#### M. LEMOINNE ON THE EXCLUSION OF ENGLISH DIPLOMAS.

M. JOHN LEMOINNE, in an excellent article in the *Débats*, expresses the hope that the Chamber will reject the *projet de loi* of M. Roger Marvaise. He observes, after criticising the bill in the same sense as it has been criticised in this country: "We are not surprised at the agitation which this project has caused in England, but we are alarmed at it. If we try to force the English, who come to France to seek the sun or mineral waters, only to consult French doctors and to undergo French medical treatment, this sort of continental blockade will only have the effect of sending them to spend their money elsewhere, and to make the fortune of the Italian Riviera at the expense of Nice and Mentone."

#### CLINICAL SOCIETY OF PARIS.

A NEW Clinical Society has been formed in Paris. It is composed of twenty honorary, sixty titular, and an unlimited number of corresponding members. The office-bearers are as follows: *Honorary President*, M. Barth; *President*, M. Peter; *Vice-Presidents*, MM. Bucquoy and Ledentu; *General Secretary*, M. Dieulafoy; *Acting Secretaries*, MM. Labadie-Lagrave and Huchard; *Treasurer*, M. Carrière; *Librarian*, M. Krishaber.

#### CLINICAL SOCIETY OF LONDON.

THE proceedings at the last meeting of the Clinical Society were of a mixed character. The new president, Mr. Callender, took the chair for the first time, and delivered an admirable address on the experience and expectation of clinical research, which will be found published at page 130. It was listened to with much attention by all the members present, and at its termination, Professor Burdon Sanderson proposed a vote of thanks to the president, and expressed the hope that the address might be printed in the Society's *Transactions*. He spoke of the great pleasure with which he had listened to the address, and advocated strongly the establishment of precision in clinical investigations. Dr. Greenhow seconded the vote, which was carried with applause.

#### THE HOSPITAL AT NORWICH.

AN important letter has been published by Dr. Copeman of Norwich on this subject. It seems that the question of the alterations required in that hospital, to which we referred in our number of February 19th, 1876, has received two different solutions from opposite parties of the subscribers. Ample funds have been obtained to make such additions as are suggested in Mr. Netten Radcliffe's report, and this course is advocated by Dr. Copeman and others. But another set of governors, under the influence of the views on pyæmia advocated by Mr. Erichsen, and believing that the present building is "pyæmia-stricken", wish to pull it all down and apply to the public for an indefinite sum in addition

to that now subscribed. We cannot but agree with our correspondent that such a course would be injudicious and wasteful. As Dr. Copeman most sensibly observes: "A new hospital may be as much affected by pyæmia as an old one; it is the management within its walls that has more to do with the prevention of hospitalism than the age of the building itself." Besides, when the important consideration which Dr. Copeman puts before us is borne in mind, that the additions can be so made that the old hospital can afterwards be removed if it be thought good, what possible justification can there be for demolishing a structure which is allowed to be fairly adapted for hospital purposes, and which the best authorities believe to have been only unhealthy because overcrowded, and possibly otherwise mismanaged? It becomes more and more clear, from increasing experience, that far too much effect on the progress of surgical cases has been ascribed to the mere details of hospital construction; and that most of the large sums spent in building and managing pavilion hospitals like St. Thomas's, over and above what they would have cost in some more usual construction, has been wasted. We hope the governors of the Norwich Hospital will not part with good money in a similar way in pursuit of some dubious theory.

#### THE LIVERPOOL ROYAL INFIRMARY.

THE trustees of the Liverpool Royal Infirmary acted wisely at their meeting on Monday last in not passing the resolutions submitted to them, to place the election of the honorary medical staff in the hands of the committee. The meeting was adjourned for a month, and in the mean time it is to be hoped that the opposition which the proposal met with, backed as it was by the unanimous opinion of the Medical Board and of a large meeting of the members of the Medical Institution, will have the effect of preventing a serious blow being inflicted on the charity. The action taken by the Medical Board, supported as it was by the profession of Liverpool, will, we trust, in the end prevail. It is a pity to see that a small number of trustees of a hospital should attempt to make changes of so fundamental a character in its laws without taking the opinion of the medical staff. The Medical Board were not, it appears, consulted on the matter, and the proposal came upon them as a surprise, and all who are interested in the welfare of the charity are indebted to them for the performance of what must have been a somewhat unpleasant duty. The reasons assigned for the proposed change have but little weight in comparison with those which can be urged against it, and we think it would be difficult for any body of men, with due regard to the interests of their profession and of the charity which they serve, to hold office under such conditions as were submitted to the Liverpool Infirmary trustees at their meeting. The institution has probably been saved, by the resolution which was passed, from being placed in a disastrous position, and time has been afforded for wiser counsels to prevail. The following is the resolution of the Medical Board:

"The Medical Board have seen with regret the announcement that it will be proposed at the annual meeting of the Liverpool Royal Infirmary, so to alter the laws of the institution as to place the appointment of the honorary medical staff in the hands of the committee. Having given the subject very careful consideration, the board are unanimously of opinion that the proposed change would act injuriously on the interests of the charity, and would probably prevent the appointments at the Infirmary being as eagerly sought for as heretofore. They, therefore, feel that they would be neglecting their duty both to the Infirmary and to the medical profession were they not to place on record their views on the subject, and urge on the trustees the desirability of not making the alteration now proposed."

The following are the resolutions passed at a special general meeting of the members of the Liverpool Medical Institution held on Friday, January 26th—Dr. Turnbull, the President, in the chair.

"Proposed by Dr. Waters, seconded by Mr. Bickersteth—"That, in the opinion of this meeting, the election of the honorary medical officers of the great medical charities by so limited a body as a committee of management is open to grave objection, and liable to abuse; and that it is calculated materially to affect the interests of these charities."

"Proposed by Dr. Cameron, seconded by Mr. Shadford Walker—"That the meeting, having heard that it will be proposed at the annual

meeting of the Royal Infirmary to alter the laws of the institution, so as to place the election of the honorary medical officers in the hands of the committee, would earnestly impress on the trustees the desirability of not making the proposed change.

"Proposed by Dr. Vose, seconded by Dr. Carter—"That copies of the foregoing resolutions be sent to the President and Chairman of the Committee of the Royal Infirmary to the Liverpool daily papers and to the medical journals."

We are strongly of opinion that the method of election by open vote of the whole body of governors is a bad one—bad because it is 'costly, inefficient, and excessively burdensome; and we hope that the trustees will use the interval to consult the medical board as to the best method of election, and that arrangement will be made with which all will be satisfied. There are many precedents for changes of the kind, as at St. Mary's Hospital, London, and the London Hospital. All the parties to the discussion are equally interested in desiring a satisfactory solution to the difficulty, and we see that Dr. Steele stated that the medical officers are themselves impressed with the feeling that the present system requires alteration. No doubt, therefore, they will be enabled to agree upon a just method of effecting that alteration.

#### SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

A QUARTERLY court of the directors of the Society was held on Wednesday, January 10th, in the rooms of the Royal Medical and Chirurgical Society. In the unavoidable absence of the President, the chair was taken, at eight o'clock, by Dr. Pitman, V.P. The treasurer reported that there were fifty-eight widows and eleven children applicants for relief from the general fund, and four children from the Copeland fund. A sum of £1257 10s. was voted to be distributed among them. The expenses of the quarter were £65 16s. 9d. The deaths of two widows were reported by the secretary; one had been receiving grants since December 1828, and the other since September 1847. One fresh application from a widow was considered and admitted. At Christmas last, a sum of £323 had been distributed as a present out of the surplus income amongst the widows and orphans, and fifteen guineas were presented to the secretary, as a compliment for his exertions in collecting the subscriptions of the members. Five new members were elected.

#### BRITISH MEDICAL BENEVOLENT FUND.

THE annual general meeting was held on January 10th; Sir George Burrows, Bart., President, in the chair. The report, having been read by the Honorary Financial Secretary, was approved and adopted. The receipts for the year 1876 were so far unfavourably influenced by the prevalent financial depression and the loss by death of generous friends, that the amounts received as donations have been less by nearly one-half than in 1875, the sum received under this head being £473. The subscriptions, however, reached £955. A legacy of £500 from the late Sir James Bardsley had also been received and invested for the annuity department. The amount voted to cases of distress from the immediate relief department was £1,379, in one hundred and thirty grants, benefiting over three hundred and thirty persons. A further sum of £689 was distributed amongst thirty-six annuitants, the total number assisted during the year being upwards of three hundred and eighty individuals, at a cost of £2,068. Votes of thanks were passed to Sir George Burrows, President; to Messrs. Churchill, for their liberality in providing a committee-room; to the staff of the Fund; the auditors; and the editors of the medical journals, for their kind and liberal advocacy of the claims of the Fund.

#### SCURVY.

A TOTAL of thirty cases of scurvy were entered, according to the *Pall Mall Gazette*, at the Seamen's Hospital (*Dreadnought*) during the past year, twenty-seven of which came from British and three from foreign ships, and ten of the former were sent from one vessel. But, in 1867, the year before the special sanitary clauses of the Merchant

Shipping Acts came into operation, upwards of one hundred cases of scurvy were admitted into this institution, then existent on board the old hospital ship in the Thames. In point of fact, since the quantity and quality of the antiscorbutics carried in merchant ships have been supervised by the Board of Trade, scurvy has decreased about 80 per cent., and this, too, in vessels trading indifferently in cold, temperate, and tropical climates. A slight increase of the malady has been noticeable during the past year; but a large Blue-book, recently published, shows that this is mainly due either to bad quality of rations, or carelessness in the issue of lime-juice. The *Dreadnought* reports show seven cases of scurvy admitted in 1873, eighteen in 1874 and fifteen in 1875.

#### AN OCTAVE OF TRIPLETS.

THE *Lyon Medical* relates the case of a married woman living in Paris who has just given birth to a triplet, comprising her twenty-second, twenty-third, and twenty-fourth children. This woman, in the course of her married life of nine years, has given birth to twenty-four children, all born three at a time and in perfect health. Unfortunately for the husband, who is desirous to transmit his name to posterity, this remarkable family party consists entirely of girls.

#### SIGMUND'S TREATMENT OF SYPHILIS.

In the clinic of Professor Sigmund, the treatment of syphilis by inunction is still pursued. One hundred and eighteen patients, mostly of bad habits (Dr. Howard writes to the *New York Medical Journal*), under mercurial treatment at one time, and not one case of salivation, has its lesson. Is this lesson the superior value of inunction, or of the *régime* adopted? While the inunction method is the pride and glory of the veteran professor, he rather insists that this exemption from salivation is the reward chiefly of the *régime* he rigidly enforces. He believes that with a tooth-brush, chlorate of potash, and industry, salivation can be prevented with certainty, whatever the form, manner, or degree in which mercury be administered. In every case, several days before beginning a mercurial course, the cleansing of the teeth and rinsing of the mouth with chlorate of potash are combined with its internal administration. During the mercurial course, the internal use of the chlorate of potash is discontinued, but rinsing the mouth with it is repeated every few hours. During several months, I have seen only one instance of salivation in the wards, but its explanation was the stubborn disobedience of the patient. Subcutaneous injections of mercury are practised in many cases; the bichloride, cyanide, albuminate, and chloride being respectively used, but without any particular rule of selection. The albuminate of Bamberger, said to be incapable of producing abscess, does not sustain its repute; that virtue, together with certainty of action, Sigmund awards only to calomel. Experiments to determine mercurial impregnation of the air have been in progress in a close room in which patients vigorously practised inunction; the results were negative. In patients under this treatment, however, Dr. Paschkiss, Sigmund's first assistant, has confirmed the finding of mercury not only in the milk and urine, but also in the placenta. The iodide of sodium, in Vienna as elsewhere, is now a good deal substituted for the iodide of potassium when the latter is not well tolerated.

#### THE ADMINISTRATION OF ETHER.

CHLOROFORM deaths continue to occur at frequent intervals; and it is even to be feared, from the slowness which is often shown by those to whom they occur to put them on record, that there are many which are never heard of. A very serious responsibility rests, in our view, upon any medical man who fails to give to the profession the earliest intimation and the fullest details of any case of fatal accident from the administration of any anæsthetic whatever. We have for long urged the claims of ether to be considered as a safe, and therefore a more proper anæsthetic for use than any other now known. The following observations by Dr. Morton in a recent number of the *American Journal of Medical Sciences* are worthy of much notice, now that ether



is coming largely into use in our British hospitals and in private practice.

"There is seldom any danger from ether when properly administered, and there is abundant evidence to show that fatal results are less likely to follow its use than any other anæsthetic agent. The fact of ether having uniformly been looked upon as a perfectly safe agent on every occasion may, I am inclined to think, have induced great carelessness in its use. The occasional deaths from or at all associated with ether should in the future be sufficient to serve as cautionary signals; a constant watchfulness should be observed by the etheriser, and every symptom carefully noted, especially all complications arising from bronchial secretion, pulse-failure, or vomiting; and I am satisfied that not only should the patient be watched by a medical man during anæsthesia, but until reaction has been thoroughly established and the ether-effects entirely passed over. I have seen, as probably all surgeons have, ether poured upon the inhaler or napkin in great excess, so as to flow down on the patient's face and neck; the cloth thus becomes saturated, is not pervious to air, and the patient almost suffocates. Such practice cannot but be severely condemned.

"The assistant should devote his attention exclusively to the patient, while a few drachms at a time, with care, poured on the napkin, will generally induce anæsthesia promptly. When the napkin becomes the least soiled, another should be substituted; and, when complete anæsthesia has been induced, occasional inspirations of pure air should be allowed. Ether has been most successfully employed in the Pennsylvania Hospital for more than twenty-five years; it was introduced about 1850, and first used in a case of luxation of the femur which resisted repeated attempts at reduction with the pulleys. It is needless to say that, after etherisation, no difficulty was experienced; and from that time to the present this agent has been in daily use, and, with the few exceptions herein noted, has been the only anæsthetic employed."

#### THE PUBLIC HEALTH.

THE Registrar-General's weekly return of births and deaths states that the rate of mortality per thousand last week was lowest in Brighton, namely 16; and highest in Liverpool, namely 29; the rate in London being 21. The 1,425 deaths which occurred in London included 86 from small-pox (in comparison with 116, 100, and 79, in the first three weeks of the year) and 40 from whooping-cough. The report remarks that, in order to fully appreciate the remarkable tendency of small-pox to single out the unvaccinated for its victims, out of the 86 deaths, 38 were certified as unvaccinated and 22 as vaccinated, although the vaccinated in the population of London are about nine times as numerous as the unvaccinated.

#### FORCED SLEEP.

IN a very interesting note on the relation of the waking state to external stimuli, the *Academy* points out that the *experimentum mirabile*, described by Kircher in the middle of the seventeenth century, has of late years been made the starting-point of several interesting lines of research. In its original form, the experiment consists in tying down a cock to a table and drawing a straight line with a piece of chalk from the tip of his beak. The bird then remains motionless for a variable length of time, making no attempt to struggle or regain its freedom. Kircher's own explanation of the fact is fantastic: "*cujus quidem rei ratio alia non est*", he says, "*nisi vehemens animalis imaginatio, quæ lineam illam in pavimento ductam vincula sua, quibus ligatur, apprehendat*". Czermak was the first to inquire into the matter in a systematic way. He confirmed the truth of Kircher's statements, and extended them to a great variety of birds. But he showed that, in order to obtain the desired effect, it was enough to hold the bird firmly down with the hands, preventing any voluntary movement of the head and neck. Bonds and chalk-line he found to be quite superfluous. In another set of experiments, the body of the fowl was fixed, while its head and neck were left at liberty; an indifferent object was then held close to its eyes; the same curious quiescence was induced, occasionally conjoined with phenomena of a cataleptic order. Czermak believed these singular results to be due to the development of a hypnotic state in birds, analogous to that occasionally observed under somewhat similar conditions in the human subject. Preyer's investigations included rabbits, a guinea-pig, and a squirrel, in addition to birds. He never suc-

ceeded in producing any condition at all like sleep. He rejected Czermak's explanation, and ascribed the immobility of the various animals experimented on to simple terror: the first impression of utter helplessness—of the futility of struggling—persisting in the creature's mind even after all restraint had ceased. Heubel (*Pflüger's Archiv*, xiv, 2 and 3) rejects the theories of all his predecessors. He gives reasons for rejecting them which tell more strongly against those of Kircher and Preyer than against that advanced by Czermak. Previous inquirers he believes to have witnessed only the first stage of the phenomenon—that stage which is most easily induced in animals of relatively high organisation. Cold-blooded vertebrates, such as the frog, may be reduced to a state of complete immobility at will; they will remain in a constrained position for hours, instead of seconds or minutes. This abolition of voluntary movements and of consciousness is nothing more than occurs in ordinary sleep. Pflüger has given many reasons for his belief that the waking state requires for its maintenance a continual stimulation of the higher nervous centres by impressions conveyed to the brain along the various centripetal nerve-fibres. In forcing an animal to remain motionless for a long interval (without inflicting pain), and simultaneously excluding visual and auditory sensations from its brain, we suddenly deprive its nerve-centres of a large proportion of their accustomed stimuli. Accordingly, they are unable to remain awake, and their functional activity is only restored to them when they are roused by some impulse from without. Having satisfied himself in a variety of ways of the correctness of this explanation as applied to the phenomena exhibited by the frog, Heubel proceeds to extend his results to birds and mammals, and arrives at the conclusion that "forced sleep" will account for all the facts hitherto observed.

#### ENTERTAINMENT AT CLAPTON ASYLUM.

ON Thursday, January 25th, the annual New Year's entertainment was given to the imbecile children at the Metropolitan District Asylum at Lower Clapton. It consisted of a concert, performed entirely by some of the children, a burlesque, in which both staff and inmates took part, under the direction of Dr. Fletcher Beach, the medical superintendent, and a performance of the "Anvil Chorus" with dumb-bell accompaniment by a dozen of the larger boys dressed as imps. About a hundred and fifty visitors came to see the entertainment provided for the children. Dr. Brewer, Chairman of the Metropolitan Asylums Board, and Sir Edmund Currie, Chairman of the Clapton Committee, accompanied by several managers, were present. The entertainment was much enjoyed by visitors and children, and was a great success.

#### THE BRESSA PRIZE.

By the will of Dr. Cesare Alessandro Bressa, signed September 4th, 1835, he left all his property, after paying certain legacies, in remainder expectant on the expiration of a life-interest, to the Royal Academy of Sciences of Turin, with power to convert and put the capital out to interest in the way deemed most profitable; and with the interest of this property a biennial prize was directed to be established and adjudged in the following manner. "The net interest of the first two years to be given in premium to that person, of whatever nation or country he be, who shall have during the previous four years made the most important discovery, or published the most valuable work on natural and experimental philosophy, natural history, mathematics, chemistry, physiology, and pathology, as well as geology, history, geography, and statistics. The net interest of the following two years to be given only to an Italian, who, by judgment of the above named Academy of Turin, shall have made the most important discovery, or have published the most important work on any of the above mentioned sciences. The prize will continue to be distributed in the same order." The Academy has accepted the task, with the intention of fulfilling to the best of their ability the generous wishes of the testator; and the first open prize will be given in the year 1879. The value amounts to 12,000 Italian *lire*, or nearly £400 sterling. In accordance

with the spirit of Dr. Bressa's will, the Academy will choose the best work or discovery, whether or not it be presented by the author. The prize in no case will be given to any of the national members of the Academy of Turin, resident or non-resident. In the year 1881, the second Bressa Prize will be given, according to the above rules, to an Italian; and so on every four years there will be a Bressa prize for competition among scientific men of any part of the world, and every four years one which can be competed for by Italians only.

#### FASHIONABLE MEDICINES.

In the *Archives Générales de Médecine* for January, MM. Lasèque and Reynauld give the following statistics respecting some modern drugs supplied by the medical men of the *Assistance Publique*. In 1869, the Central Pharmacy distributed 141 kilogrammes of chloroform against 308 kilogrammes in 1875. Chloral showed a still more rapid increase. In 1869, only 5 kilogrammes were required; whilst, in 1875, 360½ were consumed. Iodoform from 250 grammes in 1859, rose to 28 kilogrammes in 1875; bromide of potassium rose from about 3 kilogrammes in 1855, to nearly 800 kilogrammes in 1875; opium showed but small variations, but the same cannot be said of morphia, no doubt from the general use of hypodermic injections, for, from 275 grammes, in 1875 the amount rose to the enormous quantity of more than 10,000 kilogrammes. A very large augmentation in medicinal substances was also seen in the alcohol used in the hospitals and infirmaries of Paris. Thus, in 1855, the *Assistance Publique* only appropriated 1,270 litres of alcohol to the use of the sick, whilst, in 1875, 37,578 litres were used. The same increase is noticeable in rum and red wine. The use of white wine was sensibly diminished. The use of leeches has gone nearly out of fashion. In 1834 and the following years, up to 1837, the number of leeches employed exceeded a million; in 1874, the number had fallen to 49,000 only. The consumption of sulphate of quinine is on the increase, and represents 53,734 grammes in 1875, against 24,525 in 1855.

#### THE DENTAL PROFESSION.

THE *Monthly Review of Dental Surgery*, which is, we believe, considered to be rather a radical organ of the dental profession, has this month an article on the present position of the dental profession, in which it points out that "the position occupied by Mr. Cartwright at the present time is a very remarkable one. As President of the Odontological Society of Great Britain, President of the Association of Surgeons practising Dentistry, and Chairman of the Dental Reform Committee, he is at the head of the three most diverse sections of the dental profession." It intimates, not unnaturally, that some reconciliation of the diverse views of these three sections may now be expected; and certainly, unless Mr. Cartwright take strictly the same view of his position and obligations as Captain Macheath, of which we by no means suspect him, some efficient programme for effecting a compromise between the three "parties" which he represents must be expected from his hands. The solution to which the *Monthly Review* inclines appears to be indicated in the following words.

"The moderate Liberal party, representing the dental licentiates, not unreasonably wish that the dental diploma may be considered the only qualification requisite for a dentist; and, if the College of Surgeons were likely to remain as it is at present, the scheme of dental education might be made so comprehensive as to include general surgery and dentistry; but, as we have already pointed out, the completion of the conjoint scheme will totally change the character of the College, and we must look forward to the necessity of adding the examination of the Conjoint Board to the examination of the Dental Board; that is, if dental surgery is to reach and maintain that standard of efficiency that we all desire. With regard to the ultra-Radical party, we must confess we have but little sympathy. Those who desired to qualify have had ample opportunity of doing so; and, if they have lost their opportunity, they have only themselves to blame."

If this please "the moderate Liberals", we imagine that the "Conservatives" have equal reason to be satisfied with what is virtually the

adoption of their programme; and the "ultra-Radicals" seem to have no one's sympathy, although they are probably the most numerous body and thrive fairly well without it.

## SCOTLAND.

AT a recent meeting of the Edinburgh University Court, the additional examiners in medicine for the year 1876 were reappointed for the year 1877.

MANY will learn with regret the sudden death of Mr. Wm. Graham, surgeon, of Dumbarton. He was making a visit, when he was seized with convulsions and died in a few hours. Mr. Graham had been practising in Dumbarton for upwards of twenty years, and was one of the leading citizens of the town. His funeral was a public one.

#### THE VIVISECTION ACT.

PROFESSOR ALLMAN, who has been appointed an inspector under the Vivisection Act, arrived in Edinburgh at the beginning of the week, and, after inspecting the registered physiological laboratories, then went on to Glasgow.

#### WATER IN THE HEAD.

THE persons charged with milk-adulteration at Glasgow sometimes put forward curious and ingenious lines of defence. Last week it was pleaded, unsuccessfully however, against a charge of selling diluted milk, that the cow that yielded it was suffering from "water in the head". A day or two later, a milk-dealer who was fined for selling buttermilk adulterated with 36 per cent. of water, declared as an excuse for the presence of the water, that the bung had inadvertently been left out of the barrel during a heavy shower of rain.

#### THE EDINBURGH ROYAL PUBLIC DISPENSARY.

THE annual report of the Edinburgh Royal Public Dispensary, better known to Edinburgh men as the Old Town Dispensary, for the past twelve months, has just been issued. From it we find that, during that time, 9,724 poor persons have received medical advice and assistance. It points out that the coming season is one likely to increase the amount of work required from the institution, and, in particular, that the vaccination department would be much pressed. The directors acknowledge a donation of £100 given to the institution by Mrs. Bevan in commemoration of its centenary, and refer to the services gratuitously performed by the medical officers. In the report of the medical officers, it is stated that the number of vaccinations and revaccinations performed in 1876 was 742, and that no case of small-pox had been reported at the dispensary. It is to be observed, that the ordinary expenditure for the year was only £316, and the extraordinary expenditure £172; so that much good is done by this institution, as also by the New Town Dispensary at Edinburgh, at a comparatively small cost. In each case, the revenue is derived principally from small voluntary contributions.

#### EWES' MILK.

AT a recent meeting of the North British Branch of the Pharmaceutical Society, Dr. Stevenson Macadam read a paper on "The Composition of Ewe's Milk". Having had occasion to observe the extreme richness of ewe's milk, as compared with that of the cow, or even of the goat, the author had arranged for a series of trials of the composition of ewe's milk yielded by animals fed solely on good natural pasture; and on the same animals after having fed on extra diet, including linseed-cake, cotton-cake, and oats. The results of these experiments showed that ewe's milk was very much richer than cow's or goat's milk. Thus, taking the total percentage of solids by weight in the milk, the average results were as follows: town dairy cow's milk, 12.27; country dairy cow's milk, 12.77; goat's milk, 13.43; ewe's milk on natural pasture, 18.75; and ewe's milk on natural pasture



with the addition of feeding stuffs, 20.11. Again, taking the fat in the solids, the town dairy cow's milk gave 2.58; the country dairy cow's milk, 2.88; goat's milk, 4.31; ewe's milk in natural pasture, 6.77; and ewe's milk with extra feeding, 8.27. The general results of these experiments proved, first, that the better feeding of the ewes yielded richer milk, though the gain was not very great, owing, doubtless, to the good natural pasture; and, second, that the ewe's milk, taken under any circumstances of feeding, was of much richer quality than cow's or goat's milk.

#### GLASGOW WATER-SUPPLY.

At the last monthly report, it was stated that the quantity of water in store on the 15th ult. was two hundred and ninety-seven days' supply, and that the average sent into the city during the previous fortnight was thirty-two million gallons a day. The report of the engineer showed that the rainfall in the Loch Katrine district during 1876 had been slightly under the average. The quantity used during the whole of 1876 had amounted to nearly thirty-three million gallons a day. The population supplied, estimated in April last from the number of families rated for water, was about 710,000, so that the consumption per head had averaged over forty-six gallons a day. This was about four gallons a head less than during the previous year, showing that some good result was attending the efforts to reduce the waste.

#### IRELAND.

At a late meeting of the Bangor Dispensary Committee, it was unanimously resolved, that Dr. Henry Thompson should receive a retiring allowance of £100 *per annum*.

THERE were eight cases of small-pox under treatment in Cork Street Fever Hospital last week, but the mortality in Dublin is very trifling, averaging about one death a week.

ON next Monday, the 5th inst., Dr. Macalister, Professor of Zoology in the University of Dublin, will give his first lecture at the King and Queen's College of Physicians, on "Researches on the Intestinal Canal in Man, and in the Higher Animals".

At a recent meeting of the guardians of the North Dublin Union, the report of the committee lately appointed to examine the applications for an increase of salary to the dispensary medical officers of the union was received. The committee have recommended that the medical officers shall each receive an addition of £20 yearly, but the report will be under the consideration of the guardians next week, when the matter will be finally decided.

#### CARLOW UNION.

A MEETING of the Board of Guardians of this union was held last week, for the purpose of electing a medical officer to the workhouse, at a salary of £100 *per annum*, in the room of Dr. Rawson, senior, who had resigned. Two candidates presented themselves, Drs. Edward Rawson and O'Meara, the former being elected by a large majority.

#### SANITARY PROCEEDINGS IN DUBLIN.

THE Public Health Committee of the Corporation, at a meeting held on January 26th, resolved that the consulting sanitary officer, the medical officer of health, and the sanitary staff in general, should make a minute inspection of the places in the city where animals are kept, especially dairy cattle, with the space given to each for exercise, rest, ventilation, and air. It was also determined that Drs. Cameron and Mapother shall make suggestions for the framing of by-laws for the keeping of animals, so as not to be injurious to health, in pursuance of the thirty-second section of the Local Government Act, 1853. This procedure on the part of the public Health Committee is highly praiseworthy, as the condition of the dairy-cattle in the city is positively disgraceful.

## THE ABUSE OF MEDICAL CHARITIES.

IN reference to the action of the Committee of Council upon the memorial and communications referred to in the letters of Dr. Meadows, Mr. Fairlie Clarke, Dr. Rogers, and Mr. Nelson Hardy, we understand the facts to be as follows.

At a meeting of the Committee of Council, on the 15th April, 1875, there was read a letter from Dr. Meadows and Dr. W. Fairlie Clarke, of which the following is a copy.

"27, George Street, Hanover Square, London, April 14th, 1875.

"Dear Sir,—We beg leave to forward herewith a memorial to the President and Committee of Council of the British Medical Association, which we have been engaged in promoting during the last few months.

"As the memorial speaks for itself, it is not necessary for us to say anything about the subject to which it relates. We are, however, anxious to mention one or two facts with regard to the signatures, and the way in which they have been obtained.

"The total number of names appended to the memorial is 303; of these, 195 are from London, while 108 are from the country. Of the metropolitan practitioners who have signed, 92 are connected with hospitals; while 103 are general practitioners, and many of these hold dispensary appointments. Among the former, you will find the names of not a few of the leading men in the profession.

"Speaking generally, the way in which the signatures have been obtained is this: (1.) We have written, or sent circular notes, to those members of the staffs of the London hospital schools *with whom we were ourselves acquainted*; and similarly we have applied to others whom we had reason to believe were interested in the question. (II.) By the kindness of the Editor, lists of the signatures have from time to time been inserted in the *BRITISH MEDICAL JOURNAL*, with a request that those who desired to add their names would communicate with us. In reply to this invitation, a considerable number of names have been received.

"These are the principal means that we have adopted to obtain signatures; and we are anxious to make it clear that *nothing like a general canvass of the profession has been attempted*, either in London or elsewhere. Bearing this in mind, we trust you will consider both the number and the character of the signatures such as to induce the Committee of the Council to take the prayer of the memorial into their consideration. From the very small number of refusals that we have met with, and from the large number of cordial notes of approval we have received, we are fully persuaded that the opinions expressed in the memorial are, in the main, those of the great majority of the profession.—We are, dear sir, yours faithfully,

"ALFRED MEADOWS, M.D.

WM. FAIRLIE CLARKE.

"To George Southam, Esq., F.R.C.S., President of the Committee of Council of the British Medical Association."

It was thereupon resolved: That the memorial be presented at the Annual Meeting, with the suggestion that a Committee should be appointed to consider the whole question of medical relief by hospitals and dispensaries of the United Kingdom, and to report thereon; and it was further resolved: That the gentlemen forwarding the memorial relative to the mismanagement of the medical charities be requested to devise some measure of reform to be considered at the next General Meeting of the Association.

At a meeting of the Committee of Council on July 13th, 1875, the following letter was received from Dr. Meadows and Dr. W. F. Clarke, addressed to Mr. Francis Fowke, General Secretary, British Medical Association.

"July 10th, 1875.

"Sir,—In reply to your letter of April 29th, in which you forward copies of the resolutions passed at a meeting of the Committee of Council held in London on April 15th, relative to the memorial on the subject of hospital and dispensary abuse, which was promoted by us, we beg leave to say:

"That it appears to us undesirable that the Association should put forward any *detailed* measure of reform. It would be almost impossible to devise a scheme which would be suitable to all the varieties of medical charities scattered throughout the kingdom. Some might object to one particular and some to another, and thus the entire scheme might fall to the ground. It seems to us, therefore, that the best course would be to endeavour to lay down certain *general principles*, which would commend themselves to the great bulk of the profession, and which would form a basis upon which each institution might reform

itself according to its individual circumstances. Perhaps, in addition to this, examples might be given of the way in which these general principles either have been, or might be, carried out at different hospitals and dispensaries.

"As the Committee have requested us 'to devise some measure of reform,' we venture to submit the following suggestions:

"1. That there can be no doubt that the medical charities have come to be greatly misused; that many persons resort to them for whom they are not intended, and who, though belonging to a humble station in life, are yet well off for their position, and quite able to contribute something towards the expense of their own medical treatment.

"2. That, if this be admitted, it becomes a part of the duty of our profession, which is entrusted with the medical arrangements of the country, to take care that nothing is allowed which tends to pauperise a large and influential section of the community.

"3. That at all hospitals and dispensaries there should be, as a primary and integral part of their machinery, some system whereby an effectual inquiry may be made into the social condition of the applicants, and their ability or non-ability to pay something for themselves.

"4. Such a system of inquiry ought to be carried out in a spirit which, while it does not check the exercise of real charity, may yet be duly mindful of the welfare of the nation at large and of the just interests of the profession.

"5. That, in the case of dispensaries and hospitals where systematic payments are made by patients, some portion of the income thus obtained should be set apart as an honorarium for the medical officers.

"6. That, in the development of the 'provident system,' and the various modifications of which it is susceptible, a remedy may perhaps be found for the evils which have become apparent.

"These suggestions might be supported by an appendix giving references to institutions or societies which are conducted in accordance with them, and which would serve to illustrate them; such, for example, as the Royal Albert Hospital, Devonport; the Northampton Provident Dispensary; the Coventry Provident Dispensary; and the Manchester scheme of Provident Dispensaries; and, in London, the Haverstock Hill, the Royal Pimlico, and the Camberwell Provident Dispensaries.

"If something of this kind were put forward with the weight and authority of the British Medical Association, it would satisfy the object we had in view in promoting the memorial, and would, we believe, greatly strengthen the hands of those who are trying to bring about reforms in hospital management.

"In order to elicit the opinion of the public upon the foregoing propositions, and indeed upon the whole subject of hospital management, we would suggest that, at the annual general meeting of the British Medical Association, a special committee should be formed, composed of members of the Committee of Council, along with a few of those who have shown the greatest interest in the memorial. Thus a committee might be formed whose opinion could not fail to have weight with the public, and whose decisions might regulate the course of reform for many years. If such a committee were to invite the attendance of persons who are well known to have given their attention to this subject, and were to question them after the manner of witnesses before a Parliamentary Committee, the opinions of both laymen and medical men might be elicited; and, if an abstract of such evidence could be published in the BRITISH MEDICAL JOURNAL, it would undoubtedly create a widespread interest in the ultimate report of the Committee.—We are, sir, yours faithfully,

"ALFRED MEADOWS, M.D., F.R.C.S.

"WILLIAM FAIRLIE CLARKE."

Upon this it was resolved: That the letter be received and entered on the minutes, and that the consideration of the suggestions of Dr. A. Meadows and Dr. Fairlie Clarke be deferred to a future meeting of the Committee of Council.

In consequence of the pressure of business at the annual meeting at Edinburgh, and in the absence of Dr. Meadows and Dr. Fairlie Clarke, the resolution of April 15th, 1875, appears not to have been acted upon, and the measure of reform devised by them was not submitted to the annual meeting.

At a meeting on January 13th, 1876, the Committee of Council proceeded, however, to consider the appointment of a Committee to consider and report upon Hospital Medical Relief; and it was then resolved that Dr. Meadows or Mr. W. Fairlie Clarke be requested to be kind enough to attend the next meeting of the Committee of Council on the matter. Finally, we learn that at a meeting of Committee of Council on July 6th, a letter and telegram were read, of which the following are copies.

"From Dr. Alfred Meadows to Francis Feake, Esq., 35, Great Queen Street, Lincoln's Inn Fields.

"July 6th, 1876.

"Just telegraphed out town, very sorry; Fairlie Clarke has written you our joint opinions; happy to act as Council wishes."

"Southboro', Tunbridge Wells, June 24th, 1876.

"Dear Sir,—I am much obliged to you for your note conveying the wish that I should attend the meeting of the Committee of Council on the 6th prox., on the subject of the memorial upon hospital abuse, which was presented by Dr. Meadows and myself. Had I been still resident in London it would have given me great pleasure to have done so; but, as it is, I fear I must ask to be allowed to decline. My predecessor in the practice here only left yesterday, and I am unwilling to make any promise which would require me to absent myself, even for a single afternoon, at a time when it is important for me to be on the spot. I am afraid I must leave to Dr. Meadows and others, who are resident in the metropolis, the further prosecution of this matter. My own opinion is that, if a small committee were formed by a few members of the Committee of Council, uniting with a few others who have given particular attention to this subject (more especially persons unconnected with the medical profession), a report might be drawn up which could not fail to be of value, and to exercise an important influence on the public.—Believe me to be, dear sir, yours faithfully,

"WILLIAM FAIRLIE CLARKE."

Upon the reading of this letter, a discussion ensued, and it was resolved: That, as Dr. Meadows and Dr. Fairlie Clarke have not been able to attend to-day and furnish facts which would justify the Committee of Council in assuming that abuses of Medical Charities exist, and in the absence of any active interest in the subject, no further action be taken at present.

## ASSOCIATION INTELLIGENCE.

### SOUTHERN BRANCH.

AN ordinary meeting of the South-East Hants District will be held at the George Hotel, Portsmouth, on Wednesday, February 7th, 1877, at 4.30 P.M.

*Business.*—Election of President and Statement of Accounts for 1876.

*Subjects of Discussion.*—1. The Provident Dispensary System; 2. The Treatment of Acute Rheumatism.

Dinner will be provided at 6.30. Charge 10s., including wine.

Members wishing to bring forward any communication, or intending to be present at the dinner, are requested to send in their names on or before February 5th.

J. WARD COUSINS, *Honorary Secretary.*

Southsea, January 30th, 1877.

### BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE next meeting will be held in the Examination Hall of the Queen's College, on Thursday, February 8th, 1877. The Chair will be taken at Three o'clock P.M.

*Business.*—To elect an Honorary Secretary to fill the vacancy caused by Dr. Foster's resignation.

*Papers.*—The following papers are promised.

1. Dr. Savage: Incisions of the Cervix in Uterine Hæmorrhage.

2. Mr. Lloyd Owen: Cysts of the Orbit.

Members are invited to exhibit Pathological Specimens at the commencement of the meeting.

JAMES SAWYER, M.D., *Honorary Secretary.*

Birmingham, January 30th, 1877.

### MIDLAND BRANCH: MONTHLY MEETING.

THE third monthly meeting was held at the house of the President on January 19th, 1877.

*New Members.*—Messrs. W. W. Morris and Thomas Poynt. Wright were elected members of the Branch.

*Operation Fees to General Practitioners.*—Mr. WRIGHT BAKER of Derby brought the matter of fees in surgical consulting practice, as advocated by Mr. Maunder, before the meeting, when it was resolved, "That it is the opinion of this Branch that it is desirable to put Mr. Maunder's suggestion with regard to an operation-fee into actual practice."

*Paper.*—Dr. SEATON read a paper on Practical Disinfection, which was freely discussed by members present. Drs. Ransom, Brookhouse,



Buck, and Messrs. Hatherley, Sympson, Wright Baker, and Franklin, took part in it.

*Case.*—Mr. SYMPSON of Lincoln related a case of Abscess treated by Hyperd'stension by Carbolic Water, in which the patient received much benefit.

*The New Meeting* will be held on Friday, February 16th, for which a paper is promised by Mr. Franklin of Leicester, on Autumn Diarrhoea in Infants.

## CORRESPONDENCE.

### ANIMAL VACCINATION.

SIR,—The occurrence of another epidemic of small-pox has again found numbers unprepared, by neglect of the means, to control its malignity; and not a few have succumbed who had presumed on their security. As usual at such times, vaccination and revaccination became the order of the day, and shoals of both classes of applicants for the means of defence throng the public stations, and many importune private practitioners. Under these circumstances, as might be expected, has arisen a repetition of the demands, from varied reasons, for the institution of animal or heifer vaccination—a practice now extensively adopted on the continent and elsewhere, with the approbation of the medical profession, and to the satisfaction and reputed benefit of the respective communities.

M. Lanoix states "that for more than twenty years past epidemics of small-pox in Naples have never acquired any great severity, and it is an opinion held by the inhabitants that persons vaccinated with animal vaccine are not now exposed to danger from small-pox, like those who in their infancy were vaccinated from arm to arm". As a means for promptly and efficiently obviating a scarcity of reliable lymph; there cannot be a doubt of its expediency and advantage.

It will be remembered that in the year 1869, Dr. Blanc, on his return to England from captivity in Abyssinia, introduced the practice of heifer vaccination into London. He had previously visited the continental institutions established for that purpose. For a brief period, he employed and distributed weekly supplies of such lymph. His labours, however, were brought to a close by a summons to professional duties in India.

I believe that it is not generally known that since that period Dr. John Greene of Birmingham, after having studied all the details of animal vaccination under Dr. Blanc and Dr. Warlomont of Brussels, has, at various periods, carried on that practice, and has employed and dispensed the resulting lymph to numerous applicants, the source of his primary supplies being the institution under the charge of Dr. Warlomont.\* I have, on several occasions, obtained and used supplies of such lymph from Dr. Blanc and Dr. Greene, and can testify to its energy and efficiency, characterised by its deliberate evolution, great firmness of the vesicles, comparative late appearance and slow decline of the areola, prolonged limpidity of the lymph, late incrustation, and much delay in the separation and falling off of the crust.

The practice of heifer vaccination seems now fully established as a national method in France, Brussels, Holland, Vienna, Berlin, St. Petersburg, and in the state of Massachusetts; in all of which places it has taken root. Dr. Ballard's remarks on these facts are so pertinent and so just, and his views and opinions on the whole subject are so coincident with mine, that I shall make no apology for quoting them in detail. "It is difficult," he says, "to account for its adoption in so many places, except on the ground that some real advantage is attached to it. I confess that I should be glad to see animal vaccination adopted in this country as a part of our national arrangements for the prevention of small-pox. I believe that great good would result from it; if no other good, there would be this, that practitioners who are dissatisfied with the lymph they are using might have recourse to the vaccinated heifer at any time for the improvement of their supply. It would not necessitate, or even render desirable, the abandonment of arm-to-arm vaccination; but its adoption would tend to meet the prejudices of some persons who decline now to avail themselves of vaccination on account of the dangers with which they believe it is surrounded."† "All that is requisite for the attainment of these objects is a proper organisation, and I cannot avoid thinking that it

would be a direction to which the action of the Government of a kingdom such as ours might be worthily engaged."

I am, sir, yours truly, ROBERT CEELY.  
Aylesbury, January 24th, 1877.

SIR,—Can any of your readers tell me the preliminary steps that should be taken for starting a stock of animal-lymph? What situation in the calf is the best place for making the puncture? Ought the place to be cleared of hair first? Are the days for taking the lymph the same as in the human subject? My case will show why I am so anxious to know this.

All infants in this district were vaccinated in October and November, and I and my colleague took what lymph we could get as a stock. Since then, an outbreak of small-pox has occurred here and in two or three other places in the neighbourhood, causing a panic and a sudden demand for revaccination that long ago exhausted my stock of lymph, and all that I could procure from the few babies born since the public vaccination in October and November. My friends in the neighbourhood are as hard pressed as myself, and cannot supply enough lymph to revaccinate all who come expecting me to perform the operation.

It is absurd to think a public vaccinator can afford to pay at the rate of two shillings per head for lymph sufficient to vaccinate one person who brings him a fee of 1s. 4d.; therefore, if a few medical men, who had the chance of doing so, could contrive to start animal-lymph, it would be a great boon, and I for one would be glad to begin it down here, if I knew all the conditions necessary for its commencement.—Yours faithfully,  
H. D. PALMER.

Nayland, Colchester, January 27th, 1877.

### VACCINATION.

SIR,—The suggestive letter of Dr. Crisp, in the JOURNAL of January 20th, induces me to mention some experiments I made, about twenty-five years ago, in relation to the power of vaccine lymph taken from the fully-developed vesicle, in persons under revaccination, to reproduce its like. At that time, I was observing for the first time an epidemic of small-pox. There was a great demand, as is usual at such a time, for revaccination. Many, not revaccinated, took small-pox. I was much struck by the parallelism in the development of modified small-pox and the secondary cow-pox. I communicated my observations to the East Kent Medical Society. The old confidence in the permanent protection of primary vaccination prevailed amongst the members at that time. The formation of a perfect vesicle in revaccination was doubted; and the test was required, that it should reproduce itself. Accordingly, at the first opportunity, I took lymph from a well-developed secondary vesicle of the eighth day, with incipient areola, and used it in primary vaccination, with lymph of the ordinary kind; making separate insertions of the two kinds; one for the secondary lymph, three for the primary. This I did that the future protection of the child might not be invalidated. The progress was equal with all the vesicles; the only difference that was noted was that the scar of the secondary vesicle was somewhat smaller, and not so well foveated. The experiment was repeated with the same result. In one of these instances, I had the opportunity of revaccinating the boy, about puberty; and the secondary cow-pox developed in the papulose-vesicular form. I am aware that the result of this experiment is but an approximation to the point required by Dr. Crisp; and it has not given me the confidence to use the lymph of the perfect vesicle of secondary cow-pox in primary vaccination, chiefly for this reason: although the development may be complete to the eighth day, there is no guarantee that it will take the natural course to the end; the latter stage may be altered and curtailed, as is well known in modified or post-vaccinal small-pox. This doubt is a weakness which prevents the protective potency of secondary and primary vaccine lymph from being perfectly comparable. It would prolong this letter too much to answer fully the question raised in the concluding clause of Dr. Crisp's communication. My experience, taken from revaccination in houses where small-pox already exists, as well as from observations on concurrent vaccinia and variola, tends to the reply that it is safe to allow a revaccinated person to enter the room of a small-pox patient after the eighth day, or full maturation of the secondary cow-pox, in the degree of development of which the system is capable. I have not met with, or heard of, the occurrence of small-pox after revaccination, where an appreciable result has been well authenticated.—Yours obediently,  
Canterbury, January 20th, 1877.

JAMES REID.

\* *On Lymph: an Inquiry as to what extent it is desirable to employ Heifer Lymph.* By John Greene, L.C.P., etc. Birmingham: 1871.

† *On Vaccination: its Value and alleged Dangers.* A Prize Essay, by Dr. Ballard.

\* *Ibid.*; and Dr. J. Greene, *loc. citato*, and *On some Advantages of Animal Vaccination for the Prevention of Small-pox*, by A. Vintras, M.D. Churchill.

## THE ABUSE OF HOSPITALS.

SIR,—While your able correspondent "A Member of the Charity Organisation Society" goes on accumulating facts and figures with reference to this subject, it will not, we trust, escape observation that one of the most remarkable circumstances adverted to in his first letter has not yet received the full explanation which it clearly demands. After quoting the text of the memorial to the President and Committee of Council of the British Medical Association, and reminding us that it was signed by some of the most influential men in the profession, your correspondent continues, "it seems difficult to believe that a document supported by such illustrious professional names, and justified, if I am not misinformed, by most striking figures and facts, could be easily consigned to oblivion", yet, for aught that we or the other members of the Association who signed the memorial know to the contrary, that is precisely what the Committee of Council have done with it: they have not, so far as we know, endorsed its statements, nor have they disputed them; indeed, in July last, they went so far, as we learn from Drs. Meadows and Fairlie Clarke, as to appoint a day for the consideration of the matter, but professional engagements having prevented these gentlemen from attending, the subject was dropped, and the memorial apparently "*consigned to oblivion*".

As we cannot for a moment suppose that the authorities of the Association consider the absence of two gentlemen on a certain day sufficient reason for deferring *sine die* the consideration of an important public question like this, we, and we believe many other of the memorialists, would be glad to have some authoritative statement with regard to it from the Committee of Council.

We are, sir, your obedient servants,

JOSEPH ROGERS, 33, Dean Street, Soho, W.

H. NELSON HARDY, 144, Bishopsgate Street, E.G.

## HOMICIDAL INSANITY.

SIR,—Under this heading, I find in your issue of January 6th the following paragraph.

"A man may fall into a desponding state of mind and have delusions respecting his business and worldly affairs; he may imagine that there are secret conspiracies against him, and that a wife or friend is secretly administering poison to him. In the opinion of his medical attendants and friends, he is in a condition which would justify confinement in an asylum; but a medical man naturally hesitates to sign a certificate unless there be some overt act which shows that his patient is a *dangerous* lunatic. In one instance which came to our knowledge, the Commissioners liberated a lady who had reached the stage we have mentioned short of the perpetration of actual violence, and censured the medical attendant for signing a certificate for her confinement in an asylum."

The Lunacy Act, 1845 (8 and 9 Vict., cap. 100, sec. 76-7), permits the Commissioners to discharge, after certain formalities, any patient who is detained in a licensed house *without sufficient cause*. Taking the law and the above statement together, it would appear, if your information be accurate, that the Commissioners have determined that melancholia with delusions does not afford a sufficient cause for the detention of the sufferer in an asylum, and that an overt act of violence demonstrating the patient to be *dangerous* must be awaited. Will you let us have the full particulars of the case referred to, that we may be enabled to judge for ourselves what the Commissioners really did in it? In the meantime, I shall not hesitate to certify such a case without waiting for an overt act of violence, if I think that detention in an asylum is likely to promote the patient's recovery.

Yours obediently, W. F. WADE, F.R.C.P.

\* \* It would be improper for us to give the full particulars of the case referred to, as the physicians who signed the certificate, the Commissioner who discharged the patient, and the lady herself, are living; and we have no intention to become public prosecutors, or to subject ourselves to a possible action for libel. It is surely sufficient for us to say that the delusions under which this patient laboured were such as, in the opinion of the family physician, were likely to explode in an act of violence against her husband. This gentleman, a man of good professional experience, had watched his patient for months had observed the gradual increase of the malady and the violent language used against the husband. The lady had been seen by three London physicians of experience, who agreed that she was labouring under delusions, and that these delusions were taking a dangerous turn. She was then placed in an asylum on a certificate signed by her family physician and another medical gentleman. When seen by the Commissioners about a month afterwards, she was liberated after a short examination, the lay Commissioner observing that she was no more

insane than he was! These are the plain facts. The chief danger to society now is, not that patients are likely to be improperly confined upon medical certificates, since the restrictions and penalties surrounding them are of a severe kind, but that a deliberately formed medical judgment, based on weeks or months of careful and anxious observation, may be legally reversed in half an hour by a lay Commissioner. He may really have no medical experience of insanity or the proper mode of testing its existence in a monomaniac. We believe this to have been so in the present case. We do not desire to frighten medical men, or to deter them from signing certificates. Their duty is plain: they must act upon their own judgment, irrespective of any possible reversal of that judgment by a lay Commissioner. It is, indeed, a serious matter to discharge patients under such circumstances as those above mentioned; but our law, in its wisdom, has given to laymen a power of nullifying the certificates of well-informed medical men. We do not say that melancholia with delusions does not afford a sufficient cause for the detention of the sufferer in an asylum. What we really complain of is, that the law has now put it in the power of one unacquainted with insanity in its medical aspects to reverse the most deliberately formed judgment of a medical man. This should not deter members of the profession from doing their duty in such cases, but it is a heavy blow and a great discouragement to its proper performance.—ED. B. M. J.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### THE LOCAL GOVERNMENT BOARD AND THE METROPOLITAN ASYLUMS.

SIR WILLIAM WYATT, at a recent meeting of the Metropolitan Asylums Board, drew special attention to the new rules of the Local Government Board for the management of the sick asylums—rules, it will be remembered, which place the whole government and responsibility of each asylum, lay as well as medical, in the hands of the medical superintendent. Sir William urged that the amount of salary which the Local Government Board permitted to be offered was not sufficient to secure a medical man able to take so great a responsibility as the lay and medical superintendence of these huge asylums; and moreover, Sir William said, the medical superintendent had quite sufficient duties in the asylum without having to burden his mind with duties in connection with the charge of servants. Sir William said that so deeply did he feel that the new rules would lead to some mismanagement—and the Committee thought with him—that they would not remain in the management of the Fulham and Deptford Asylums, now approaching completion, longer than March. Sir William added that he thought the difficulties caused by the Local Government Board would be increased in regard to Fulham and Deptford Asylums; for, if there were little chance of obtaining medical men who would take the whole responsibility of an asylum under a permanent appointment, there was less chance of finding medical men who were able and willing to accept a temporary appointment on these terms. Sir E. H. Currie defended the Local Government Board's rules, and said that the system proposed by the central authority was to give the asylums a single instead of a dual government; and he maintained that one management was best. He trusted that the Board would not lose Sir William Wyatt and his Committee, but that they would come to see that it was best to have one government for each asylum. Sir William Wyatt rejoined that he hoped Sir Edmund would take the chairmanship of the Committee for Fulham and Deptford Asylums under these new rules, as the present Committee had quite decided to resign.

### INFECTIOUS DISEASES.

THE President of the Local Government Board received last week a deputation from the Society of Medical Officers of Health, who presented to the right hon. gentleman the resolutions printed in the BRITISH MEDICAL JOURNAL of January 27th. Dr. George Buchanan introduced the deputation. He declared that, under present circumstances, the efforts of the medical officers were retarded, and it was impossible to make progress in sanitary science. He cited numerous instances where a single case of infection, for want of isolation, had spread the disease to numerous other persons, and whole neighbourhoods had been made to pay the penalty of the present loose system. They only wanted means for limiting the spread of the disease. At present, they were only made aware of the existence of cases some



time after the occurrence, and often when it was too late to stay the infection. Dr. Tilly mentioned an instance where at a grocer's shop small-pox prevailed, and he traced fifteen cases among the customers of that shop. He thought the local authority should have power to remove the cases on the certificate of the medical officer. Mr. Jacobs of Surrey spoke of the difficulty of getting medical attendants to give information of the prevalence of disease among their patients, and called for an alteration of the law whereby they would be compelled to give it. Dr. Tripe of Hackney remarked that, since the Asylums Board had been established, infectious diseases had been so readily dealt with, that the spread of contagion had been greatly arrested. He complained of the indiscriminate medical relief given to persons of the non-pauper class. Mr. Sclater-Booth, in reply, observed that a good deal of improvement in respect of sanitary legislation had been effected within the last few years, and statistics bore evidence that great good had arisen even from the imperfect extent of isolation and treatment which had been effected under the legislation of recent times. The subjects of the resolutions alluded to by the deputation were carefully considered while the Public Health Act, 1875, was in preparation, and many reasonable improvements were made in the law. It was felt that many very desirable improvements were omitted, but they were such as would have provoked opposition, discussion and delay, which might have been fatal to the measure. Although public opinion was fast ripening in the direction of something more authoritative and vigorous in the way of an interference between the medical attendant and his patient as to infectious disease, still he was not at all of opinion that they could have pressed Parliament to go further in 1875 than they did. He thought the time not far distant when, with the consent of the public, improvements in the law would be effected. With regard to notice being given to a central authority of the existence of disease, no doubt public opinion was developing itself in that direction. He thought, however, it would not be wise, in asking for increased stringency of legislation, to ignore the fact that a great part of what was wished to be accomplished was done in a less precise and specific manner by the notoriety which attended infectious diseases, and the fact that such diseases could not be kept unknown for any lengthened period. They had to consider the distinction of classes. The danger of a spread of infection was much greater among the poor than among the wealthier classes; and from the latter resistance to that kind of interference was most likely to be anticipated. In the houses of the wealthier classes, plenty of room existed for complete isolation, and any obligation imposed on the occupier to make known a case of infection would be stoutly resisted. Besides, surely the medical attendant would have supplied such persons with the means of perfect disinfection. Moreover, the medical world would not at all be disposed to agree that they were neglecting their duty in giving advice to check the spread of disease, or that an objection to a proposal of the kind asked for would come exclusively from the apprehension of losing their practice or their patients. His information led him to suppose that there was a good deal of jealousy in the medical world of interference between them and their patients, and they would resent very much being placed under the authority of another medical man as regarded the means to be adopted for purposes of that kind. The plan of making the occupier responsible for communicating information was open to objection, until the householder was made assured by some provision of law that the interference would not be undue or excessive, or out of proportion to the necessities of the case. He feared that great abuses arose in the grant of medical relief, and he hoped to be able shortly to deal with the subject. With regard to amending the Sanitary Act, he could not say that in the coming session he would be able to do so. Nor could he say he was disposed to take up the question of the Public Health Act at that moment; but anything that could be done to secure the desired publicity should be done, and any suggestions to improve the law would always have his best attention and command his deepest interest. The deputation thanked Mr. Sclater-Booth very cordially.

#### DR. BLOXAM, THE ST. GEORGE'S UNION BOARD, AND MR. FENTON.

SIR,—My attention has been drawn to an annotation in your issue of the 20th ult., and to a reply thereto from Dr. Bloxam, which I feel it to be my duty briefly to comment on, though my remarks will be limited to Dr. Bloxam's letter. I see therefrom that Dr. Bloxam denies that he is the medical officer of St. George's Workhouse. Dr. Bloxam does hold office in St. George's Union, and, therefore, the stricture implied in your article of the 20th ult. as to his appearance, obviously by desire, at an inquest on a person who had ceased to be a pauper by virtue of the Board's refusal to grant out-door relief, is well

merited. Dr. Bloxam denies that a fee of £5 5s. was given him for such attendance. There must be here some error; for I am in a position to assert that such sum was voted on the 13th ult. That Mr. Fenton and myself parted amicably and agreeably with Dr. Bloxam, I will not deny. We had no wish to act otherwise than most courteously, as professional men should act towards each other; and, therefore, it is the more to be regretted that Dr. Bloxam should have put in an appearance on this occasion at all.—I am, sir, yours very obediently,  
10, Waterloo Bridge Road, Jan. 30th, 1877. ARTHUR PRICE.

#### REPORT OF MEDICAL OFFICERS OF HEALTH.

SWANSEA.—Mr. Rogers reports at considerable length on the various hamlets making up his district; and, after giving an unfavourable description of Llandilo-Talybont, he says that it is a veritable "Hygeia" as compared with the unsavoury "Laputa" (the hamlet of Clase), the majority of the houses in which are situated on a steep hillside, without roads, drainage, scavenging, or adequate water-supply for domestic purposes. This district he calls No. 1, the deaths in which were 239, or 28.82 per 1,000; whilst in No. 2 the deaths were only 171, or 20.54 per 1,000 inhabitants. The deaths from zymotic diseases were also much more numerous in No. 1, being 6.15 to 3.36 per 1,000 in No. 2. If, therefore, the other conditions be equal, 8 deaths per 1,000 occur yearly in No. 1 through defective sanitary arrangements. As regards infantile deaths, a similar variation takes place, as in No. 1 there were 10.98 deaths of children under one year to 5.77 in No. 2 per 1,000. There is no hospital for infectious diseases, although the urban authority is willing to pay its proportion towards the building and fittings. In Trewyddfa District, the death-rate is higher than in Clase, as it was as much as 29.91. In Brynphid and Eaton Town, it was 29.77; in Caersalem, it was 22.24; in the parish of Llandilo-Talybont, it reached 29.7; whilst in Cwmbbwrla District the death-rate was only 16.42, in Waunarlwydd 17.5, and in Swansea Lower 18.32. The report also contains a copy of Mr. Netten Radcliffe's report on the outbreak of enteric fever in Swansea Rural District, which he attributed to overcrowding, want of care in disinfecting the discharges, to defective window-space and ventilation of bed-chambers, want of privy accommodation, polluted water-supply, and the almost entire absence of surface and subsoil drainage. The death-rate from all causes for the whole district was 24.23, and from zymotic diseases 4.53, per 1,000 population.

#### PUBLIC HEALTH MEDICAL APPOINTMENTS.

\*FOX, Cornelius, M.D., re-appointed Medical Officer of Health for the Central, Eastern, and Southern Divisions of the County of Essex.  
\*MARSHALL, C. G., M.R.C.S. Eng., appointed Medical Officer of Health to the Rural Sanitary Authority, Woodbridge Union.

## OBITUARY.

#### WILLIAM FRANK-SMITH, M.B.

WE regret to announce the death of this accomplished physician at Torquay on January 16th last. He was born at Nottingham in 1836, and educated at Bromsgrove, where he acquired a knowledge of classics, which he maintained through life. After deciding on the medical profession, he spent some time with the late Mr. Ewen of Long Sutton, Lincolnshire. Under the guidance of this excellent man, Frank-Smith learned many details of practical medicine, though most of his time was probably spent in the well filled library, where room was found for German and Italian poetry beside the long rows of Hunter's, Cooper's, and Abercrombie's works. Mr. Ewen was a staunch Guy's man, and, of course, took care that, when his pupil went to London in 1858, he should enter at that school. He read hard at intervals, and rowed, and took long Saturday walks, and wrote essays on medical and other subjects, some of which were read before the Pupils' Physical Society, and others appeared in the *Cornhill Magazine*. His favourite study was chemistry, and he worked well in Dr. Odling's laboratory. Afterwards, he dressed for Mr. Hilton, and was clerk to Dr. Gull, for both of whom he always retained a loyal admiration. In 1862, he studied practical obstetrics at the Rotunda Hospital of Dublin.

Before taking his degree at the University of London, Frank-Smith spent the summer session of 1864 in Edinburgh, under the late Professor Hughes Bennett. He had previously worked for several months in the laboratory of Professor Würtz in Paris, and had intended to devote himself entirely to chemistry. But he was beaten by Dr. Stevenson as a candidate for the demonstratorship at Guy's Hospital,





## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAY...	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.—Charing Cross, 2 P.M.—
FRIDAY.....	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8.30 P.M. Dr. Wiltshire: Third Lettomanian Lecture, "Pathology and Treatment of Hemorrhages from the Female Generative Organs".
TUESDAY.—Pathological Society of London, 8.30 P.M. Adjourned special evening for the exhibition and discussion of specimens of Visceral Syphilis. Specimens will be exhibited by Mr. Hutchinson, Drs. Aitken, Buzzard, Davidson, Goodhart, Gowers, Green, Pye-Smith, Shepherd, and Sutton.
WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens. President's Address. "Cases of Inversio Uteri," by Drs. Hickman, Godson, Heywood Smith, and Elkington. Dr. Braithwaite, "On the Treatment of Retroflexion"; and other communications.
FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Christopher Heath, "Sequel of a Case of Aneurysm of the Aorta treated by Ligation of the Left Carotid Artery, communicated in 1872" (a living subject); Mr. Holmes, "Sequel of a Case of Aneurysm of the Aorta treated by Ligation of the Left Carotid Artery, communicated in March 1876" (a living subject); Mr. Pugin Thornton, "A Case of Tracheotomy, in which the Operation was performed three times in the course of a few years" (living subject); Dr. Greenfield, "A Case of Hydatid of the Lung".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## COCKROACHES IN THE EAR.

SIR,—A *propos* of the subject of cockroaches in the ear, alluded to in this week's *JOURNAL*, I may say that I very easily, by syringing, removed a dead one from a patient's ear some years ago. A living one need offer little difficulty, as, by first pouring oil into the meatus, he would very soon be dead.—Yours faithfully,  
Ealing, January 27th, 1877. GEO. D. BROWN.

NUMISMATIST writes:—It may interest your readers to know that on the ancient Greek coins of "Enus in Thrace" there is figured on one side a head of Mercury and on the other side a goat; and as this artistic people symbolised on their coins most things relating to their daily life, I think one may fairly conclude that we find figured here both "medicine" and "antidote". A reference to coins of this city in the British Museum would certify you as to the verity of this.

## CONDENSED MILK.

SIR,—My attention has been called to a letter by Dr. Correquer Griffith in one of the daily papers, deprecating the use of "condensed milk" as a food for infants. Dr. Griffith states that it produces occasionally a form of diabetes. As I have been in the habit of advising its use, with, I consider, very satisfactory results, I should be glad to know, through the medium of the *JOURNAL*, the general opinion of the profession as to its effects. Perhaps some of your readers will kindly favour me with their experience.—I am, sir, your obedient servant,  
Kensington, January 24th, 1877. HILDYARD ROGERS.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## BRAND'S MEAT ESSENCES.

MESSRS. BRAND and Co., of 11, Little Stanhope Street, have obtained an injunction to prevent the imitation of their excellent food products for invalid use by firms adopting a similar style.

## AN APPEAL.

SIR,—Will you permit me, through the medium of your columns, to make an appeal to my professional brethren on behalf of the widow of a medical man lately deceased? The late Mr. John Stevens for twenty-four years practised as a surgeon in Plymouth, where he was regarded alike by the profession and his patients as a man of the strictest integrity and honour. By unremitting industry, he was enabled to bring up and educate a very large family; but at his death, which happened somewhat suddenly, it was found that his widow, and three daughters who were still at home, were left totally unprovided for, except by a small sum of money for which his life was insured. When their only source of income was suddenly stopped, they had no alternative but to have recourse to the little capital with which they were provided, and which, I regret to say, is now fast melting away. An opportunity is now apparently offered for Mrs. Stevens and her daughters to make an income by taking into their house as boarders young ladies who attend the Plymouth High School, which has very rapidly become a large establishment. I would ask any medical men who are in a position to do so, to contribute towards a fund to enable these ladies to take a suitable house and provide the necessary furniture for their purpose. I may mention, that they have at the present time two or three boarders, and could at once have more, but that their very limited accommodation prevents their taking them; and the profits arising from a very small number are not sufficient to meet the necessary expenses of the household. I shall be very happy to receive any contributions, and to publish the name of contributors.—I am, sir, your obedient servant,  
EDWARD E. MEERES, M.D.

9, Princess Square, Plymouth, January 26th, 1877.

A. B. and D. P.—A Licentiate of a College of Physicians is not legally justified in styling himself Doctor.

## ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The following questions on Surgical Anatomy and the Principles and Practice of Surgery were submitted to the candidates for membership on January 19th. 1. Describe the anatomical relations of the last four inches of the rectum in the male, its structure, and the arrangement of its blood-vessels. 2. Mention, in order, the parts which would be divided in amputating through the knee-joint. 3. A man has a penetrating wound of the chest and lungs; mention the complications that may arise in the progress of the case, and the treatment you would adopt. 4. What are the symptoms, progress, and results of gonorrhoeal ophthalmia in the adult? Describe the appropriate treatment. 5. Describe acute inflammation of bone in youth, its symptoms, pathology, and treatment. 6. Mention the varieties of urinary calculus, and the circumstances which determine their composition.

WE regret to be unable to find space for Dr. Bramwell's communication this week.

## THE MEDICAL DEFENCE ASSOCIATION.

SIR,—The individual referred to in the accompanying advertisement, which I have cut out of the *Pharmaceutical Journal*, seems to be an appropriate subject for the attention of the Medical Defence Association, as I cannot find his name in the *Medical Directory*.—Yours truly,  
VINCLUM.

"Health, Strength, and Energy.—Dr. Lalor's Phosphodyne or Vial Elixir (Registered) purifies and enriches the blood, clears the skin, thoroughly invigorates the brain, nerves, and muscles, re-energises the failing functions of life, restores the exhausted nervo-electric force, and rapidly cures every form of nervous debility, consumptive and wasting diseases, nervous and mind-diseases, from whatever cause. Sold in bottles at 4s. 6d. and 11s., by all export, wholesale, and retail medicine vendors. Pamphlet on phosphoric treatment, with cures, post free, one stamp. Sole proprietor: Dr. R. D. Lalor, Bay House, 32, Gaisford Street, London, N.W."

MELIORA QUERENS asks whether there have been lately any improvements in the construction of suspensory bandages.

## THE CONTAGIOUS DISEASES ACTS.

THE *Edinburgh Medical Journal*, in reviewing Dr. Parkes's book on *Hygiene*, says:—We are tempted to quote, in conclusion, the last dying testimony, so to speak, of this thoroughly informed witness in regard to the *quæstio vexata* which at present excites so many ignorant non-professional but well-meaning people. "The prevention of syphilis and gonorrhoea, by periodical inspection of prostitutes, and removal of them to lock-hospitals when diseased, is only carried out in this country in certain military and naval stations, where the effect has been to lessen primary syphilis by nearly one-half, and to abate its virulence. The effect of the Contagious Diseases Acts upon the women, in respect not only of curing them, but of influencing them for good and for reclaiming them, has been very remarkable. In Germany, France, and Belgium, precautions against venereal diseases have been carried out among the entire population for many years, with the effect of greatly lessening the amount and virulence of syphilis. As primary syphilis has a most pernicious effect upon the health of a very large number of persons, it is most urgently to be hoped that the legislature may, before long, deal thoroughly with this matter, and attempt to lessen syphilis, not merely in the army and navy, but among the population at large."

H STORICUS (Exeter).—Many years ago, members of the College were compelled to pay an additional fee on coming to this metropolis to practise their profession. A promissory note now before us is in these words: "I promise to pay to the Royal College of Surgeons in London the sum of fifteen pounds and fifteen shillings in case I shall at any time hereafter practise surgery, or profess to practise surgery, within the cities of London and Westminster, or either of them, or within the distance of seven miles of the said city of London, as witness my hand this 3rd day of March, 1809, John Bishop: witness, Okey Belfour, Secretary." Curiously enough, and fortunately for Mr. Bishop, the law was repealed before he came to this metropolis, in which he was well known, becoming a member of the Council of the College and F.R.S.



**NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.**

#### ERYSIPELAS AFTER VACCINATION.

SIR,—Although vaccination is but rarely followed by any serious illness, the recent outbreak of erysipelas at Gainsborough, and the risk, though slight, to which all newly vaccinated infants are exposed, calls for urgent attention on the part of the Local Government Board and of the profession. It is probable that erysipelas, and other ailments which are generally of a comparatively trifling nature, though annoying to the parents, and calculated to bring vaccination among the ignorant into disrepute, might often be prevented, or greatly alleviated, by some systematic plan of after-treatment, and by some such rules as the following being printed in large type and suspended on the walls of every public vaccinating establishment: they could also be circulated among the public.

#### "Instructions to Mothers."

"1. Do not expose the arm to the air after inspection on the eighth day.  
"2. Do not apply cream, butter, lard, or anything else which your neighbours may recommend.

"3. Carefully follow the public vaccinator's instructions until the arm is quite well.

"4. After vaccination, do not allow red flannel or other coloured material which may contain an irritating dye to be worn next the arm, and see that the child's dress is very loose about the shoulder and arm.

"5. Keep your house dry and clean. Open the windows from time to time.

"6. Should there be any bad smell from drain or closet, at once inform the medical officer of health.

"7. Should any infectious disease, as scarlet or other fever, or erysipelas, appear in your neighbourhood, be careful to inform the public vaccinator at the station before he vaccinates your child.

"8. Should your child be unwell after vaccination, it is your duty immediately to inform the public vaccinator at his surgery during his consulting hours, or before he pays his morning visits. In no case neglect to do this."

At present, it is needless to state that at public stations no systematic plan of protecting the arms by soothing applications and disinfectants is carried out. The only precaution universally taken is to vaccinate from vesicles surrounded with as little areola as possible.

In private practice, should vaccine be accompanied or followed by any irregularity, the surgeon, being the family attendant, will be quickly informed thereof, and will take care to keep the infant under his notice until it has thoroughly recovered. On the other hand, as matters stand at present, should anything go wrong with a child vaccinated at a station, the public vaccinator may hear nothing of it until the child, through neglect, has become seriously or even dangerously ill. Any public vaccinator in a large and populous centre would, no doubt, endorse this. It occurs to me that these, fortunately, rare mishaps could in many cases be prevented, and in others lessened in effect, by the Local Government Board issuing further instructions to the public vaccinators, or by an addition to the Vaccination Acts, which would compel boards of guardians to enter into fresh contracts with the public vaccinators of their unions. A few medicaments, such as carbolised oil, gutta-percha-tissue, zinc-ointment, and lint, provided by the guardians, could be kept at the stations. It is needless to state that the additional duties of the public vaccinators, which would consist of dressing the arms on the eighth day, and assuming the responsibility of any subsequent treatment that might be needed, would necessitate an increased rate of payment. The public would not grudge proper remuneration for such laudable work; and I am certain that by its performance a feeling of greater security would be engendered amongst the artisan and labouring classes.—Your obedient servant,

PUBLIC VACCINATOR.

#### HOW SMALL-POX IS SPREAD.

SIR,—The following case illustrates some of the ways in which small-pox is spread, in spite of all sanitary precautions, or of laws which only act against direct infection from the diseased person. Sixteen days ago, I was called to a baby nine months old (unvaccinated). On hearing the nature of the case, I refused to attend until I had returned to my home and changed my clothes for a suit I kept for fever cases alone, which I did as soon as possible. The child died the same evening; and, although I had an opportunity of speaking to the undertaker and warning him of the danger of going into the house, although the father of the child, being a carpenter, told him in my hearing that he could measure the body for the coffin and put it in after it was made, he insisted that he was not afraid, and went to the house to do what was required himself, without taking the slightest precaution to prevent the disease being carried into the next house he might go to. I now hear that the father of a particular friend of the undertaker's is suffering from small-pox, carried, it is more than probable, during his frequent visits to the house. One of the members of that family, again, does washing; and, although such washing is not done in the house, yet her clothes will again spread it to those she washes, and so to their wearers.—I am, etc.,  
Battersea Park Road, Jan 13th, 1877.

W. MUNRO, M.D.

SIR,—May I inquire through your valuable medium how long a medical man is expected to attend a woman, free, after the day of her confinement?—Yours truly,

ENQUIRERS.

#### PITTING OF SMALL-POX.

SIR,—In a recent number of the BRITISH MEDICAL JOURNAL, I observe that constant poulticing is recommended for the prevention of the ugly scars known as pitting of small-pox. As this disease is now somewhat prevalent in London and other places, I am anxious to call the attention of the profession to a letter of mine on this subject which appeared in a contemporary in 1872, relating the case of a gentleman who came under my care when convalescing from this disease owing to the demise of his medical attendant. This gentleman had been covered with a very copious eruption all over his body, except in two places. To one of these a porous plaster had been applied previously to his sickening; in the other (abdominal), mustard and poulticing had been freely resorted to in the earlier stages of the disease; and, as these parts remained covered for some days, on neither of them did a single pustule make its appearance. From this, I suggested to the profession the trial of an application of some light impervious (not necessarily altogether impervious; to wit, porous plaster) material as a mask, which, if applied in the earlier stages of the disease, by preventing or lessening the eruption or aborting the maturation of the pustules, would materially lessen the suppurative fever: a most important result. Small-pox disappearing from Belfast about this time, I had no other satisfactory opportunity for investigating this subject.—I am, etc.,  
JOHN MARTIN, Senior Physician Belfast Dispensary.  
Belfast, January 23rd 1877.

**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than Thursday, twelve o'clock.

#### REVACCINATION.

SIR,—As many guardians and medical officers seem to be unacquainted with the excellent provision made for the prompt vaccination and revaccination of all persons in any house where a medical officer is called to attend a person with small-pox, and for the payment for the same by the guardians, permit me to forward you the enclosed extract from the Vaccination Act, 1871. This provision will, I feel assured, prove of great value in the present epidemic; and the St. Marylebone Guardians deserve the credit of now calling attention to the matter.—I am, sir, faithfully yours,

NORMAN KERR, M.D.

42, Grove Road, Regent's Park, January 29th, 1877.

Extract from the Vaccination Act, 1871, 34 and 35 Vict., Chap. 68, Sect. 17.

"Where the medical officer of any board of guardians is in attendance as such medical officer upon a person sick of small-pox, and vaccinates any person who is resident in the same house with the sick person and has never been vaccinated or had the small-pox, or revaccinates any person who is resident in the same house with the sick person and has never been revaccinated, and is of the age at which successful revaccination by a public vaccinator is paid for under the regulations of the Lords of Her Majesty's Council for the time being in force, such medical officer shall, upon transmitting the same certificates as he would be required to transmit if he were the public vaccinator for the district, be entitled to be paid in respect of every such case of vaccination and revaccination the same sum out of the same fund as he would be entitled to receive if he were the public vaccinator for the district."

#### VACCINATION.

SIR,—All of us interested in the immortal discovery of Jenner will be also interested in hearing from Dr. F. Brown his *proofs* that lymph taken from revaccinated persons is useless. I trust he will give us more than the mere assertion that it is useless. How does he gauge the uselessness? As a slight addition to the subject, I may say that personally I prefer, if I may call it, virgin lymph; but at the same time I am not at all prepared to agree to the dictum that any other is useless. In former years, when I was a public vaccinator, I well recollect that in the largest village of my district there was a wholesome dread of small-pox, and large numbers of young men and women, besides the children over ten at the schools were revaccinated, I continuing to do so at the rate of eight or ten weekly. These vaccinations were more or less successful, but every week I selected the most perfect vesicle as the medium of communicating it to the fresh candidates. Almost every week, one or more presented a perfect vesicle, one that I was unable to distinguish from infantine vaccination. This, perhaps, may be considered no proof of success, but I go further. Soon afterwards, small-pox attacked the neighbouring town; thence it was carried to several, if I recollect rightly all, of the neighbouring villages, some in constant communication with the village to which I allude, but no case of small-pox occurred in this revaccinated village. I do not think this looks like revaccination-lymph being useless; it rather tells the other way.

Yours, etc., H. J.

#### SUPPLY OF LYMPH BY PUBLIC VACCINATORS.

SIR,—Perhaps you will allow another public vaccinator to say a few words on the subject of supplying lymph to those medical men who are now numerously asking for it. It would be perfectly fair, as far as I can see, to ask the purpose for which it is wanted—whether for patients who will pay for vaccination, or not. If it be for the former, then I do not see on what ground it should be asked for without some return offered; if for the latter, I should, if I knew it, certainly refuse, for a gratuitous vaccinator who is not a public vaccinator is robbing those who are. My fees are the lowest the guardians can legally offer, and in my appointment I find no semblance of a stipulation that I am to provide for other than my own necessities. Most public vaccinators are in the same condition with myself as to remuneration. I am quite willing that an alteration should be made in my appointment, and that I should be expected to provide for the wants of others, but not on the terms on which I now hold it. Still, though holding the opinions above expressed, I have never, when asked (which has been the case very often) refused to my neighbours those supplies which my position as public vaccinator places at my disposal. I have left the matter of return to their own feelings, and am willing at all times to do my part to quiet the public alarm and to stop the ravages of small-pox.—I am, sir, yours obediently,

ANOTHER PUBLIC VACCINATOR.

January 15th, 1877.

SIR,—Being public vaccinator here, I have, as a rule, an abundant supply of lymph, and will be most happy to give a brother practitioner a start if he will kindly forward me a couple of points on or before Wednesday in any week.—Truly yours,

Darlington, Jan. 31st, 1877.

WM. H. ARROWSMITH, F.R.C.S.E.

\* Dr. Reid (Newbiggin-by-Sea) has forwarded to us a box of points, which are at the disposal of any practitioners who chuse to call for them at the office. He will also, we believe, be willing to oblige his colleagues within the limit of his powers.

#### UNSEAWORTHY CREWS.

SIR,—Your article on this subject chiefly refers to long voyages; but I can only say, in confirmation of your observations, that after three years' residence in a West Indian port, a position in which a medical man sees more of such evils than at home, I can heartily endorse your remarks even in regard to such short voyages. About five years ago, I reported to the *Lancet*, in the form of a letter, several illustrative cases of sailors who had died in hospital in St. Kitt's—one of consumption, another of syphilis, etc.—but all of whom must have been far advanced in ill-health before they left England. In such crews as they belonged to, consisting sometimes of only thirteen men, "all told," for ships of three hundred tons, the danger of being short-handed is very great. I suggested the necessity of a "medical" examination being made before they left England, both for the sake of the men themselves and the ships they sail in, and wondered at the blindness of shipowners, even as a money matter, in not enforcing such an examination, as every such case entails serious expense on them, which might be saved by the payment of, say thirty shillings to a medical man before the crew was joining. The danger to the ship and cargo is perhaps not taken into consideration—that is covered by insurance, which, so far as sugar is concerned, usually amounts to more than the market value of the article.—I am, yours faithfully,

Battersea Park Road, Jan. 15th, 1877.

W. MUNRO.



## OBSTINATE VOMITING.

SIR.—Dr. Douglas's case of invincible vomiting after scarlatina brings to mind a case wherein I was consulted some fifteen years ago, in the practice of Mr. Stanwell of Rochdale.

The patient was a boy about nine years of age, who, having had scarlet fever not very severely, was convalescing quite satisfactorily, when, about ten days (I think) after subsidence of the fever, he was suddenly seized with persistent vomiting of everything that he took. This state of things continued for some time, until the boy became so weak and attenuated as to cause gravest anxiety to his parents and to his medical attendant. Under these circumstances, my aid was sought. I ascertained from Mr. Stanwell that almost every probable remedy had been tried. I then observed to my colleague: "You seem to have given everything but creosote; try this: I believe it will be just as inefficacious as all the rest. When, however, the experiment has been made, and fruitlessly, then I advise that you let the boy alone, giving him neither food nor physic—not water; I expect, after a while, a *longing* for something will arise; if so, give him what he asks for, whatever it is, and let us see what happens." This proceeding was agreed to; and the result was very much what was anticipated. The creosote was useless: the patient then became quiet and somnolent; and, I was afterwards informed by Mr. Stanwell, in about three hours the patient roused up, and beseechingly solicited some bitter beer; this was given to him in a long champagne-glass more than half filled, and after drinking it, the boy fell asleep. On awaking two hours afterwards, he said—"could he have some currant-pudding, which he thought he had smelled earlier in the day?" It was given, relished, and retained; and from that time the vomiting ceased, and in a few weeks the strength was quite restored under such dietetic management as seemed right to his medical attendant. I paid no further visit, but saw the boy in excellent condition at a neighbouring watering-place on the completion of his convalescence.

Experience of this kind is not uncommon, and suggests, I consider, that the organic nervous system plays a prominent part in such instances.—Yours, etc.,  
MANCHESTER, January 20th, 1877. DANIEL NOBLE, M.D.

SIR.—I have read with interest the account of a case of vomiting as a sequela of scarlet fever, most graphically reported by Dr. Justyn Douglas. The symptoms do not appear to point to any disease of the stomach, or to stricture of the oesophagus, but rather to paralysis of some portion of the gut; and I think it probable that the rejected food has never actually entered the stomach. Paralysis of certain groups of muscles are, of course, exceedingly common after diphtheria, especially of those connected with deglutition; and I think that such a phenomenon is not at all unlikely to occur after scarlet fever. If this be the explanation of the vomiting, I should consider that galvanism, the hypodermic injection of strychnia, and the administration of phosphorus pure, would be followed with good results. If the tonsils have been left enlarged and ragged, their removal would certainly improve the child's condition, as diseased tonsils are not unfrequently the cause of sickness, and very commonly of loss of appetite.—I am, etc.,  
LEWELLYN THOMAS, Surgeon to the Central Throat and Ear Hospital and the Royal Academy of Music.

## CERTIFICATES WITHOUT FEES.

SIR.—I think I am not mistaken in supposing that most life-assurance offices, when they ask for the opinion of the usual medical attendant as to the health of an intending insurer, pay the fee for the professional advice, and do not treat the matter as, you will see by the enclosed, the London Life Association do. Will you kindly say in the notices to correspondents whether I should, if such a case should occur again, decline to give the opinion? In the present one, as the candidate for assurance is a relative whom I must well ask for a fee, I have replied to the questions.—I am, dear sir, yours faithfully,  
HENLEY VILLA, Ealing, W., January 15th, 1877. GEO. D. BROWN.

"London Life Association, King William Street, London, Jan. 15th, 1877.

"Dear Sir,—This being a mutual assurance society, and not a trading corporation, it requires every person desiring to be admitted to its advantages to furnish evidence that he is in good health, without expense to the society. If he cannot do this, he cannot be admitted. Mr. Barry, therefore, and not the Society, made application to you for a report; and the form in which that might conveniently be given was supplied to him to save trouble. Your application for a fee should, therefore, be made to him.—I am, dear sir, your obedient servant,  
EDW. DOCKER, Secretary.

"G. D. Brown, Esq., M.R.C.S."

\* \* The argument is neither novel nor valid. We should advise our correspondent to refuse to furnish any information to an office which does not pay for it.

## MEDICAL ETIQUETTE.

SIR.—I shall feel much indebted if you will give me your opinion on a matter of professional etiquette which has given me no little anxiety of late. It is now nearly two years since I commenced practising in this village, and all along it has been, and still is, my wish to act towards my professional brethren (most of whom are my seniors) in a strict spirit of etiquette. Unfortunately, however, by acting thus conscientiously, I incur not only the displeasure of patients, but the intrusion of other medical men less scrupulous than myself.

I crave your indulgence by permitting me to relate simple facts by which in my endeavour to avoid a breach of etiquette I have brought on myself the censure of my would-be patients as well as those already under my care. Mr. W. is a neighbouring practitioner attending the child of Mr. A., a very well-to-do person. On Sunday evening, Mr. A.'s little boy meets me in the street, and says, "Mr. G. papa wants you to go and see him." I, knowing the baby has been ill a day or two, and that I am not the family doctor, reply, "Is any one attending baby?" and on receiving an answer that "Mr. W. saw her this morning," I return a message to this effect: "Tell your papa I am very sorry I cannot come—not that I am unwilling to serve him, but that I should not like to meddle with Mr. W., who is already in attendance, unless intimation is first given to him that further advice is needed." Thinking, however, this message might be wrongly delivered by the little boy, I took a few hours afterwards further trouble of writing to Mr. A., to try and fully explain the (to laymen very difficult task) duty we owe to our brethren in point of etiquette. What has been the result? I probably have lost a good family; another medical man is called in and attends, and I am censured by the lay population as being too independent, coupled with a hint that another less independent medical man would be desirable.

I cannot hide from you the fact that Mr. W. is not well disposed towards me on account of my having commenced practice here, although I have on several occasions rendered him help during his temporary absence from home—the thanks, however, having been accusations of meddling. I can honestly say that I have never acted in an unprofessional way towards any of my brethren, and by so doing I

reap the benefit of being on good terms with nearly all the medical men around me.

I fear, sir, I have largely intruded on your valuable space, but I am very anxious to know from you whether or no I have exceeded my duty, notwithstanding what might have been gained by taking the case and ousting the medical man already in attendance. I am often applied to attend a new patient, and I always make it a rule to inquire if any one is already in attendance; and if such be the case, I scrupulously avoid intruding, at the same time intimating my desire to help a patient if his medical man be absent from home, provided he shall be made acquainted with the full facts. An opinion will tend to guide me in my future conduct towards any new patient who may apply to me.—I am, sir, yours, etc.,  
VERITAS.

\* \* Veritas may console himself with the conviction that by preserving his own self-respect, and acting steadily in accordance with what he knows to be due to his own sense of right and the accepted rules of the profession, he will certainly end by winning the respect and esteem of those whose goodwill he must chiefly value, whether among his townsmen or medical brethren.

## STROMOUS OPHTHALMIA.

SIR.—The following I find to answer very well in this district. R. Hydrargyri oxid. flavi gr. vi.; unguent. simplicis 3i. A piece of the size of a hempened se to be inserted between the eyelids every third night.—R. Hydrargyri perchloridi gr. ii.; ammonii chloridi gr. iii.; aquæ ad 5j. Solve. One teaspoonful to be mixed with half a small teaspoonful of luke-warm water, and used as a lotion for the eyes every four hours. In bathing the eyes, care must be taken that the lotion is applied inside, and the eyelids dried thoroughly after each application of the lotion. The eyes must be kept covered by means of a light bandage. When the inflammation subsides, the bandage should be removed, but the lotion to be continued for three or four weeks, to assist in removing the opacities. Cod-liver oil and syrup of the iodide of iron are to be given for a lengthened period.—I am, etc.,  
January 17th, 1877. JOHN CUNNINGHAM.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Sheffield Daily Telegraph; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Glasgow Herald; The Metropolitan; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Liverpool Pictorial; The Salford and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Wales Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Gazette; The Hull Criterion; The Glasgow News; The Mail; The Leeds Mercury; The Hull Criterion; The St. Pancras Gazette; The Worcester Guardian; The Liverpool Critic; The St. Pancras Gazette; The High Peak News; The Oswestry Advertiser; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Midlands Advertiser; The Rock; The St. Andrews Gazette; The West Cork Eagle; The Portsmouth Times; etc.

\* \* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

## COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. C. J. B. Williams, Cannes; Dr. W. H. Corfield, London; Dr. Ord, London; Dr. W. Fairlie Clarke, Southborough; Dr. Bucknill, London; Dr. George Johnson, London; Dr. Foulis, Glasgow; Dr. J. Milner Fothergill, London; Dr. J. W. Moore, Dublin; Dr. Joseph Bell, Edinburgh; Mr. Wilders, Birmingham; Dr. Meeres, Plymouth; Dr. Dickinson, Stalybridge; Messrs. Brand and Co., London; Numismatist; Mr. T. M. Stone, London; Mr. D. H. Forty, Wotton-under-Edge; Dr. Henry Longford, Osmostherly; The Registrar-General of England; Dr. Edis, London; Mr. Lennox Browne, London; The Secretary of Ap. Apearies' Hall; Mr. G. Eastes, London; Dr. Greene, Birmingham; Our Paris Correspondent; Mr. Lund, Manchester; Dr. Clifford Allbutt, Leeds; An Associate; Dr. A. S. Taylor, London; Mr. Alfred Pain, London; Mr. R. S. Fowler, Bath; Mr. Christopher Heath, London; The Registrar-General of Ireland; Dr. Braidwood, Birkenhead; Dr. Rabagliati, Bradford; Dr. Nankivell, Torquay; Dr. Percy Boulton, London; Mr. Sampson Gamgee, Birmingham; Dr. Tilbury Fox, London; Dr. R. A. Warwick, Richmond; Dr. Wm. Roberts, Manchester; Dr. Fletcher Beach, Clapton; Mr. Comyns Leach, Sturminster Newton; Mr. H. De Styrar, Shrewsbury; Dr. Dobell, London; Mr. H. D. Palmer, Nayland; Dr. Caton, Liverpool; Mr. G. D. Brown, Ealing; M.D.; Dr. Taylor, Scarborough; Mr. Hildyard Rogers, London; A. B.; Dr. Collie, Homerton; Dr. Eastwood, Darlington; Mr. G. W. Callender, London; Our Dublin Correspondent; Mr. L. W. Spencer, Preston; Mr. S. R. Allen, Georgetown; Mr. E. M. Holmes, London; Dr. Byrom Bramwell, Newcastle-upon-Tyne; Mr. R. Barwell, London; Dr. Birkbeck Nevins, Liverpool; Dr. Tripe, London; Dr. Skerritt, Clifton; Associate; Dr. Reid, Newbiggin-by-Sea; Mr. R. W. Beever, London; Subscriber; Dr. Pye-Smith, London; Dr. J. Sawyer, Birmingham; Dr. Hamill, Worsop; Mr. C. MacMahon, Sheffield; Mr. H. B. Harrison, Caterham; H. T.; Dr. Griffiths, Sheffield; Dr. H. A. Allbutt, Ventnor; Mr. J. T. Clover, London; Mr. Gregory, Blackpool; Meliora Quærens; Dr. Constable, Leuchars; Mr. W. Odell, Hertford; Dr. Norman Kerr, London; Mr. J. Brown, Dorchester; The Secretary of the Pathological Society; Our Edinburgh Correspondent; Mr. Gosling, Congleton; Mr. Pugin Thornton, London; The Secretary of the Obstetrical Society; Mr. H. E. Price, London; Mr. Arrowsmith, Darlington; Dr. Robinson, Chesterfield; Mr. Albert Napper, Cranleigh; Dr. Burney Yeo, London; Enquiries; Dr. Rutherford, Edinburgh; Mr. Geoffrey Hett, London; Mr. E. P. Hardey, Hull; The Secretary of the Clinical Society; Dr. Thorowgood, London; Mr. Snell, London; Mr. Holmes, London; Dr. Wilks, London; Dr. Rogers, London; etc.



## TWO HARVEIAN LECTURES

ON

## BRIGHT'S DISEASE AND ITS TREATMENT:

CONSIDERED MAINLY IN RELATION WITH ARTERIAL TENSION FROM BLOOD-CONTAMINATION.

*Delivered before the Harveian Society of London, November 1875.*

BY

THE LATE FRANCIS SIBSON, M.D., D.C.L., F.R.C.P., F.R.S.,

Consulting Physician to St. Mary's Hospital; Vice President of the British Medical Association; etc.

## LECTURE II.

*Treatment.*—We have evidence, amounting to a scientific demonstration, that in Bright's disease the poison in the blood causes arterial tension; and that the degree of the tension is in proportion to the amount of the poison. Although the arterial tension does immediate harm by causing hypertrophy and valvular disease of the heart and atheroma and dilatation of the aorta and the rest of the arterial tree, yet the mischief caused by the arterial tension is in every way secondary to that induced by the poisoning of the blood. Our treatment is, therefore, mainly directed to the poison, for we know that if we lessen that, we lessen all the ill effects that proceed from the poison. We have seen that the left ventricle, forced into a large expansion with thickening of its walls, has found relief by widening out its mitral aperture, and so sending its overcharge of blood backwards into the left auricle as well as forwards into the aorta. We have seen that the arch of the aorta, widened excessively by its own distension, has thus rendered its valve incompetent, and has so lessened the tension of the whole arterial tree and lessened its own size. We have observed cases in which bronchitis or congestion of the lung has transferred the tension from the arteries of the body to the arteries of the lungs, which have in their turn relieved themselves by pulmonary apoplexy, when the blood, incapable of finding its way through the capillaries of the lungs, has poured itself out into the air-cells. Under all these circumstances, and others that I do not name, the arterial tension has been completely relieved; and yet the poison saturates the blood and the tissues as completely as ever, sometimes more so, and the danger to life is often rather increased than lessened.

In considering the treatment of Bright's disease, I shall keep steadily in view the getting rid or lessening of the poison actually in the blood; the not adding to the blood fresh poison, either of the kind already there, or of a similar narcotic quality; and the stirring up the powers of life, so that they may better resist, override, and live above the poison that is there. I shall also keep in view the relief that may be afforded to certain effects of the disease, such as dropsy and distension of the abdomen, which tend dangerously to increase the disease that gave them birth. I shall, however, make no attempt to exhaust the subject of the treatment of the disease, and to repeat those lessons familiar to all of you, and which, as practical men, you employ every day efficiently in the treatment of the disease.

Soft water, repeated frequently through the twenty-four hours, is the great and effectual diuretic. It is the needful medium for other diuretics if we would really make them do their work. Hard water certainly passes less freely through the kidneys than soft water, and in going through them it carries off much of the poison that has accumulated in the blood. I would here say that the kidneys cannot work by deputy. They alone have the power of expelling the urea and the other salts that are the result of the metamorphosis of the muscles and tissues. The hot-air bath, which is often an effectual remedy in acute Bright's disease and fatty kidney, draws off an abundance of water with common salt and salts that pass off through the surface, and it relieves the pressure of blood that is bearing on the kidneys themselves, and overwhelming or drowning their function. But this great remedy is doing the work, not of the kidneys, but of the skin; and, as practical physicians, we all know how important it is that the skin should be active and warm in this disease. In doing so, as I have just said, the kidneys, no longer flooded with an excess of blood, are often restored to their function. I have advocated soft water, and the difficulty is to get it; for rain-water, if it could be met with, is unfit, and

distilled water is unpleasant; and if much water is to be really taken, it must be welcomed by the palate. Schweppe's Malvern soda-water, the gas being previously stirred out with a spoon, is the best means that I know of giving soft water. It has the advantage, too, of lessening the acidity of the urine, for acid urine irritates the kidneys and makes them deny their function when affected with Bright's disease, especially in the inflammatory forms; just as acid urine irritates the bladder when it, the prostate, or the urethra is affected.

This leads me to say that alkalies, in proper quantity, are as useful to the physician in Bright's disease, as to the surgeon in disease of the bladder and urethra; and for the same reason, since they render the acrid fluid bland and soothing that is constantly distilling through the bladder of the affected kidney. The smallest vessels then cease to shut themselves up, and the tubes are flushed by the abundance of soft mild fluid that is passed through them. We all know how admirably the potash salts often fulfil the purposes of which I have just spoken in these cases. Leeches to the loins, linseed and mustard poultices, warm and not wet, we all know to be effectual diuretics, as well as soothers, in acute Bright's disease.

When the abdomen is greatly distended by windy inflation of the stomach and bowels, or by ascites, or when the lower part of the body, from the waist downwards, is greatly swollen by dropsy, those conditions being either single, or, as they often are, conjoined, the return of venous blood from the kidneys is hindered by the general compression, and the urine is scanty. Under such circumstances, the relief of the swelling is often the best, and indeed only, diuretic, for the kidneys refuse to let any quantity of fluid through themselves, when their veins are thus obstructed. The oedema of the surface should then be drained by puncture with the needle or lancet; and the ascites by the trocar and cannula, or the aspirator.

One of my patients with Bright's disease in St. Mary's Hospital suffered from great distension of stomach and colon, moderate ascites, and some tightness of the skin of the abdomen from dropsy. He was only passing fourteen ounces of urine in the twenty-four hours. I decided to have the fluid removed from the abdomen; and, as the intestines came very near the surface, the trocar was thrust downwards and withdrawn. A drachm of fluid came through the cannula, but, by the insertion of a female catheter, at hand for the purpose, through the cannula, ninety ounces of fluid were easily drawn off. The relief to the patient was immediate, and the urine increased at once to forty ounces, and subsequently to sixty ounces in 24 hours. He improved for a time, but finally died. This case shows well how useless it is to give diuretics when the return of blood from the kidneys is hindered, for the same means exactly were employed before and after the tapping.

I have spoken here only of the obstruction to the flow of blood through the renal veins in such cases; but another effect is to have no vegetables, but take lemon-juice instead, and biscuits instead of bread. On this diet, the size of the abdomen has lessened three inches in forty-eight hours, with great relief to the patient in every way.

It is evident that if we would put no additional poison into the body of the kind already there, we must know one of two things, either the character or the effects of the poison; so that we may put nothing into the body, whether in the form of food, stimulant, or medicine, that is of the same character or tends to produce the same effects as the poison already there.

My first lecture was occupied with the conditions that prove the presence of a poison in the blood, and in so far as that poison affects the circulation of the blood; and we saw the main effect of the poison on that function was that arterial tension, with all its various secondary effects, symptoms, and signs.

We have here a definite indication that we should avoid giving the patient anything that tends to increase arterial tension. We have the opposite effect to guide us in the treatment of fevers with great arterial relaxation, and its effect and sign, a dicrotous pulse; and we know that by giving those substances that increase arterial relaxation we do mischief, while by giving those that lessen arterial relaxation and substitute for it arterial tension, we do good.

A similar position holds in Bright's disease as regards the first point, and we may say with certainty that whatever increases arterial tension adds to the original mischief.

It does not, however, follow that whatever will lessen tension will be of use, for, as we have seen, the nitrite of amyl immediately converts the sphygmographic tracing of tension to one of complete relaxation or dicrotism. This step, however, instead of touching the disease, adds to the original poison another poison that intensifies rather than moderates the effects of the kidney disease.

It is self-evident that the main motive of our treatment, in regard to the point we are now considering, should be the withholding, as far as possible, every article of food that contains the same kind of poison as



that which already contaminates the blood; and especially that we should not ourselves actually direct the patient to take such food as his proper nourishment. In carrying out this principle, it is needful that we shall keep steadily before us the character of the poison so infecting the body.

Although chemists and physiologists are agreed that the poison of Bright's disease consists in the *débris* of the tissues, that, instead of being expelled through the diseased kidneys, is unduly retained in the blood so as to impregnate every organ in the body; yet they have not yet discovered the precise chemical nature of that poison.

The work done by the muscles—including that most important and incessantly labouring muscle of them all, the heart—and by every important organ, indeed, in the body, is done at the expense of some of the materials of those organs; for there can be no expenditure of force without the corresponding metamorphosis of tissue. No part of the tissue is lost, but it is converted mainly by oxidation into a series of new products, which are, at the beginning of the process of metamorphosis, only less complex than the muscle by the exuviae of which they are formed; which become less and less complex in the descending scale; and which finally appear in the more and more simple forms of urea and ammonia. Now the juice of flesh, the composition of which has been in a great measure made known to us by the labours of Liebig and other chemists, is, if we deduct the albumen and gelatine, entirely composed of "extractive", due to the metamorphosis of tissue. Kreatin, one of the more compound of the structures transformed from muscle, is itself found in urine, and is converted by its decomposition into sarcosine and urea. The poison contained in the blood in cases of Bright's disease is composed of the materials metamorphosed from the muscles and other tissues, that accumulate in the blood because they are not sufficiently expelled by the diseased kidneys. Beef-tea and soups, deducting albumen, and Liebig's essence of meat, which contains no albumen, are entirely composed of the metamorphosed structures of muscle, including kreatin, kreatinin, and the fatty and aromatic acids. Some of those ingredients are innocuous, but the more important of them essentially correspond with the retained self-generative poison already circulating in the blood. By giving such patients beef tea or the essence of meat or soups, we are adding the metamorphosed structure of the muscles of the cow to the retained metamorphosed structures that are already poisoning their blood. Beef-tea and the so-called essence of meat, by containing the fragrant juices of the flesh, give a grateful spur to the stomach in patients weakened by fever and other ailments in which the blood is not poisoned by the effete tissues, and are of great value to such patients as the medium in which real food may be given. They are not in themselves a food, but flavoured food that may be finely mixed with them, whether the *purée* powder of the meat of which they have been made, or vermicelli, or bread, or other farinaceous food. In these feeble patients the arteries are relaxed and the pulse dicrotous, and the metamorphosed materials from the cow's flesh increase the tension of the over-relaxed arteries. Those effete structures, though not a food, are a double spur when given to those weakened patients; first to the stomach, enabling it to digest real food, and then to the heart and blood-vessels, by lessening arterial relaxation or increasing arterial tension.

Cases of Bright's disease are diametrically opposite to the enfeebled patients of whom I have just spoken, in the character of the poisoned composition of their blood, the arterial tension caused by the difficulty with which their poisoned blood forces its way through the smallest vessels, and the powerful action of the heart. What is, therefore, a life-stimulating fluid to the exhausted patient, is an immediate poison to the patient with Bright's disease. Beef-tea, soups, gravies, chicken-broth, animal fluids of all kinds, essences of meat, whether Brand's admirable kind, or Liebig's essence, which, because it is stale, should never be used where fresh beef-tea or essence is to be had, ought to be rigorously forbidden to every patient with Bright's disease.

It has been justly said that it is not incumbent on those who discover and expose an evil to find out and apply a remedy. The detective and critical mind is not, as a rule, the suggestive, organising, and artistic mind. The two classes of mind are almost opposed to each other. But in this case, in objecting to the use of beef-tea, essence of meat, and the like, with life to be supported by food, it is a duty that cannot be escaped from to find a substitute for the poisonous beef-tea; and that duty has already been practically fulfilled by every physician in this room; for in milk, abundantly supplied, we have a perfectly innocuous food that supplies every part of the body with its needed materials of repair; that has already built up and formed every one of us in infant-life; that promotes the action of the kidneys, and so tends to expel the poison from the blood; and that may be gratefully mixed with Schweppes's Malvern soda-water, or Apollinaris, or lithia, or other waters, with the effect of enhancing the purifying

power of the kidneys and so washing out the poison. Milk, however, two or three or more pints daily, may be given in any form that is agreeable to the patients, cold, iced, hot, with rice, with bread, with flour or vermicelli, or corn-flour, with macaroni, with fruit, with puddings and tempting well-flavoured dishes of all those varieties that the thoughtful, handy, artistic cook of taste and affection knows so well how to prepare.

The question must here be put and answered, whether it is proper or not to give meat to patients affected with Bright's disease. When we consider that meat contains its own juice which is impregnated with the poisonous metamorphosed structures; and that meat in its own nature tends to undergo metamorphosis; our first inclination would, perhaps, be to forbid meat. There is no doubt that meat is found to be injurious in some cases of acute Bright's disease, whether from cold or scarlet fever in the young, and one of yourselves told me after my last lecture of an interesting case of that class. In answering this inquiry, however, we must look to both sides of the question, which every practical and sagacious physician will intuitively do, and inquire what influence the giving and the withholding of meat may have on a patient affected with Bright's disease. In cases of fatty, lardaceous, and granular kidney, meat in moderate quantities, and properly cooked, is in a practical point of view of unquestionable service. It gives them a compact non-distending food; it helps to sustain their muscular power and action, just as it helps to sustain hard labour, and it gives zest to life. Nor is this result of practice otherwise than confirmatory, as it always must be, of the physiological view of this question. Meat supplies the body with the exact ingredients of the patient's muscles, all ready to be laid down in the midst of the structure when it requires repair. It is like the stone already hewn and shaped in the quarry for the builder; transport only, and not local labour, is wanted. The meat that is eaten is not metamorphosed until it has served its purpose, taken part in the work of the muscle, and, like every other part so doing its work, is then metamorphosed and thrown off, first from the muscular fibre into the muscular juice, and thence into the blood and the urine. There is an experimental point suggestively in favour of giving meat in cases of Bright's disease that is quoted by Donders in his very valuable work on the *Constituents of Food, in relation to Muscular Work and Animal Heat*, translated by Dr. Moore. He states that Bischoff and Voit observed that when a dog, after having been fed for some time on vegetable matters, got a liberal supply of meat, the water was removed from his body in streams; by the urine alone, four ounces more were excreted than was taken in with all the food and drink together.

I need not detain you by speaking of the valuable employment of eggs, of the fats, and of fat-making food of all kinds, the patient using his own choice; and of other non-poisonous and fitting articles of food, in cases of Bright's disease, for they suggest themselves to all of us in our practical everyday treatment of that affection.

The second application of the principle, that we should not add another poison to the poison in the blood, is to the alcoholic stimulants. The composition of alcohol, unlike that of the juice of meat, is quite different from that of the poison that infects the blood in Bright's disease, so that, in that respect, we have no reason to expect that alcohol would in those cases form an additional poison to that in the blood. There are, however, two of the effects of alcohol on the system—one from the immediate, the other from the habitual, use of that stimulant—that make it, when employed in large doses, an additional poison to that in the blood. The immediate effect is the intoxication of the nervous system; the effect of its habitual use is the degeneration of the tissues, and especially of the arteries, the actual production of Bright's disease itself. The full effect of the two poisons on the nervous system is very close, since they both produce confusion and clouding of the intellect, thickness of speech, imperfect use of the limbs, unconsciousness, and coma resulting in death. The excitement and exhilaration of alcohol, and the whole character of its early symptoms when not taken in excessive quantities, are quite unknown as the effects of the poison of Bright's disease. Looking to the analogous effect of the two poisons, when alcohol is given in large doses, and to the ultimate injurious effect of the continued over-use of alcohol in causing degeneration of the tissues and Bright's disease itself, we may accept the principle that, unless there be some immediate good effect to be gained from alcohol, it is better not to give it in Bright's disease, and especially not to give it habitually, or even in large quantities. Dr. Parkes has shown, by a long and careful series of observation of its effect on soldiers who were the models of health and strength, that the continuous daily use of alcohol in quantities above one ounce and a half, is injurious to the healthy man. It is self-evident that, if more than this quantity be injurious to the healthy man, less than this quantity will be injurious to the patient affected



with Bright's disease which, as we have just seen, is itself often caused by habitual drinking, and which causes, like alcohol, degeneration of the arteries. We may say, then, with scientific and practical confidence, that in Bright's disease, alcohol, if habitually used, should be taken sparingly, and in far smaller quantities than in health.

There may, however, be some effect of alcohol in small doses that may render it of service in Bright's disease. In small quantities, largely diluted with soft water, and especially in certain forms, such as gin or whiskey among spirits, and hock and perhaps claret among wines, it certainly promotes the action of the kidneys, and in so doing it may carry away not only its own poison but a certain amount of the poison of Bright's disease.

Thus controlled, alcohol may be of use in that disease, for we know that practically it is sometimes of the greatest use. Hock was a favourite wine with the original observer of this disease, Dr. Blackall of Exeter; that wine or claret in very moderate quantity—a glass or at most two daily of either of those wines largely diluted—may be, and I believe is, of real service in some cases. It promotes the action of the kidneys, serves to help digestion, and to give a sense of support and comfort. Whiskey in very moderate quantity, an ounce in the twenty-four hours, very largely diluted, may prove equally serviceable with hock or claret in its action on the kidneys. If, however, there be any cirrhosis or congestion of the liver, or any degeneration of the arteries, spirit is to be altogether forbidden, and every wine that contains spirit. Beer is as a rule to be forbidden, but I know no practical objection to a moderate amount of cider.

The effect of alcohol on arterial tension is an important consideration in guiding us as to its use in Bright's disease. Dr. Anstie showed, in 1868, that alcohol increased arterial tension and the power of the heart, and the force of its action in cases of fever or pneumonia with low arterial tension, indicated by a dicrotous pulse; and he thus supplied us with a scientific and practical rule of the greatest value for its employment in those cases. If alcohol increased arterial tension in health, it would at once condemn its employment in Bright's disease, with arterial tension, which, as we have already amply seen, is the natural effect of that disease.

The important series of sphygmographic observations made by Dr. Parkes and Count Wollowicz, M.D., that I now send round, show that, as a rule, and especially after it had been administered for some days in succession, relaxation of the arteries, shown by dicrotism, was induced. Thus, on the diagram of the fourteenth day, which was the sixth of the use of alcohol, dicrotism was strongly induced; while on the very next day, the fifteenth, when the healthy soldier drank nothing but water, the dicrotism disappeared and a healthy amount of arterial distension was restored. When spirit was again given, and for the first time in the form of brandy, dicrotism reappeared, and became intensified during the two succeeding days with a large allowance of brandy. This effect is especially marked on the twenty-third day, when at twelve o'clock the effect of the eight o'clock dose was going off, and the pulse, dicrotous at ten o'clock, one hour and a half after brandy, ceased to be dicrotous at twelve o'clock, and became again dicrotous at two o'clock, after a renewed dose of four ounces of brandy. On the first of the three days of the renewal of spirit (the twenty-first) the two o'clock tracing, half an hour after the dose of brandy, showed no dicrotism. On the twenty-fourth day, after the return to water, the dicrotism disappeared, showing, as before, that the continued use of spirit increased the dicrotism. Zimmerberg, quoted by Marvaud, observed, by the use of the kymograph, that arterial tension was lessened by alcohol, and Marvaud himself in these observations found that the first effect of alcohol was to cause increased action of the heart and lessening arterial tension, followed by diminished action of the heart and increased arterial tension. He also found, confirming Anstie's observations, that in fever the low arterial tension was increased by alcohol.

These various results would not in themselves forbid the employment of alcohol. When, however, the alcohol increases arterial tension, they directly say do not employ it; but when the alcohol lessens tension, they are neutral as regards its use, for, as I have before remarked, it is not the effect of the poison, but the poison itself that we have to consider.

When, however, there is, owing to pulmonary congestion and pulmonary apoplexy, low arterial tension, then alcohol may be used with best effect, and, as in the case of fever, just related by me, saves the patient's life.

[To be concluded.]

## ON MENTAL ANXIETY AS A CAUSE OF GRANULAR KIDNEY.\*

By T. CLIFFORD ALLBUTT, M.A., M.D.,

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To the physician who desires, in the highest sense of the word, to be a practical man, a knowledge of the causes of disease is the most precious part of his craft, and may be more valuable to him, if possible, than a knowledge of technical therapeutics. And yet it is in this department of our science that we seem chiefly to lag behind. Much has been done, no doubt, in the discovery of the causation of infectious diseases; but our knowledge of the causation of the organic diseases of the human system is still far behind our knowledge of their pathological anatomy.

With these views, it has been my earnest desire, as a practitioner of medicine, to trace, as circumstances would allow, the causes of disease in those persons who have come under my own eye. For this end, I have taken more or less careful notes of almost every case which has come under my notice at my consulting-rooms for some years past; and these records have led me to many important conclusions, and have incidentally taught me that no case, or but very few cases, can be regarded as trivial or meaningless; but that disorder, at the time slight enough, may often form very important links in the chain of the life history of the individual or of the family. Among the conclusions to which I have been led by the careful record of nearly one thousand new cases in each year, I may refer to the following, which I have published already or which are almost fit for publication.

First of all, I have convinced myself that affections of the skin form most important links in several series, and that many of them enter curiously into the history of hereditary neuroses, as well, of course, as into the gouty and other series; also that, as herpes occurs at the various mucous outlets, so eczema occurs in the bronchial mucous membrane, psoriasis in the tongue and colon, and so forth; that, in fact, skin-diseases are not always placed on the outer skin alone.

Secondly, my notes seem to prove that acute phthisis is, very often at any rate, a neurosis.

Thirdly, that migraine, among many other curious affinities so admirably worked out by Dr. Liveing, is associated with aphasia and right-sided palsies.

Fourthly, that rheumatic fever tends to concur with gout in some persons or families, and with phthisis in others.

To-day, however, I have more especially to urge upon you a proposition, the truth of which has been asserting itself in my own mind for some years; namely, that among the causes of that kind of Bright's disease known as granular kidney, mental anxiety and prolonged distress take a high, if not the chief, place. A middle-aged person, man or woman, will come to us complaining that he is no longer active and eager for work, but is unaccountably languid and heavy; that he has of late become liable to dyspnoea; and that, especially after mental anxiety, attacks of this dyspnoea may come on even during hours of repose. The physician will then find the flesh falling and the complexion fading, the pulse growing tense and the heart enlarging; the urine varying widely in quantity, of low gravity, and often slightly albuminous. Now, if he inquire into the preceding history of such a patient, he will very commonly find that carking care or bitter and long sorrow has set its mark upon his life. It is impossible to prove this statement by the reading of cases; my statement is one which must be tested by others, and must stand or fall by the general voice. But I may say that I am even myself surprised to find how fully my belief is borne out by the comparison of my own cases. During the last two years, I find I have made notes of thirty-five cases of granular kidney occurring in private practice, and I find a marked history of mental distress or care, or both, in twenty-four of them. As a result of such causes, indeed, I find that granular kidney follows more frequently than degeneration of the brain or spinal cord, and far more frequently than primary failure of the heart's muscle. Not as proofs, then, but as illustrations, I may read brief notes of some few of those cases which I find recorded during the last two years, and which resulted probably from the causes I have indicated.

CASE I.—A lady, aged at death about 52, was brought to penury by her husband, who then deserted her. She was reduced to keeping a small shop in Hull; and, while there, her son deceived, deserted, and, I believe, robbed her. She gradually became sallow, wan, listless; the

\* Read before the Medical Section at the Annual Meeting of the British Medical Association in Sheffield, August 1876.

† I published this opinion in the *Lancet* some time ago, and Dr. Brookhouse of Nottingham subsequently expressed a like opinion. I believe I am at liberty to say that Dr. Dickinson also accepts it.

His Majesty the King of Prussia has conferred the dignity of Knight of the Order of Merit for Science and Knowledge on the eminent physicist Professor Du Bois Reymond of Berlin.



pulse became more and more tense, the urine lost its quality of health, and she died of uræmia.

CASE II.—A gentleman, whom I had known for some years as a person of position and means, came to me with symptoms of granular kidney. His age was about 51. I did not think it likely that care had eaten into his life. His wife, however, told me that, about eight years ago, he had almost accidentally invested a forgotten trifle of money in a trading company. This company failed miserably, and dragged hundreds of families to the dust. My patient, who had invested about two hundred pounds, ultimately lost about five thousand. Now, to have lost five thousand pounds at a stroke might have affected him little, but, for three or four years, he went to bed night by night ignorant whether he might not be gradually drained of his all. And to this were added the care and pains exacted of him in the position which he accepted of trustee in the liquidation: a tedious, thankless, and distressing post. His health during this time slowly fell off, and, by the time he had well extricated himself from his anxieties, he had entered into the long lane of chronic interstitial nephritis.

CASE III.—A gentleman, whom I am now attending for advanced granular kidney and uræmia, came to me, four or five years ago, complaining of symptoms which I then referred to overwork. He was living in good style, at the head of a large business, and I urged him strongly to take rest and change. I thought him a little obstinate in declining to do this, and I saw nothing of him till a few months ago, when, as I have said, he was hopelessly ill. I then found that his prosperity had been but apparent. The senior partners in the firm had died or retired, taking capital with them, his son disappointed him, and my patient, a man of great industry and probity, was left to fight single-handed an unequal battle. For years he had striven stoutly, and, so long as trade was vigorous, he kept misfortune at bay; with the slackening of trade, however, came the pitiless end—bankruptcy and beggary had sat beside him for years, and now entered in and took possession. A fine man, of healthy family and apparently sound constitution, his life was thus gradually eaten away. [This patient is since dead.]

CASE IV.—This is the story of a wealthy and happy man, born to a high place and to a free and beautiful life. All his hopes were bound up in one child, and this one was all in all to him, until by degrees the idol was broken in pieces; and, with the desertion of his child, the father's face grew wan and sallow; in middle-life his heart thickened, his urine pale, and, after two years of this, he fell in an apoplectic fit and spoke no more.

CASE V.—This is not unlike the preceding. A mother brings up four sons, who inherit an honourable and famous name and great estates. She nurses the estates, pays off encumbrances by industry and thrift, and yet one by one her hopes are stricken down. Her eldest son passes away from her into something worse than death, and the rest are lost to her in various ways which I refrain from indicating, lest I should point too nearly to the identity of my patient. She slowly passed, at about fifty years of age, into chronic Bright's disease and died of uræmia.

CASE VI.—This is again a sad story of a suffering wife and mother. Happy in her husband and family for many years, she awoke one morning to find her husband a helpless idiot. For years, she gave up her life to him and to her son, his heir. The father died after six years of a life worse than death, and the son is now gambling away his patrimony under her eyes. Before sixty years of age, she shrinks and fails, and people wonder what ails her. Now I find her urine albuminous, her heart thickened, her kidneys dwindling, and her days numbered.

CASE VII.—A fine vigorous man, living the life of a sportsman, hunting four days a week, shooting, fishing, and giving every evidence of splendid health and endurance, married, rather late in life, a lady to whom he was deeply attached. Two years later, she died in her first confinement. Months pass by, and people look sadly at him and say to each other that he has never recovered that shock. More months go by, and his falling flesh, sallow face, and tense pulse suggest albumen, and it is found. Everything that money can do has been done; but he remains the subject of chronic interstitial nephritis, and the outcome of it is, I fear, too sure.

CASE VIII is a commercial traveller, energetic and fairly temperate in habits, but whose family have embittered his existence. After several years of wretchedness and disappointment, he called upon me, and I found decided evidence of granular kidney with arterial tension. I do not know whether he is still living.

Need I multiply such cases as these, monotonous in their sad procession? I must pass on to consider very briefly those cases in which mental distress was not an obvious factor in the causation of this morbid state. In the preceding histories, I have referred only to cases in which the sufferers were more agitated by depressing passions than the average of *καλὸν ἄνθρωπον*. But although I think that, in the majority of cases of

granular kidney, the cause I have indicated will be found present in the higher measure, yet, in many other cases, we find no marked evidence of such causation. For instance, of the remaining eleven of my thirty-five cases, three seemed to owe their disease to intemperance. In these, the disease was discovered somewhat early in life, that is, about forty years of age, and, besides the decided history of intemperance in each, I could find no obvious cause. In no one of these had gout appeared; and I may add here that, in no one of the cases I have taken as resulting from depressing passions was intemperance present. On the contrary, many of these cases were persons of singularly abstemious habits. Again, in no one of my thirty-five cases have I distinctly found gout as a primary cause. Gout I believe to be one of the first consequences of dwindling of the kidney; but, when I look back upon the number of men and women who have striven with gout from early years, I am surprised to find how few of them end in Bright's disease. I have been especially struck by three cases I have carefully noted of late, in which I found a high pulse-tension, together with evidence of marked gout, in persons who have thus suffered for years, but whose urine gave no indications of granular kidney. Many such persons have thickened and embarrassed hearts, and die ultimately with cardiac symptoms, but with urine throughout of normal specific gravity, and containing no albumen. Three more of my thirty-five cases occurred in young persons of the ages of eighteen, twenty and twenty-five respectively. In these, the renal and arterial changes were well marked, and, as in early diabetes, the course of the disease was far more rapid than in older patients. In cases of granular kidney in early life, I have always found a bad family history; more especially marked in the other members by sallowness of skin, headache, dyspepsia, want of muscular power and energy, imperfect nutrition, and phthisical tendencies. The rest of my cases afford no features of special interest: in two, pregnancy was the cause; in another, chronic disease of the urinary passages; and in the remainder, the disease appeared in advancing life without definite cause. Concerning the connection of depressing passions with granulation of the kidney, I offer no opinion. As many of these cases pass urine profusely in the earlier stages, I was led at one time to think that we had evidence in this of some irritation from the base of the brain affecting first the vascularity of the kidney, as in diabetes insipidus. Diabetes insipidus, however, does not end in granular kidney, and the copula remains, I believe, yet to be made out.

Finally, if you accept my proposition that prolonged mental distress is one of the chief, if not the chief, cause of granular kidney, how are we to turn this knowledge to use in our profession? Can we, by a word, bid the sparks not to fly upward? We cannot; but we may profitably regard the matter as thus divisible. These depressing passions may be divided into three classes: Class 1. Antisocial passions; Class 2. Social passions; Class 3. Fretfulness. With respect to this third class, much may be done in impressing upon all persons (and the younger they are the more useful is the lesson) that to fume and fret, to brood and worry, is to waste power at the time and to waste the frame thereafter. No man or woman ever decided the more wisely from lying a night awake in agitating doubt. The torment of self-questioning and of apprehension of events which rarely come as we imagine them, is a loss every way, whether the object of anxiety be selfish or unselfish. A maiden lady, one of the noblest and most unselfish women I ever met (whose case is not included above), has worn her kidneys granular by years of fretting over the trials and interests of others. Temperaments differ, but I feel sure that in all a calm wise habit of mind may, by practice, be more or less successfully reached; and all persons should have it clearly impressed upon them that a man, who sees he can only do his best, and who quietly awaits the right moment for action, acts when the time for action comes far more effectively than his neighbour who has fretted himself into a fever. No man ever saw his way through a difficulty more clearly for tossing it over in his mind by night and by day.

*"Æquam memento rebus in arduis  
Servare mentem."*

In the next place, concerning antisocial passions; these passions are all which concern self exclusively or primarily; and the grosser kinds of them are greed of gain, pride of place, and lustful desires. The men or women who cherish these, and who find, as they must find sooner or later, that the fruits of them turn to ashes in their mouths; that ambition, avarice, petty tyranny and selfish indulgence have no continuing joy in them, but rather work out destruction, will find at the same time that they have laid the seeds of bodily disease, which the nineteenth century, with its gilded crown, has no royal touch to cure. Perhaps, in our time, the fear of granular kidney is to preach a more powerful evangel than even the Church; for life seems to consist in the reduction of our ideals.

*Dybbone*



But what are we to say to those who are falling or to fall in a true fight, whose life is expended in a noble despair, who have tempered fretfulness with wisdom and resignation, and whose passions are purified? Simply this: that we are born to war and not to peace; but we must see that we spend ourselves to some good purpose. A generous ardour is no safeguard against errors of aim; and we find that men and women often die rather like the bird which beats its wings against the cage, than by the defeat of well-directed effort. Many of us must fight, knowing that victory is impossible; and in constant strife there can be no joy or fruition; still, in a good cause, no wise effort can be wholly in vain, and a consciousness of this is a healing salve more powerful than any we can give. We shall be but blind physicians if we preach cowardice or inaction as the secret of health; let us rather urge upon those who seek our help in times of trial, to fix their affections on no selfish, unworthy, or transitory desires; to spend themselves, if their lives must be prematurely spent, in the cause of others, and for ends which are not visionary but attainable; and, finally, to possess their souls in patience and steadfastness. I know, in many cases, you may as well bid the wind cease to whistle; but, in others, by economising effort, by purifying suffering, and by lessening defeat, you may not only keep reason on its throne, but you may save the body from the inroads of organic disease, and from that disease more particularly on which to-day I have ventured to address you.

## ON THE RESULTS OF RECENT RESEARCHES IN THE TREATMENT OF PHTHISIS.\*

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In attempting to bring before the members of the British Medical Association some results which have been arrived at by recent investigations into the treatment of pulmonary consumption, I am aware that I am opening up a very wide and debatable subject; that it is one of the very greatest interest and importance no one, I take it, will deny; that it is one which may with much propriety occupy the attention of such a meeting as this will, I also hope, be readily conceded.

The treatment of those widely prevalent diseases of the lungs which we comprehend under the designation of pulmonary phthisis must always possess a deep and painful interest for us. I suppose there is no class of diseases for which we should so rejoice to learn that we possessed certain and reliable remedies, nor any class of diseases, when we contemplate their *post mortem* results, for which we so despair of finding any.

But we should not be discouraged by the contemplation of the final results of pathological processes as we see them in the dead-house. It is certainly not the province of pathological investigation to quell our ardour and diminish our efforts in endeavouring to check the ravages of disease. That it has some such effect on certain minds is beyond question. Let us guard our own against any such fatal bias. When we look upon a lung infiltrated from apex to base with tuberculous and inflammatory deposits in every stage of deposition and disintegration, riddled with cavities; its air-spaces—such as remain to it—choked with purulent secretion and *débris* of tissue, we may well confess our helplessness before such a state of disease and decay.

But this is only the final expression of what was at one time probably simply a constitutional tendency; a proneness to a certain form of disease, analogous in some respects to that tendency to gouty changes which we know to be so common, and perhaps, when early recognised, amenable like it to remedial measures. Pathology, and especially the pathology of phthisis, teaches us this lesson: that we should seek out and strive to comprehend those constitutional tendencies in which disease originates, and which, if undetected and unchecked, proceed, often with considerable rapidity, to the establishment of fatal morbid processes; and that we should treat these tendencies before they take the form of a definite morbid change. Pathological studies are of use also in another way in influencing the treatment of disease. By showing us what is possible, or, at any rate, what is impossible, they often point out the only useful direction which scientific therapeutic efforts can take.

The vast amount of patient labour that has of late years been expended in the investigation of the pathology of phthisis may appear at present, and on a superficial consideration, to have contributed very little to any particular advance in the treatment of that disease; but I

shall, I hope, be able to show that such a conclusion would not be altogether just, and that we may gather from the advanced pathology of phthisis indications of the true direction which remedial measures must take.

The subject of the treatment of pulmonary phthisis is, as I have already said, a very wide one, and, to be thoroughly comprehended, must be regarded from several points of view. In the limits which are imposed upon me in this paper, I shall only be able to refer to a few of the more important ones.

1. The tendency of modern investigation is to endeavour to discover the genesis, to seek out the origin<sup>†</sup> of disease, and, if possible, to deal with it at its source. It is only thus that we can ever hope to exterminate or even diminish the prevalence of certain forms of disease. This is especially the case with phthisis. We are no longer ignorant of the conditions which give rise to this disease, and we are prepared to point out how, to a great extent, its development may be prevented. The prevention of pulmonary consumption may be considered under three heads.

(a.) The prevention of the transmission of the phthisical constitution from parent to offspring.

(b.) The prevention of the development of the disease when the predisposition exists.

(c.) The prevention of those unhealthy social conditions which are known to favour the production of phthisis.

(a.) The frequent direct transmission of tendencies to disease from parent to offspring, and the duty incumbent on society to recognise and oppose it, are, I am willing to think, much more generally admitted now than formerly; and there seems to me to be no reason why we, as the professional guardians of the public health, should hesitate to speak to the public frankly and strongly on this subject. It is our duty to point out that a diseased variety of the human species may be, and is, voluntarily bred just as any esteemed variety of animal or plant is bred. Let us speak, as with perfect truth we may, of the voluntary breeding of the insane and epileptic, the scrofulous, the cancerous, and the gouty varieties of man. By so doing, we may possibly, in course of time, rouse mankind to a sense of their responsibilities in this matter, and secure in the breeding of the human race some small portion of that same care which is bestowed in the rearing of many animals. Why should a man select a scrofulous female to be the mother of his children, when there is no lack of vigorous and healthy mates for him? or why should feeble and unhealthy males desire to hand down their feebleness and disease to succeeding generations? This question is, I know, a very delicate one, one which it is often difficult to approach, and one which at all times must be discreetly and carefully handled, and which may frequently run counter to certain sentiments for which we all entertain the profoundest respect; but we may, nevertheless, find many appropriate opportunities of showing how much pain and misery are either ignorantly or wickedly called into existence by the systematic disregard of such considerations as these. Many have to sit, as I do, week after week and hear the same sorrowful story over and over again from young people of both sexes, just at the period when life should be opening her portals widely before them, instead of which, death has already cast over them the fringe of his dark mantle. With sad and tearful foreboding, they tell us how their "mother and father died of consumption", or their "brothers and sisters have died of consumption", or their "mothers and aunts", and so on. It is almost too painful sometimes to ask the question, for the certain answer brings such a terrible inference with it. But I fear we become callous to these things; for it is "the hand of little employment" that "hath the daintier sense", else we should make more strenuous efforts than we do to bring the question home to the public, "Why does this breeding of disease go on unchecked?" If, then, we would deal with phthisis effectually, we must strike at its source: at its origin in the marriage and intermarriage of scrofulous parents. It is often from ignorance that this mischief arises, and we mainly possess the knowledge which should dispel that ignorance.

(b.) Of the prevention of the development of the disease where the predisposition exists, I need say but little before an association like this. I will content myself with enumerating the principal precautions which modern research has proved to be efficacious. The children of a phthisical mother should be wet-nursed, or brought up on cow's milk, boiled, and not much diluted. The child should be allowed much freedom of movement of its limbs and chest, not bound up and enveloped, as is the custom still, to some extent, with bands and napkins and other garments. A kind of somewhat loosely fitting flannel dressing gown lined with cotton-wool is a simple, excellent, and economical dress. Such children should be allowed an abundance of fresh air and exercise. At the period of teething, beef-tea may be added to the cow's milk, and, if dentition be delayed, some preparation of lime is

\* Read before the Medical Section at the Annual Meeting of the British Medical Association in Sheffield.



useful. After the second or third year, cold bathing is most useful to counteract that peculiar sensitiveness to cold which is common in scrofulous children. More than ordinary care is needed in watching such children through the usual diseases of infancy and childhood, as whooping-cough, measles, scarlet fever, etc.; for we now know that pulmonary consumption often has its starting-point in the chronic pneumonia which frequently remains after these diseases, or the enlarged and inflamed glands which are a common sequel serve as foci of infection whence tubercular disease may be disseminated. It may be even necessary to extirpate such enlarged glands when they refuse to yield to constitutional treatment.

At the approach of puberty, we should look especially to the proper development of the thorax, we should see that the carriage of the body is such that the chest expands freely.\* Gymnastic exercises specially designed to draw the shoulders backwards and dilate the upper part of the chest should be adopted, but we should be exceedingly careful that these do not overtax the imperfect breathing power. Cold ablutions should be associated with these exercises. We should be careful to maintain the nutrition of the body, and especially ward off anæmic conditions. We should select for such persons occupations involving much out-of-door exercise, and avoid all those that are sedentary, or which lead to the breathing of impure air.

In the case of incomplete resolution of inflammations of the respiratory organs in such persons, much good has been obtained by a course of mineral waters containing soda and lime (Ems), and in bathing in such saline springs as those of Reichenhall and Soden. Such courses may be advantageously followed by a residence in an elevated region; but of this I shall have more to say when I deal with the question of climate.

(c.) The third division of this part of my subject, viz., the prevention of phthisis arising from unhealthy social conditions, occupations, habitations, etc., has already been so ably and fully dealt with at this meeting, that any further observation on this head from me would be superfluous.

2. I next pass to the consideration of those remedial measures which modern research has suggested as of use in phthisis. From amongst these I propose to select for our present consideration the following chiefly.

a. The use of the *alkaline hypophosphites*.

b. The use of antiseptic inhalations, and of the sulpho-carbolates internally.

c. The treatment of phthisis by rest (local rest).

d. The removal to mountain climates.

a. Nothing could be more unfortunate than the manner in which the alkaline hypophosphites were introduced to the notice of the medical profession as remedies for pulmonary consumption. An unreasoning, untrustworthy, and injudicious advocacy, provoked a hasty, impatient, and somewhat unjust antagonism. The absurd and extravagant claim for them that they were specific remedies for phthisis, was met by the equally unfounded statement that they were worthless and inert. I hope we are now in a position, disregarding alike their original quackish advocacy, on the one hand, and their hasty rejection, on the other, to form a calm and unbiased opinion as to their real merits. For my own part, knowing how difficult it is in treating cases of phthisis to judge accurately of the influence of the remedies we administer, because of the many counteracting agencies to which such patients are exposed, especially when they are out-door hospital patients, I determined, in forming my own estimate of the value of the hypophosphites to give them perseveringly in a great number of cases, and extend their trial over a long period of time. During the

last five years, at the Brompton Hospital alone, I have given the hypophosphites in one form or another to nearly a thousand patients selected out of more than fifteen thousand cases that have been under my care in that institution.

Any one who cares to look at the records of these cases will be forced to admit that these remedies have had a most patient and persevering trial. From this extended experience of these remedies I have been able to arrive at the following conclusions.

In the first place, they have *no claim whatever* to be regarded as specific remedies for tubercular disease; but they are of considerable value in a certain limited class of cases.

In advanced phthisis, with both lungs involved—a very prevalent condition amongst the out-patients at Brompton—I have never been able to discover that the hypophosphites are of any use. Nor are they of use in less advanced cases which are obviously running a rapid course, and are attended with much fever and cachexia. I have given them in such cases again and again, and I have been compelled to abandon their use, often at the solicitation of the patients themselves. In short, in those cases which we have always been accustomed to regard as hopeless and beyond the reach of all remedies, the hypophosphites are of no avail. I have noticed that they are less successful with dark persons of sanguine or bilious temperament, than with fair persons of phlegmatic temperament. They are much more useful in young than in older persons. I have seen the greatest benefit arise from their use, in the first place, in children in all forms of chronic lung-disease; and, in the second place, in young adults of fair complexion, not very cachectic or emaciated, and with disease limited to the upper part of one lung. In the cases in which they do good, their beneficial effect is generally noticed almost immediately. The patients usually say they feel very much better “in themselves”; they feel stronger, in better spirits, are more active, eat better, and sleep better. The night-sweats disappear, the cough sometimes disappears also; but it will often be observed that, while there is this general amelioration and a subjective feeling of improvement, the cough will continue unrelieved, and even occasionally become more troublesome. Notwithstanding the evident improvement in general health, the physical signs often remain the same, and I have known them actually increase in extent, while the patient has been feeling so much better that he has resumed his occupation, and declared that he felt “as well as ever he did in his life”. The improvement which follows the use of the hypophosphites is frequently only of temporary duration; this is especially the case with hospital out-patients. It is much less so with private patients, who can be more carefully watched and more thoroughly protected from adverse circumstances.

I have seen all the symptoms of phthisis disappear during the use of the hypophosphites, and the general condition as well as the physical signs undergo rapid amelioration. The patient has been, apparently quite well, but an imprudent visit to a theatre has resulted in a fresh catarrh, and the disease has again advanced with unusual rapidity; the former remedies were now quite useless, and, in a few months, the case ended fatally. It has, indeed, seemed to me that, in some of these cases where the hypophosphites led to temporary arrest of the disease, the subsequent advance has been unusually rapid and quickly fatal. I would therefore, urge that patients who are mending under the influence of these remedies should be protected with more than usual care against all those conditions which may possibly lead to a relapse.

Such are some of the results of my own observations with regard to the use of the alkaline hypophosphites in the treatment of pulmonary consumption, and I believe they are consistent with the conclusions of many other recent observers. Time forbids my entering into many interesting details, or quoting the records of illustrative cases.

[To be continued.]

## THE CAUSES OF THE SOUNDS OF THE HEART: REPLY TO DR. LEARED.

By W. H. BROADBENT, M.D., F.R.C.P.,  
Physician to St. Mary's Hospital, etc.

My friend Dr. Leared attributes to heat what was really due to haste. I found myself at issue with him as to matters of fact, and plainness of speech, I thought, would conduce to clearness of meaning; and we certainly understand each other thoroughly.

We are in flat contradiction on the point whether, in listening to the naked heart from which the blood has been cut off, it is possible to distinguish between sound produced by friction of the stethoscope against the heart and sound produced by sudden tension of the muscu-

\* Mr. Liebreich has given much attention to the correction of faulty attitudes and positions arising during school-life; and although his original object was to prevent and correct defects of vision, he has carried his observations further than this, and many of his remarks apply equally well to the rectification of those faulty attitudes which interfere with the healthy action of the organs of respiration, and promote the development of phthisical disease when a tendency to it exists. Speaking of the treatment of tendencies to spinal curvature, he observes: “If a hard surface is to give the back rest, without making it suffer, it must have certain curvatures so adapted to the normal shape of the body that this latter is supported everywhere, and its weight equally distributed. These curvatures I have carefully studied, and, following their outlines, I have designed a couch adapted to the inclination of the body at an angle of 45 deg. For girls who have any predisposition to lateral curvature of the spine, it will be found useful to let them do every work that will admit of it, while reclining on such couch at an angle of 45 deg.” (*School-Life in its Influence on Sight*, by R. Liebreich, Ophthalmic Surgeon at St. Thomas's Hospital). I have examined this couch, which can be seen at Callaghan's, optician, Bond Street; and it seems to me well calculated not only to support the back, but also to take the weight of the arms and shoulders off the upper part of the chest; for when these are allowed to hang forward, as in the stooping attitude habitual to many young people, they compress the upper part of the chest, and prevent due expansion of the apices of the lungs. I have, later on, called attention to some remarks of Professor Rindfleisch on this head.



lar walls of this organ. Dr. Leared says it is absolutely impossible. An universal negative is a very sweeping assertion—absolutely impossible to any and every human being. This is what Dr. Leared says, but I venture to think he means “absolutely impossible to me”; and I hope I shall have his thanks for the alteration I suggest. My own assertion then becomes, “It is easy to me”, and I have only to show how the element of friction is eliminated. Dr. Sibson found, as will be seen by reference to his *Medical Anatomy*, that there is a point on the anterior aspect of the heart towards which all other parts converge, and which is itself almost motionless. In all delicate observations, it was here that the stethoscope, which was flexible and had a small cup, was applied. There was no friction to hear. The statement which he quotes from Dr. Halford, “that neither first nor second sound was heard”, is beside the question. Dr. Leared must have heard sound under these conditions, as I have, or his assertion about it was simply unmeaning. Had he come to the same conclusion as Dr. Halford, I should probably never have written my remarks at all. The second sound disappears altogether, and the first becomes exceedingly feeble; but any sound that is audible must be entirely independent of friction.

As regards the anæmic aortic or pulmonic murmur, Dr. Leared accepts my correction, but endeavours to attenuate its effect. When he has restated the proposition put by him as a *crux*, which I challenged, with the modifications required by his admission that the murmur accompanies instead of replacing the sound, I will again consider it. In the meantime, I may give my own version of the question as it now stands. The argument, as I understood it, was, that the shock-sound being replaced by a murmur in consequence of the altered condition of the blood, the shock and murmur owned the same cause—collision or vibration of the blood. To this, my objection, admitted by Dr. Leared to be well founded, was fatal. The new ground now taken up is that, while it is impossible to deny that the sound and murmur coexist, this is only occasional, and the sound is feeble and degenerated; *i. e.*, apparently the sonorous vibrations are divided into shock and murmur. If, therefore, the shock-sound be not notably impaired when a murmur is present, the theory of the common origin of the first sound and murmur falls to the ground. We are now again in the field of observation. Unfortunately, the issue is not so simple and definite as when the coexistence of a sound and murmur only was in question. If it were, I should confidently expect an early surrender on this point also; for, according to my experience, not only does a first sound accompany an anæmic murmur, but this first sound is not otherwise diminished in intensity than through weak action of the heart. When, indeed, the heart's action is excited, the first sound is very loud, but sharp. The first sound must, of course, be sought where we hear it under other circumstances—at the apex or over the right ventricle, according as the murmur is aortic or pulmonary; and not for this occasion only over the aorta.

Dr. Leared's answers to my questions are before the reader, and there I am content to leave them, with one or two general observations. First, as to “the difficult question of the propagation and conduction of the sounds”, on which a part of these answers turns: I see no end to the discussion if we must cease to accept the recognised methods of localising the source of a sound whenever this is required by the exigencies of Dr. Leared's theory. Errors arising from the conduction of sound do not prevent us from forming a confident diagnosis in disease, and ought not to be invoked to break the force of an adverse observation. Another part of these answers turns on the difficulties attending the production of shock-sounds in fluids. This is exactly the reason why we, the “unbelievers”, are not even “convinced against our will”, and refuse to reject, in favour of so uncertain a cause, the sudden tension of membrane and muscle which must occur and which cannot but be attended with sound. If we deny to the valves any share in the production of the sounds, we must positively explain their silence. I tried in vain to obtain Dr. Leared's attention to this. Dr. Leared kindly informs me that, when I whistle, it is the air issuing from my lips which forms the sound. Quite so. But he wants me to believe also that the boom of the drum is formed in the same way. There is just the same difference between the murmurs and the sounds of the heart as between the “toot” of the fife and the “beat” of the drum.

I ought to conclude here, but my attention is specially called to the fact that there are instances in which the first sound is louder over the base than over the apex. Well, these exceptional cases would be an interesting clinical study; but they do not invalidate the rule, with which this discussion alone is concerned.

An explanation, again, is put in my mouth of the second sound sometimes heard (in the neck), together with an aortic regurgitant murmur, which I repudiate. I do not attribute this second sound, or any second sound, to vibration of the valves only. I am in this a

disciple of Dr. Markham, who showed that the elasticity of the valves, arterial and auriculo-ventricular, alike brings them into position to close the orifices before the pressure of the blood comes into operation; and of Dr. Sibson, who taught and proved that the second sound is produced by the sudden tension of the great vessel and valve together.

I feel that I owe an apology to Dr. Williams for intruding myself into this discussion. I did not consider that the great and imperishable monument of his work was shaken, or that it needed any support from me; but statements were confidently made which I could not but challenge, and I trust Dr. Williams will accept my apology, and with it my tribute of respect and admiration.

## ANIMAL VACCINATION.

By JOHN GREENE, L.R.C.P., Birmingham.

AT the present time, when the paucity of vaccine lymph is drawing public attention towards the question of supply, and when an impression is gaining ground that all available means are not employed by Government to that end, the right of anyone having a special and large experience of animal vaccination to express his views on that process will be granted.

I will premise that, in pressing forward, I am impelled by no mere love of change, but by a conviction that certain facts connected with vaccination have not as yet received a due recognition by those in authority, or, at any rate, if received, have not had a proper sequence of action. Further, I am not an advocate for the substitution of ordinary arm-to-arm vaccination by that direct from the calf; I desire merely to secure the advantages which that system affords as a means for the cultivation and renewal of the virus, and as a reserve source of supply in time of temporary pressure, the former being the chief aim; that a certain percentage of the population may, either by preference or direction, be inoculated from animal-vaccine, would be simply a necessary incident. In my pamphlet, *Good Vaccine Lymph*, 1871, I endeavoured to prove the necessity of an occasional renewal of the virus from a primary source, taking as my text an unknown or forgotten paper of Jenner, “Instructions for Vaccine Inoculation”, found amongst the medical papers of my grandfather. The opinion expressed in this pamphlet received the cordial adhesion of many leading members of the profession, particularly of Mr. Robert Ceely, the well known author of those remarkable papers on the “Variolæ Vaccinæ”, than which, as evidence of close and accurate scientific observation, it is impossible to conceive anything more complete.

In 1853, the responsibility of keeping the virus up to a high state of efficiency hitherto resting with the profession, which by individual enthusiasm had nobly justified public reliance, was transferred *ipso facto* by Lord Lyttelton's Act to the legislature. That *verve* which responsibility gave to individual effort was extinguished, interest in the question for the time being paled before the universality of the practice and the supposed infallibility of the genius of public law.

This important duty so transferred has, since this Act, been fulfilled on the narrow basis of departmental opinion existing at that time and since. The radical defect of the law is, that, while stringently forcing upon the nation a certain saving virus, it has not taken a sufficiently broad view of the possible necessities of its nature and origin; as the use of this virus is compulsive, it is essential that the ruling idea concerning its source should be perfect at all points and satisfactorily ample in its dimensions, not only for the sake of disarming possibly ignorant suspicions, but for the conservation of its high prophylactic power.

It was, of course, much the pleasanter and smoother road for the learned framers of the Act to adopt the theory of unchangeability in the lymph under official supervision, rather than the weary and difficult path of those who from time to time sought to produce a new stock of high standard in relation to variola. It is not the first time that difficulty has been hidden under the cloak of dogma, and all in good faith has been done; for the evidence in favour of non-degeneration is certainly strong, till contrasted with the opposing facts and arguments which have accumulated and grown stronger since the time in question.

In all observations on the course of the vaccine in the human subject, it has not been sufficiently stated whether the presence of the typical vesicle in the vaccinations of a given stock has been meant to express that such was the average condition, the numerical majority. An experienced vaccinator is well aware that a number of children may be vaccinated from a weak or doubtful stock, and yet that certain of them will unfailingly exhibit a good vesicle, and *vice versa*. The superiority of “the most active kind of virus” (Jenner) over a poor virus is simply that it raises the average number of vesicles of the actual or ap-



proximate Jennerian type, or vesicles in conformity on all points with Jenner's description.

We might ask those who assert the unchangeability of lymph to carefully compare any old stock, Jennerian or otherwise, that has been in use for many years, with a stock of lymph of an active kind whose date of origin from cow-pox is only three or four years previous, and which at the same time has been subject to equally good conditions of preservation as the old one; or to compare the product of the old lymph with the exact description by Jenner in his "Instructions for Vaccine Inoculation"; they will find, as indeed is acknowledged by both sides in the controversy, though attempted to be explained away by the *semper eadem* phalanx, that there are marked differences, particularly with respect to the comparative frequency of certain transient epidemic occurrences or sequelæ. Whether these differences are important, is a matter upon which the right of freedom of opinion should be conceded and opportunity afforded by the State for that freedom to exercise itself in action. Let us remember, before we dogmatise, how little is known of the true life-history of any of these contagious disorders, or what is the influence that at certain times raises or lowers their virulence. The subject is full of anomalies and unanswered riddles, and so is the practice of vaccination, both animal and human.

If a public vaccinator observe a falling off in the power of his lymph, in a plain uncompromising manner he first seeks the cause, probably fails, and then proceeds to his remedy. If he have a very large *clientèle*, he may attempt to bring it up again by patient selection; if he fail in this, or his *clientèle* be not really large enough for such a trial, he resorts, say, to the National Vaccine Institution, and receives by post lymph taken at hazard from the bulk of that in store, which has been supplied and paid for from numerous vaccination stations in correspondence with the institution; the only guarantees of value being, first, that afforded by the naked eye or a pocket-lens as to whether segregation has taken place, or epithelial or other deposit impairing its brightness; and, secondly, the periodical visit of the inspector.

It is probable that the critical duties of these gentlemen are not severely taxed. Owing to the care taken in the choice of public vaccinators, any fault existing cannot fairly be laid upon these gentlemen, but upon the system, a system which, I advance, is certainly calculated to produce a tolerable uniformity in the vaccination throughout the country, but an uniformity of a lower standard than ought to emanate through the Post Office from the central fountain of renewals. Is it proposed to continue this system as the *ne plus ultra*?

It has been here assumed that the public vaccinator has had recourse to the "National Vaccine Institution". But suppose, from his great care and other favourable conditions, that his type of vaccination is remarkably permanent, it is yet possible to conceive that those actual differences between old and new lymph, often described and discussed, and which frequently make themselves suddenly apparent, may also be created so gradually as to escape observation for years. There would always be a few children exhibiting an approximately typical vesicle resulting from the compromise between receptivity and inoculability, neither of which attributes has a fixed but a fluctuating value; the movement depending not only upon the vaccinator, as the selector of propagating specimens, but, perhaps upon some additional unknown influence.

Even on such a ground as this, it is unfair and impolitic to afford no opportunity for the use of recent lymph to such persons as desire it. Jenner himself noticed no change in his lymph after twenty years, but his judgment did not dogmatise; he said in reference to this question, "Time alone will show". Now that time has come; we are in the midst of a sharp epidemic of variola, occurring in a population living for many years past under a coercive vaccination act. The dimensions of the epidemic of the last four years cannot surely be explained away by the mere increase of the population; it would be almost a pity if figures could prove this, lest it should help to make us satisfied with a bad state of things.

During the first half of this century was observed a continually increasing popularity of vaccination and diminishing of small-pox, are we not now threatened with a reverse movement; increasing small-pox and diminishing *prestige* of vaccination? In the defect of the vaccine administration lies the strength of the anti-vaccinators. It is not wise to exercise activity in the direction of prosecution only, but in satisfying the public on the question of the origin of lymph. Jenner himself states that an imperfect variolous inoculation will not protect from variola; much less likely, then, is an imperfect vaccinal inoculation to do so.

It should be remembered, that in robbing small-pox of its contagious power by our artful scheme of passing it through the body of a cow, we do rob it of half its nature, its most virulent half, and retain only its milder power of infection. How then are we, with this dwarfed and semi-hybrid product, to fight against contagious small-pox, unless

we take along with us the constant effort to approximate it, as nearly as may be consistent with safety, to its original character? And if we find that certain virulent yet safe qualities (the absence or presence of which must be judged of by average) are in effect absent, we must immediately seek a method to recover them.

Let us try to lower the present small-pox death-rate by raising the standard of the virus, accentuating its constitutional impression and encouraging revaccination by bending slightly to prejudice, whether well founded or not, when that bending will not entail any loss of value. It is here suggested that the authorities having charge in this country of the administration of the vaccination laws, shall add to their resources by instituting the practice of animal vaccination as a supplementary method in aid, but in no sense to supersede, the present arrangements.

By limiting the production of animal lymph to one central establishment, they will at once proclaim the undesirability of adopting it as a means of general vaccination, and by a concentration of attention render of certain issue such public benefit as the system has been proved to possess by the extensive experience of many places on the continent, and, to a slight extent, by private effort at home. The one thing essential is, that such an establishment should be carefully sheltered from the pernicious effect of a popular rush; in other words, that the distribution of such lymph should be regulated not by the demand but by the easy capability of the resources of the day, jealously bearing in mind that the chief *raison d'être* would be the supply of an unimpeachable lymph for the purposes of renewal. That many persons would by preference be vaccinated in this way there is no doubt; but proper restrictions would be sufficient check to prevent any excess in number without impairing the liberty of those whose minds were set upon it, and who entertained a conscientious objection to hominal lymph.

The above considerations need not prevent the employment of animal vaccination for the production of virus for revaccination in time of epidemic variola; but this would require even more stringently an unflinching application of the rules in detail as the danger of drawing non-effective lymph from pocks that would not mature would be increased by the pressure of demand. The experience at Brussels is here most valuable, and shows a success in revaccination by different Belgian physicians using dry points of 63 per cent. My own success in revaccination in Birmingham in 1870-71 direct from the animal, and counting in the few more vaccinal successes, goes still higher, reaching 75 per cent.

The *laissez faire* system, so natural to the English character and so often wise, is, with regard to animal vaccination, a most unfortunate one. At this critical time for Jenner's great discovery, no looseness of practice should exist. The directing influence of authority over every single case of vaccination should be felt more and more; but, if things are left alone, numerous establishments for animal vaccination will arise entirely without control, and in the hands of gentlemen who, striving to do good, yet may possibly lack experience, material resource, and even sometimes the necessary firmness in selection. The last state of things might be worse than the first. I appeal, through these columns, to the medical advisers of Her Majesty's Government to inquire again into the matter; and to see if I am not right in thinking that, if animal vaccination must be practised, it should be under Privy Council regulation, which no one would more welcome than those gentlemen whose convictions have led them in this direction.

I desire now to mention a few of the opinions formed upon the subject after eight years' experience, during which time from four hundred to five hundred animals have been inoculated by me, either for vaccination or the purposes of experiment; some of these thoughts I have lately expressed in "Practical Notes on Vaccination" (*Birmingham Medical Review* for October last). At present, it will be useful to briefly reiterate several points. During the above eight years, I have never seen any serious effect follow from the lymph being too severe in its operation, as has been asserted; in two cases at the most (revaccination) have I seen a rather deep excavation ensue, accountable for by the state of the patient's health at the time; in neither of these cases was the healing a protracted affair. In the first and second removes, the local effect is increased in intensity, requiring a somewhat more guarded insertion; but with that limitation, no dread of its action need be entertained; it speedily loses this acrimony, and succeeds on the human subject pretty much as the cow-pox lymph itself, with a very slight average acceleration. The excellence and high standard of cow-pox preserved and cultivated on the bodies of calves, equally with human lymph, is liable to lose in time a portion of its activity.

The lymph at present in use at Brussels is a very excellent lymph, but scarcely so active as the lymph of the Esneaux source employed some years ago, or quite so tenacious of its vitality. I know of no



lymph better than the Brussels stock, yet it must yield in several ways to that formerly in use.

It is unfortunate that the various Governments abroad, which carry on animal vaccination, have not accepted the most important fact concerning the origin of the vaccine disease that has been enunciated since Dr. Jenner's time; and it is singular that it was the incongruity of his opinions thereon which, a score of years after his death, actually gave the impetus to the discovery of the truth by Mr. Robert Ceely. Strange, too, is it that Jenner should have failed to grasp that other integral portion of a dual fact that, not only would vaccination protect from variola, but that small-pox of cows was the small-pox of humanity in the cows. There is traditional evidence to prove that this latter knowledge was equally the property of the vulgar, as was the first proposition from which Jenner acknowledges he derived his earliest inspiration. Small-pox was occasionally inoculated upon the cow previously to its use on the human subject, in order "to make it mild".

The first Vaccination Act was cotemporary with Mr. Ceely's observations on this head, and before the world had been enlightened by them as to what the vaccine disease really was. Lord Ellenborough, by expressly forbidding small-pox inoculation, almost seems to have been a party to the continuance, up to the present date, of the false notion that vaccinia was something essentially different from variola, whilst clearly enough protecting from it.

It is wonderful that such a fact should not have carried with it a conviction of its identity of origin. Had Mr. Ceely's observations been made a few years earlier, or had Jenner, in the young bud of his enthusiasm, as clearly elucidated the origin of vaccinia as he did its effects, there is little doubt that the Act of 1840, when forbidding small-pox inoculation, would have added the words "without first transmitting the virus through the cow".

The animal vaccinators of the Continent, were they yet fully aware of the relation of small-pox and cow-pox, would not wait for years till some case of accidental contagion turned up, enabling them to make a fresh start, with trumpet-sound, from a "*spontaneous case*". I sincerely hope that, if ever the Government here should decide to cultivate vaccine lymph or calves, as a supplement to the present method, that they will entertain no illusions of this kind, but produce the article they require by exposing animals, from time to time, either to infection or direct inoculation as may be best, thus reproducing the conditions existing when this hybrid disease was comparatively common.

At present, there is no desire apparent at head-quarters to renew the lymph. In September last, supposed cow-pox broke out in a farm near Canterbury. The authorities were informed of this, but declined to take any steps, saying that they did not use cow-pox lymph; however, in this case, they were fortunate in their immobility. I performed a kind of modern Canterbury pilgrimage, including a mortification, upon finding the complaint to be that dreadfully monotonous "white vesicle". One of the causes of the well-known differences in power of primary stocks may possibly be due to whether the animal has been affected by contagion or by inoculation. The task, however, of producing vaccinia from variola is not an easy one, yet further experience would make it less difficult; it has been done in England many times by Ceely and Badcock, and once by myself. (See "Practical Notes on Vaccination", *Birmingham Medical Review*, Oct. 1876.)

## THERAPEUTIC MEMORANDA.

### ON THE INFLUENCE OF SALICYLIC ACID IN TYPHOID FEVER.

THE following case is an instance of the remarkable fall of temperature caused by the use of salicylic acid. The patient, a boy aged 14, had typhoid fever. He was given salicylic acid in ten-grain doses every four hours. On the twelfth day of the fever, I found that his temperature had risen to 103½ deg. Fahr., and his pulse to 116; moreover, he was somewhat comatose, his tongue very dry and furred, in consequence of his parents having left off the medicine as he had had four liquid stools. I immediately increased the dose to twelve grains every three hours, and his brandy to three ounces daily. On the following evening (*i.e.*, twenty-four hours after), his temperature had fallen to 101 deg. Fahr. and his pulse to 104; tongue moist and cleaner. He also readily answered any questions put to him. The medicine was then given every four hours, and the boy is now convalescent. In this case, a fall of nearly three degrees took place on the resumption of the acid.

In another case that presented all the symptoms of a severe attack of typhoid, this drug apparently cut it short.

E. A. SNELL, City Road.

## TREATMENT OF RINGWORM BY GOA POWDER.

IN several articles recently published in the *BRITISH MEDICAL JOURNAL*, the virtues of this remedy have been discussed. Having formerly been a resident in the East for nearly two years, and having treated a large number of cases of the so-called "Doby's ringworm", or *trinea circinata*, both among natives and Europeans, I may add my mite to the inquiry. This disease, which is so common in India and China that almost every individual becomes at some period affected with it, is successfully treated with several external applications, such as tincture of iodine, solutions of mercury, etc. Undoubtedly, the most certain and rapid is that of Goa powder. I have found, in acute cases, that one application was usually followed by recovery. In chronic cases, two or three may have been necessary to thoroughly eradicate the disease. In no single instance do I remember the employment of this drug to have failed in effecting the object desired.

A. HUGHES BENNETT, M.D., M.R.C.P., Medical Registrar,  
Westminster Hospital.

## TREATMENT OF RINGWORM BY THE TINCTURE OF PERCHLORIDE OF IRON.

AMONGST the many remedies that have been recommended for this common and sometimes intractable disease, I have observed lately notices of the Goa powder, cassia lata, and chrysophanic acid, but have failed to observe any reference to the treatment of the disease by the use of the tincture of perchloride of iron. I have tried it on several occasions with most satisfactory results; sometimes, one application being sufficient to effect a complete cure. It is a clean and simple remedy, well worthy of attention. I have known cases do well under the application of common ink; this, I presume, must be owing to the iron it contains.

JAMES DOBBIE, M.D., F.F.P.S. Glas., Hillhead.

## THE RESPIRATOR-INHALER.

A VERY useful respirator-inhaler was shown in London more than twelve months ago by Mr. Carrick of Glasgow. It consists of a hollow breast-plate divided into two compartments. The larger of these contains a piece of felt; the smaller one can receive, when desired, a piece of sponge to be impregnated with medicinal solution. There is, moreover, a piece of India-rubber tubing and a mouth-piece. The breast-plate is about five inches long by three inches and a half broad and half an inch thick, and is worn inside the coat. Thus the heat of the body volatilises the inhalant, and the patient can sit, stand, or walk about while occupied in inhalation. The layer of felt in the respirator acts as an efficient filter of the inhaled air, so that Mr. Carrick, while wearing his respirator, was able to remain some time in a cloud of smoke produced by the combustion of damp straw, the smoke from which is especially distressing and suffocative. I am induced to send these few remarks from seeing the notice in the *JOURNAL* of Dr. William Roberts's respirator-inhaler. Carrick's respirator and also his very complete inhaler are sold by Messrs. Beaumont and Co., 1, Cecil Street, Strand.

JOHN C. THOROWGOOD, M.D., F.R.C.P., Welbeck Street.

## OBSTETRIC MEMORANDA.

### OCCURRENCE OF CONFLUENT SMALL-POX AT THE SEVENTH MONTH OF PREGNANCY.

I WAS called to Mrs. H. on June 7th, 1874, the messenger stating her to be in labour. Upon arrival, I found her very feverish, vomiting, with intense pain in the back. Upon examination, the os uteri was found quite closed and rigid, the vagina dry and hot. As small-pox was then prevalent in the town, I felt sure she was beginning to have it, and prescribed accordingly. The next day, the whole body was covered with the confluent eruption, and the case went through a most severe course. The treatment pursued was exclusion of light, with nitric acid and liq. arsenicalis internally. She made a good recovery, with but slight pitting. She went to the full term, when she was delivered by my assistant of a female child, strong and healthy in every way, and quite free from any indication of the mother's illness. When the child was two months old, I vaccinated it, in the first place with points, without effect; I then tried capillary tubes, with the same result. After that, I vaccinated from arm to arm, without any effect or slightest redness produced. I think the insusceptibility to vaccination may clearly be traced to the fact of the child having had small-pox in the uterus.

HENRY ROBINSON, L.R.C.P.Ed., Chesterfield.



## CLINICAL MEMORANDA.

## ADMINISTRATION OF ETHER.

RECENTLY I gave to a girl aged 10, a patient of Mr. Jessop, first chloroform gently for four minutes, then ether pretty freely on an American (gridiron) inhaler for twenty minutes or more. The girl was not very strong. Mr. Jessop removed from her neck a disfiguring scar and a suppurating strumous gland beneath. Slight stertor was occasionally present, but she readily became sensitive if the ether were diminished during the operation. The pulse was at first fair, though not so full as it often becomes during the administration of ether; but towards the end the breathing became rather slow, the face somewhat pallid, and the pulse irregular and small. Upon removal of the inhaler, there was no improvement; the pulse became worse and worse. Fresh air was freely admitted to the room, and hot brandy and water given by teaspoonfuls to the girl, still unconscious. The brandy restored the pulse, but it was necessary to give it every three or four minutes for more than an hour, the pulse failing again otherwise. Then she began to take the brandy voluntarily and to speak. The treatment was continued at longer intervals by the attendants. She is now doing well.

T. CHURTON, M.B., Leeds.

## REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN  
THE HOSPITALS AND ASYLUMS  
OF GREAT BRITAIN.

## LOCK HOSPITAL.

SYMPTOMS OF POISONING FOLLOWING THE APPLICATION OF  
EXTRACT OF BELLADONNA TO THE SCROTUM.

(Under the care of Mr. ALFRED COOPER.)

FOR the following report, we are indebted to Mr. Arthur Cooper, House-Surgeon, Male Lock Hospital.

H. H., aged 26, suffering from syphilitic orchitis, was admitted under the care of Mr. Alfred Cooper on November 30th, 1876.

On December 14th, in consequence of pain in the parts, Mr. Cooper ordered equal parts of mercurial ointment and extract of belladonna to be applied to the scrotum, which was not noticed to be at all excoriated. The application was continued up to the evening of December 16th, when the patient became delirious. At 6.30 P.M., his condition was as follows. He was very restless and noisy. He was continually getting in and out of bed, and talking loudly and incoherently to imaginary persons, who, he said, were trying to take away his bed-clothes. He complained of faintness, and of soreness and dryness of the throat and pain across the forehead. He had vomited once, and had been several times to the water-closet. He said his sight was all right, but evidently did not know what he was saying. Temperature 98.5 deg.; pulse 140, very weak. The skin was moist; the face flushed. There was no rash. The pupils were very widely dilated and quite insensible to light. He was ordered a warm bath, and the scrotum to be thoroughly cleansed; and to have an ounce of brandy in hot water.

9.45 P.M. He was still very restless. The pupils were as before. Pulse 114. He was ordered half a drachm of liquor morphine in a glass of hot brandy and water.

December 17th. He slept for a short time after the draught last night; then awoke and was very noisy, and at times violent, during the whole night. He went to sleep about 5.30 A.M., and slept for about five hours, after which he awoke and ate a hearty breakfast. —10.30 A.M. He said he felt better; he answered rationally. He could read print now, but said the letters became misty and ran into each other yesterday before the delirium came on. There was no diplopia. He did not complain of any pain. The throat was less dry; there was no rash; the pupils were slight smaller, still insensible to light; temperature 98.8 deg.; pulse 100.

December 18th. He slept a great deal yesterday. He had retention of urine; the catheter was passed. The urine was clear and non-albuminous. The pupils contracted slightly to light; temperature 97.6 deg.; pulse 92.

December 19th. He passed urine naturally. The pupils were rather more sensitive. Pulse 86.

Nothing worthy of note occurred after this date. The pupils did not become normal until about a week after the attack. The patient left the hospital on December 28th.

## HANTS COUNTY ASYLUM.

CONGENITAL HYDROCEPHALIC IMBECILITY: POST MORTEM EXAMINATION: ABNORMALLY HEAVY BRAIN: REMARKS.

(Under the care of Dr. MANLEY.)

FOR the report of the following case we are indebted to Edward G. Levinge, M.B., late Assistant Medical Officer, Hants County Asylum.

H. J. J., aged 19, was admitted on April 4th, 1865, and stated to be weak from birth; at times obstinate, violent, and dangerous, and of a sullen, dogged, and hardened behaviour when reproved. On admission, he was said to be weak in mind, but not totally lost. The subsequent entries in the case-book say, that his memory was good, and that he was possessed of some mental power, but not to any extent; that he worked in the tailor's shop, having been apprenticed to this trade.

For some years there does not seem to have been any appreciable change in his condition. Though somewhat moody and slow, he continued regularly at light employment, either with the tailor, in the wards, or about the grounds of the asylum; and, from his obliging, willing, gentle, and harmless disposition, was a general favourite. About two years since, his bodily condition began to fail; he lost flesh, and symptoms of chronic phthisis were gradually developed. These continued, and, at Christmas 1875, he was much more feeble; was much troubled by cough, sweats, and gastric irritability, coming on after taking food. He remained in this state till about two months before his death, and was removed to the infirmary ward, where he rapidly became more exhausted, and died on March 14th, 1876.

POST MORTEM EXAMINATION, thirty-eight hours after death.—Age 30 years. Height 5 feet 8 inches. The body was fairly nourished. The right lung, which was firmly adherent to the thoracic parietes, as well as to the internal structures adjoining it, and, in consequence, could not be removed entire, was totally disorganised and studded throughout with suppurating tubercle. The left lung was also adherent, except part of its middle and lower lobes, which were the only portions capable of carrying on respiration; its substance was likewise undergoing tubercular disintegration, and here and there gave place to small vomicae. The heart weighed 11½ ounces; its cavities contained both light- and dark-coloured clots, and appeared dilated, but otherwise normal; its valves were healthy. No other thoracic or abdominal viscus was removed. The calvarium was of average density and fairly symmetrical, but its contour presented four distinct prominences; anteriorly, both frontal eminences were unusually large, whilst on each side, in the region of the posterior superior angle of the temporal bone, there was an abnormal projection. When the calvarium was removed, the brain looked plump, and appeared as if it had filled up its cavity completely. The arachnoid membrane, superiorly and at the sides, was slightly thickened and opaque, but there was no appearance of tubercular deposit either in the membranes or at the base. The vessels generally were engorged with dark blood. There was no apparent wasting of the convolutions, and the brain-substance on slicing was fairly firm. The lateral ventricles, which were slightly dilated and extended abnormally far backwards,\* contained very little fluid, which, together with what escaped in the removal of the brain and that afterwards collected, amounted to about four and a half ounces. There were no other structural lesions observed.

*Dimensions of Head. By Tape.*—Circumference (maximum), 14½ inches; antero-posterior, 15½ inches; † transverse, 12½ inches. ‡

*Diameter. By Calipers.*—Antero-posterior (maximum) 8 inches; transverse (maximum), 6 inches; antero-posterior, 7½ inches; † transverse, 6 inches. ‡

*Brain-Weights.*—Cerebrum, sliced and strained, 63 ounces, or 1786.185 grammes; cerebellum, pons, and medulla, 7½ ounces, or 212.62 grammes.

REMARKS.—In treating of the foregoing case, I have purposely adopted the term hydrocephalic in the heading, because it is the one usually applied to abnormally large-headed individuals, and because it is that by which, pathologically regarded, H. J. J. was always spoken

\* In the Psychological Retrospect of the *Journal of Mental Science* for October 1876 (p. 473), the reviewer makes Dr. Meynert say, "hydrocephalus congenitus extends the lateral ventricles in their long diameter, and pushes back the posterior horn, so that it sometimes comes within a few lines of the surface".

† From root of nose to occipital protuberance.

‡ From ear to ear.

of during life; yet, in speaking of the case *post mortem*, I cannot help thinking it a misnomer, because the amount of fluid including the blood which drained from the engorged vessels, was little, if at all, above the average, especially when we take into consideration what must have been the cranial capacity of the individual; in fact, the term hydrocephalic appears to have gradually come to be used to express a condition the opposite of microcephalic. In the third edition of the *Manual of Psychological Medicine*, by Drs. Bucknill and Tuke, at page 169, the writer, in enumerating the points to be kept prominently in view in determining whether a child is idiotic, makes use of the following expression: "the form of the head, whether microcephalic or hydrocephalic, or unsymmetrical". The word megalcephalic, introduced by Professor Lucae and adopted by Dr. Thurnam in his article on "The Weight of the Brain and on the Circumstances affecting it", in the number of the *Journal of Mental Science* for April 1866, seems to be preferable, as not implying a speculative pathological condition, for I am not aware of any test by which we can during life, with anything amounting to certainty, conclude that a condition\* of hydrocephaly exists. The word macrocephalic seems to have objections\* to its use.

Perhaps it would be interesting to compare the weight in this case with a few of the other remarkably large brains on record. In the first place, I would draw attention to the fact that a very considerable number of the abnormally heavy brains of those dying insane, have been met with either amongst epileptics or those of mental deficiency. Can this, in the former, be due to the pathological conditions of congestion or induration commonly seen in those dying of epilepsy? In the case of the latter, especially in that before us, I think it is a reasonable conjecture that this hitherto, so far as I am aware, unprecedented weight of the brain-mass, may have been due to that condition of hypertrophy of the brain which, according to Dr. Brunet (*Annales Médico-Physiologiques* for June 1874), may exist either with or without induration, and which gives rise to "an increase in the weight of that organ due to a disorder of nutrition leading to an alteration in the nervous substance".† *A propos* of this subject I may mention, that Dr. Brunet says he has met with two cases of it in idiots, in one of which, an epileptic mute, "the brain was very voluminous, and found two well-marked projections posteriorly".‡

Of the recorded weights of morbid brains to which I have been able to refer, the nearest approach to the weight in this instance is that mentioned by Dr. Bucknill, in which the brain of a male epileptic aged 37, weighed 64.5 ounces (which was also the weight of Cuvier's brain, who is said to have been hydrocephalic when young); or, if we allow for the average difference of 4.5 ounces between the sexes, that reported by Dr. Skae as being found in a female monomaniac aged 39, in which the brain weighed 61.5 ounces. Again, the heaviest brain recorded by Dr. Thurnam, 62 ounces, out of an examination of four hundred and seventy cases at the Wilts County Asylum, was that of an epileptic aged 26; and the heaviest but one mentioned by M. Parchappe, in his very extensive series, is that of a male epileptic, in which the organ weighed 61.3 ounces.

Of the fifty cases of weights of idiots' brains furnished by Dr. Down to Dr. Thurnam, the heaviest, 59.5 ounces, occurred in a male aged 22, and is only slightly exceeded by that recorded by Dr. J. Batty Tuke, where the brain of a male aged 37, and labouring under a similar disease, weighed 60 ounces. Again, in the seven hundred and sixteen cases of brain-weights in the insane, reported by Mr. Crochley Clapham in the third volume of the *West Riding Asylum Medical Reports*, the heaviest, 61 ounces, was met with in a case of senile dementia, which, if we allow for the supposed decrease in the weight of the organ after a certain age is attained, would at one time have stood high in the list of abnormally heavy brains.

In recording the above case, I am fully sensible of the meagreness of the details, and of the imperfection of the *post mortem* examination; but my principal object was to draw attention to the weight of the encephalic mass, and to contrast it with some of the other remarkable cases reported. With this object, I thought that a few short notes of the mental condition of the patient on his admission and during his residence in the asylum would suffice, and would make the case of more interest, while they would also strengthen the disputed point, that the intellectual capacity of an individual does not altogether depend on the size of his brain; and, further, that a large brain is compatible with mental obtuseness; for though this man was by no means devoid of intelligence, yet he could not be regarded as *compos mentis*.

\* See Dr. Thurnam's paper, *op. cit.*, page 25.

† I quote from the review of his paper, *op. cit.*, in the *Psychological Retrospect* of the *Journal of Mental Science* for April 1875, pp. 120-21.

## REVIEWS AND NOTICES.

THE PHILOSOPHICAL WORKS OF DAVID HUME. Edited, with preliminary Dissertations and Notes, by T. H. GREEN of Balliol College, Oxford, and T. H. GROSE of Queen's College, Oxford. Four volumes. London: Longmans, Green and Co.

SUCH of the readers of this JOURNAL as take a special interest in psychological questions must have remarked of late decided signs of a philosophical reaction in England. The leaders of science and thought were until recently almost unanimous in their allegiance to Mill, at least upon ultimate questions. The accepted philosophy was in all its forms a modification of Hume: a theory of experience based upon sensation and association. But a new tendency is now beginning to show itself. With the recent political triumph of Germany, a language and literature of which our fathers knew little has suddenly become popular; and, among that class of students who take kindly to ambitious metaphysics, there is a growing restlessness under the rule of Mill, and a desire to transplant the hard sayings of Kant and Hegel into serviceable English, and so found a new school.

It is this which gives a special importance to the present reprint of Hume, or rather, to the long and powerful introductions which Mr. T. H. GREEN has prefixed to the first two volumes. It behoves all who are loyal to the reigning philosophy to take note of them; for they are the prelude to a determined attack. Mr. Green is the leader of a band of young Oxonians who have conspired together to undermine or overthrow the dominant school.

The new editor of Hume regards him as our last true philosopher. He received from Locke the accepted method of an empirical sensationalism, worked it out to the bottom, and proved, not as its enemy, but as its friend, that there was nothing in it. All that has followed has been "a régime of strenua inertia"—a threshing of old straw by sanguine disciples, who failed to see the true meaning of their master's work. To quote Mr. Green's own words: "Adopting the premises and method of Locke, Hume cleared them of all illogical adaptations to popular belief, and experimented with them on the body of professed knowledge. As a result of the experiment, the method which began with professing to explain knowledge showed knowledge to be impossible. Hume himself was perfectly cognisant of this result; but his successors in England and Scotland would seem so far to have been unable to look it in the face. They have either thrust their heads again into the bush of uncriticised belief, or they have gone on elaborating Hume's doctrine of association, in apparent forgetfulness of Hume's own proof of its insufficiency to account for an intelligent, as opposed to a merely instinctive or habitual, experience. An inquiry, however, so thorough and passionless as the *Treatise of Human Nature* could not be in vain; and, if no English athlete had strength to carry on the torch, it was transferred to a more vigorous line in Germany. It awoke Kant, as he used to say, from his 'dogmatic slumber', to put him into that state of mind by some called wonder, by others doubt, in which all true philosophy begins."

The critic accordingly starts at once with Locke, and endeavours to state his position with rigid accuracy, an attempt which leads to some ludicrous results when Mr. Green's ruthless collation brings to light the inevitable inconsistencies of so *naïf* and so rambling a writer. Locke's problem was "the origin of ideas in the individual man, and their connection as constituting knowledge"; his method was "looking into his own understanding and seeing how it wrought". Mr. Green asks at once, "Is such observation possible?" "Common sense" has always believed in it; but the physiologists, the positivists, and the Hegelians have rejected it. He proceeds to show that this "imaginary method" involves several absurd positions. How can the constituted mind observe its own assumed original state—the *tabula rasa*? Or, again, has Locke given an intelligible account of the "original of our ideas?" The answer is, that Locke made a confusion between the object of consciousness (which he talks of as an "idea of sensation") and "a possible physical theory of the conditions of consciousness"; that, namely, of "an impression made on some part of the body and continued to the brain". Locke uses the very same term as Hume did afterwards for the sun as a seen object, and for the impression made on the retina, continued to the brain, and transferred somehow to the "tablet of the mind". They are equally "ideas of sensation"; and thus we come at last to talk as if they were the same thing. Locke, in fact, tells us frankly that he may sometimes use "ideas in the things themselves" where he means "those qualities in the object which produce them in us", and conversely. And thereupon he takes leave to drift away into an endless confusion. But Mr. Green insists that "this question is the *crux* of empirical psychology". If the "simple



idea" be a mere feeling, we cannot explain the genesis of knowledge as an apprehension of the real; if the "simple idea" be a "quality of a thing," we virtually endow the nascent intelligence with the conception of substance, although, as Locke and all his followers hold, such a conception is only formed by a long process of abstraction at a far later stage in the development of the mind. This last point is the pith of the whole argument, and it recurs accordingly in a multitude of forms. Empiricism holds that all general ideas—substance, relation, and the like—are abstract; obtained, that is to say, not immediately from any impression, but mediately by the comparison of impressions and by abstracting from them that in which they agree. Such abstract conceptions, therefore, must be subsequent to our first perception of particular houses, ships, and other substances. Mr. Green contends, on the basis of the theory of Kant, that our first perception of any particular substance already implies a "conception of substance" or an "idea of relation"; and that, without presupposing in the mind at least the idea of relation, all perception would be impossible. For a mere feeling is not the same thing as the perception of a definite object; on the contrary, it is notoriously an unsubstantial momentary affection that passes away in the flux of our sensations. Locke, Hume, Mill, all assume that a mind commences by being first one mere feeling, then another, and so on; but that these feelings do link themselves together, associate themselves, and so form in the end one intelligent experience. Is this possible at all? Does it not at the very outset assume that there was something more than now a mere feeling, now another? These moments of feeling, as such, have no relation to each other, and can have none. It is true that, when we have attended to a feeling, noted it, and fixed it down, we then find it is similar or different; we compare this observed feeling with other observed feelings. But the very words we use imply that it is no longer mere feeling; it is feeling made definite by relation. Mr. Green believes, then, that the English school has fallen into utter confusion by neglecting this fundamental question. They have sought to find a genesis of knowledge out of mere feelings, ideas, impressions, and have overlooked the fact that, wherever they seemed to succeed, they had really, by confused or ambiguous expressions, smuggled in at the outset the ideas of relation, substance, cause, and which they thought they were evolving in the conclusion.

To many, all this will appear to be abstruse quibbling; but it has a very vital bearing on the philosophy of science; for the writer proceeds to show, by a careful argument too long for quotation, that, upon Locke's sensational theory of psychology, no science of Nature was possible. Locke himself saw this, though he speaks with hesitation; and Hume made it the basis of all his scepticism. Mill's logic, however, ignores it altogether, and, therefore, Mr. Green believes that Mill has failed to give a true account of the philosophic basis of research. No one, of course, doubts the truth and value of the achievements of science; they justify themselves; but it is none the less needful that our philosophic creed should justify them also. Although it treated only of methods, Mill's logic made an epoch in the history of science, and it is a serious thing that it should be attacked as an erroneous and inconsistent doctrine.

It would be out of place to follow the writer through the whole of his closely reasoned account of the inconsistencies of Locke, and the way in which they compelled first Berkeley and then Hume to push the original system to its conclusion in a sceptical *cul-de-sac*. Enough has been said to show the drift of his argument and the importance of the question. It is understood that Mr. Green intends to follow up this attack with a direct criticism of the systems of Spence, Lewes, and Bain, in which it is to be hoped that he will pay more attention to the graces of style, and condescend to be intelligible to a less abstruse order of intellect.

In any case, we may safely say that a controversy of more than ordinary importance has begun. Scientific men, as a rule, will probably be inclined to side with the existing systems. There are some pressing questions—such as the relations of mind and body—to which the idealists have not yet stated their answer, and there is a general suspicion that they are not so fully in sympathy with science as the English school has been. The biologist or the chemist is suspicious of theories which talk of fundamental *a priori* truths and seem to be disrespectful to observation and induction. The physiologist takes more kindly to a view of mind which makes it a function of ganglia than to one which talks of the brain as a mere physical condition, and looks for a spiritual basis of life and thought that will transcend all matter. The common sense man believes in empirical methods, and will understand no psychology, except the good old method of introspection. But the question must, nevertheless, be fought out. Science has nothing to fear. If Mill be over-brown, it can only be by some abler logician who will provide a still more thorough analysis of re-

search. The discoveries we have made in biology will have to be absorbed into any philosophy that claims to explain the universe as we know it. And, for the rest, if the new idealism can prove its claims, the world will be none the worse for an exchange that will give loftier views and higher ideals to life, and put an end to the reign of matter and utility.

#### THE CAUSES, SYMPTOMS, AND TREATMENT OF BURDWAN FEVER.

By GOPAUL CHUNDER ROY, M.D. New Edition, revised. 8vo, pp. 168. London: J. and A. Churchill. 1876.

THIS being a second edition of Dr. Roy's work on the fever which has devastated portions of Lower Bengal of late years, does not call for any lengthened notice. The account of the fever and of its mode of progress has been enlarged. Its etiology, and that of fevers in Bengal has been more fully discussed. But the result is unsatisfactory; no fresh light is thrown on the difficult question, why this fever sprang up fourteen years ago, why it continued to spread in certain districts, and why it appears to be now steadily disappearing, while during the same time there has been no material change in the physical geography of the district or in the habits and condition of its inhabitants. Dr. Roy's opinion is, that the fever was a malarious one, produced by the cumulative effects of imperfect drainage and of the poverty of the natives. Quinine he considers to be the chief remedy.

In an appendix, an account is given of some experiments made with the juice of the Carica Papaya as a solvent of meat. They are worthy of being extended. Apparently, Dr. Roy is only imperfectly acquainted with the accounts that have been given, in the West Indies and elsewhere, of this peculiar action of the juice. It has long been known as a popular anthelmintic throughout the tropics.

#### NOTES ON BOOKS.

*An Atlas of Topographical Anatomy, after Plane Sections of Frozen Bodies.* By WILHELM BRAUNE, with forty-six woodcuts in the text, translated by Edward Bellamy. (Churchill: London).—This admirable work, a reproduction in half-size of Professor Braune's great work, with a well translated text by Mr. Bellamy, will, we are persuaded, be welcomed by the anatomist as well as by the surgeon. The dearth of subjects, and the cost of producing artistic plates in England, combine to give our continental colleagues great advantages over us in such tasks as this; and we think Mr. Bellamy has been happily inspired in introducing to the British surgeon and anatomist this most valuable atlas of topographical anatomy.

*Arnott's Elements of Physics.* Seventh Edition. By A. BAIN, LL.D., and A. SWAINE TAYLOR, M.D., F.R.S. (Longmans: 1876).—This most able and valuable text-book of one of the most accomplished physicists and public-spirited physicians of our time appears under highly favourable circumstances in this posthumous seventh edition. It has always held a high position from its clearness, simplicity, and excellence of illustration. It has been completely revised and brought up to date by Dr. Bain and Dr. Alfred Swaine Taylor; and we cordially concur in the opinion which they, as the literary executors of Dr. Arnott, express, that "the learned and unlearned, the student and the philosopher", may equally benefit by Dr. Arnott's labours. The moderate price at which this admirable text-book is sold is not the least of its recommendations.

MESSRS. MACMILLAN send us the first parts of *Microphotographs in Histology*, by CARL SEILER, also of American execution. We have been accustomed to see very excellent work of this kind from America; those in the Surgeon-General's Reports are of a very high order of merit. We suspend any opinion as to this work till we see some further plates. Those before us are unequal; and, while a few are of great merit, others are very defective. It is, however, a most excellent undertaking, and one which all histologists will greet with welcome.

DWIGHT'S *Anatomy of the Head* (Boston, Hurd, Houghton and Co.), affords six lithographic plates representing frozen sections of the head. Neither plates nor text are quite up to the mark in the refined accuracy which might be expected in a monograph of this kind. It will repay perusal, but the execution is not equal to the conception of the book.

DR. LYTTLETON S. FORBES WINSLOW'S *Spiritualistic Mediums* (London, Baillière, Tindall, and Cox) is a *brochure* of which the object may be guessed from its title. As a rule, this sort of *brochure* pamphlet has little scientific value, and we regret to say that this is no exception to the rule. Its best *raison d'être* is that it is on the side of common sense, but with exaggeration; for it summons to its aid every imaginable *bogey*. To exactness, either of language, thought, or fact, it has little pretension; nevertheless, but for his inexcusable debility in diction and grammar, we should be disposed to pardon an author who writes chiefly to impress an opinion that "the media presiding at the *séances*, and who propagate their erroneous views, have much to answer for, causing much misery and madness; and to persuade their hearers that they have any communication with the invisible world, or that the writing which appears is written by a spirit, is preposterous, and against all scientific investigations and belief. All who really believe, and who persuade others that they see or hear a spirit, are the subjects of hallucination and auricular delusions, and should be taken care of by their friends." The sentiment here is good, although the language is far from being elegant; and, generally, we may describe the pamphlet as being well intentioned, but crude in thought, deficient in logical capacity, and failing to prove a thesis which, nevertheless, in competent hands, might be made to appear almost self-evident. Dr. Winslow has yet to learn that to attempt fine writing is not only vain but repulsive, in an author who is incapable of constructing half a dozen comprehensible and grammatical sentences in succession. We may take the sentences on page 32 as an example, culminating in that which declares that the weak-minded, infatuated, become suicidal from a belief in money; or that on the previous page 31, "It is the false, fanatic mistaken views which act perniciously on the mind, and which may seize upon a delusion associated with a religious misinterpretation of spiritualism". Will Dr. Winslow put this sentence—in his pamphlet it does duty as a paragraph—into English; or can any one else? There are others, not less absurd, on the same page; and on the previous page we read "It is painful to witness so much misery caused by belief in such an absurd creed, formed upon no sound basis, and which can never be universal or enduring, but doubtless it will disappear as the superstitions of the olden time have done before it, to be probably followed by some new error and fanaticism, but it is a disgrace to our country that a belief in it should be for one moment credited." The punctuation, the construction, and the thought, are here alike involved and incoherent. It is an exercise in cacography. Dr. Winslow must certainly himself be the subject of some very strong delusion in putting forth such a *brochure* as a contribution to the psychological literature of the educated classes.

The same author's *Handbook for Attendants on the Insane* seems to us a very useful and practical little book, carefully put together, and of handy smallness. It would, we should think, be found to be very available for the information and more complete training of attendants on the insane, whether in asylums or in private life.

*Essentials of Vaccination.* By E. HOLLAND, M.D., F.R.C.S. (Dean and Son: London. 1871.) This pamphlet of sixteen pages is dedicated by its author to the students and busy practitioners of the eighth decade of the nineteenth century, and it purports to be a curt analysis of the subject in all its more important bearings. The information conveyed in it is of a mixed nature. In some instances, as in the paragraph, "whom to vaccinate", the directions are definite and sufficiently copious; in other parts, however, the brevity is too marked; whilst in one point at least we believe the directions to be positively misleading. The author considers that the best way of preserving lymph is to take it on recently cleaned ivory points, using various precautions in the drying, etc. He remarks that the lymph will then retain its activity for six or seven weeks, and not undergo decomposition. To all practitioners who might be inclined to adopt this manner of storing lymph, we would say "Don't". The results are likely to be anything but satisfactory. Even with lymph dried on points, and used about seventy-two hours after being taken, we have found the resulting vesicle in primary vaccinations frequently imperfect, vaccinal action resulting at only two or three out of the four punctures. Neither can we agree with Dr. Holland in thinking there are the grave objections which he urges to the preservation of lymph in capillary tubes. We should rather consider the evidence in favour of tubes *versus* points to be simply overwhelming. Had Dr. Holland's pamphlet appeared since 1871 he could hardly have said that it has not been demonstrated that syphilis is propagated by vaccination when ordinary precaution is observed. True it is that such demonstrations have been exceedingly rare; nevertheless, the mere fact of its occurrence should render vaccinators as cautious as possible.

## REPORTS AND ANALYSES

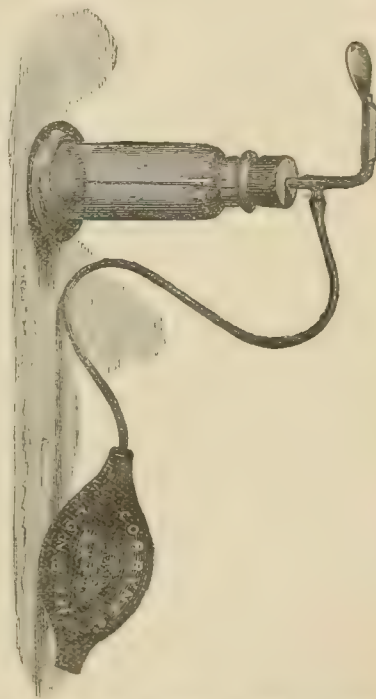
### AND DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE  
ALLIED SCIENCES.

#### A NEW THROAT SPRAY APPARATUS.

MESSRS. CORBYN, STACEY, AND CO., of High Holborn, have submitted to our notice an apparatus which has been devised by them for throwing medicated sprays on parts of the throat and mouth. The construction of the apparatus is extremely favourable to its use for the parts indicated, not only as regards the certainty of discharging the spray against the desired place, but also for facility of holding and working by the patient himself.

The general arrangement of the parts of the apparatus is excellent, but there is one special feature presented by it which will be found in practice to be as successful as it is novel; this is the vulcanite plate which projects with a downward curve about one inch in front of the



orifice from which the spray issues. In use the edge of this plate gently touches the tongue, and, overcoming the all but irresistible impulse to raise that organ when the mouth is opened, holds it clear of the spray, which may then be thrown directly on the part affected without causing aversion or discomfort. The tongue-depressor also prevents condensed spray from running about the mouth. The throat spray apparatus is fitted into a velvet lined box accompanied by a measure glass, and a box-top cork for preserving the contents of the jar when not in use. A double bellows, giving a continuous spray, may be substituted for the single bellows at a slight additional cost.

We can recommend this little instrument for use as one which is likely to facilitate or generalise a most valuable means of local treatment of throat-affections, which is probably at present much less employed than it deserves to be.

#### PILULES OF MONOBROMIDE OF CAMPHOR.

THIS substance has come much into use in France, chiefly through the researches of M. Bourneville, whose studies of its use in epilepsy, hysteria, and allied nervous affections, have established its therapeutic activity. It is not very easily or agreeably administered, we believe, in impromptu formulæ. Messrs. Schacht and Towerzey of Clifton, Bristol, have submitted to us tasteless pilules with soluble coating, containing respectively two, three, and four grains of the substance, which afford a very convenient means of prescribing it.



## REPORTS OF SOCIETIES.

### PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 6TH, 1877.

CHARLES MURCHISON, M.D., F.R.S., President, in the Chair.

#### DISCUSSION ON VISCERAL SYPHILIS.

THE discussion on Visceral Syphilis was resumed.

Dr. BUZZARD: I send round specimens of cerebral vessels and a portion of spleen showing a deposit; also some sections of the basilar artery which have been made for me by my friend Mr. Herbert Sankey, and in which the thickening of the vessels is perceptible by the use of a three-inch lens. These specimens were taken from a gentleman aged 42, whom I saw in August last in consultation with my friend Mr. Milson of Finchley Road, and who died at the age of forty-five. When I saw him, he was insensible and paralysed, apparently in all four extremities. He died a few hours afterwards. I learned certain particulars of his previous history, which I will give you briefly. Twenty years ago, he had a chancre, for which Mr. Stevens of Norfolk Crescent (to whom I am indebted for many particulars) attended him. He had no bubo, and the sore was followed by none of the common secondary symptoms. His health remained good until about three years ago, when he complained of double vision, coupled with a strange feeling about the muscles of the right side of his face, "as though", according to his own expression, "they did not belong to him". A year or so later, there was manifest strabismus, for which he consulted an ophthalmic surgeon, who prescribed mercurial ointment to the temple and iodide of potassium internally. The strabismus rapidly yielded to this treatment. A few months later, it returned; and he then resumed the iodide of potassium with an equally satisfactory result. With these exceptions, he remained well until about two months before his death, when he had "a slight loss of power in his limbs", "lost consciousness for a few minutes, and slightly lost his speech". He seems to have recovered completely, to all appearance, from this, and remained well until six weeks later, when he "lost his memory and looked strange for two days". A few days later, he vomited, and had great pain in the head. He gradually became comatose, and fell into the state in which I saw him a few hours before his death. At the necropsy, I saw the following conditions thirty hours after death. The calvaria was normal. The dura mater presented no change. The arachnoid was thickened and opaque, and a large quantity of fluid occupied the subarachnoid space. The spaces of the pia mater were gorged. The basilar artery contained numerous patches of thickening, and rigidity so interrupted that the vessel presented the appearance of a knotted piece of cord. Cut into, it was found to contain a thrombus, which extended forwards to the divergence of the posterior cerebral arteries. From this point forwards, the arteries constituting the circle of Willis contained black blood, in a fluid state generally, but in some places coagulated into a moderately firm mould of the vessels. The pons Varolii, against which the basilar artery rested, was so much softened that the finger readily slipped into it, and its middle portion especially was found to be almost in a fluid condition. The surface of both crura cerebri was also softened, but not to so great an extent. In the right middle cerebral artery, two or three nodules existed, of the same character as those developed to a much larger extent in the basilar artery. The heart appeared healthy. The aorta just above the semilunar valves was somewhat roughened for a space about the size of a shilling. All the valves were healthy. The kidneys presented no abnormality. The spleen showed on its surface, and extending to a quarter of an inch into its substance, a yellowish white mass of about one inch in length by half an inch wide. It was fibrous. Mr. Herbert Sankey, Resident Medical Officer to the Hospital for Paralysis and Epilepsy, has been kind enough to prepare sections of the mass contained in the spleen. The mass consists of fibrous tissue, and is separated from the proper substance of the organ by the capsule of the spleen, which is seen to be bent inwards by the new formation. It is doubtful whether a portion of the capsule does not also cover the mass externally. As regards the basilar artery, Mr. Sankey's description is so minute that I will not occupy your time in reading it. I will only glance at its main features. There were two new forms in the artery. External to the muscular coat was a layer of varying thickness in different parts of the circumference of the vessel, a layer of small-celled growth. The cells composing it were fusiform, and each contained a nucleus of about a third less diameter than the protoplasm of the cell, namely, about one-thousandth of an inch. The arrangement of these cells was, upon the whole, parallel to the circumference of the vessel.

Large and very thin-walled new vessels traversed this mass. The muscular layer was throughout granular, and was at one spot broken down into a small abscess. The elastic layer of the vessel was, for the most part, healthy; but internal to it was a second larger deposit of new growth more fibrous than the one already described, and probably, therefore, of older date. By these new growths, the calibre of the vessel was so far diminished that its diameter amounted only to one-twentieth of an inch; and this was completely occluded by thrombi of different dates, the most recent of which, however, from the degeneration the blood-corpuscles had undergone, was probably of *ante mortem* formation.

A communication was read from Dr. DAVIDSON of Liverpool, accompanied by two specimens; first, a specimen of primary chancre of the penis; and secondly, a specimen of syphilitic disease of the cerebral artery. They were not taken from the same case. The first seemed to Dr. Davidson to be interesting as showing, when compared with the other specimens, the histological identity of primary syphilitic deposits with tertiary, so far negating the idea of the latter being considered as mere sequelæ. The following were the notes of the case of cerebral syphilis. A seaman, aged 34, came under Dr. Davidson's care some years ago, at Liverpool, at the Northern Hospital. He had suffered from chancre and bubo seven years previously. Three years afterwards, he had suffered from a severe sore throat, eruption on the face and legs, and occasional pain in the bones. On admission, he was found to have numerous sores on the legs, but his chief complaint was an intense headache, which at night was so severe that he could not sleep, and he cried out with pain. He was treated with large doses of iodide of potassium, but without much relief. Three weeks after admission, he was attacked with partial loss of power in the left arm and leg, which did not pass off. A fortnight later, the right third nerve became involved; a week later, he became comatose and died. The pain continued to the last, and was principally felt in the right occipital region. At the *post mortem* examination, a small hæmorrhage was found in the right crus cerebri; there was no other lesion of the brain or its membranes, but the arteries at the base of the brain were thicker and firmer than normal. Sections were made of these, and one of them was now shown under the microscope. The section showed a smaller growth in the adventitia of the vessel, not uniform, more abundant, and projecting more on one side than in most specimens; secondly, an organised fibrous structure lining the interior of the vessel, with vessels and concentrically arranged nuclei. The adventitia had the well-known character of an ordinary syphilitic growth, being composed of crowds of round cells. If this were supposed to be the first change in the vessel, it would, of course, compress the vessel and prevent its expansion, and so materially interfere with the circulation of the blood through it; its state would be similar to that of a vessel which had been partially tied; a parietal thrombus would form and become organised in the usual way, and this would increase by the addition of successive layers. Dr. Davidson believed this structure to be an organised parietal thrombus, and not the product of a syphilitic inflammation of the internal coat of the artery, as stated by Heubner. The specimen showed the wavy line of the intima in its natural condition; the structure within the wavy line was, he believed, an organised thrombus, differing in no respect from the organised thrombus resulting after deligation of a vessel. He had no specimens of the latter form of thrombus, but he referred to Billroth's drawings of a thrombus ten days after deligation, the appearances of the histological structure of which were nearly identical with Dr. Davidson's specimens. The disturbance of the cerebral circulation produced by such a condition of the arteries would, of course, account for the intense headache.

THE PRESIDENT: This is a different view from that brought forward by Dr. Greenfield and Dr. Barlow at the last meeting. Perhaps the Society would like to know what Dr. Greenfield would have to say upon the subject.

Dr. GREENFIELD: I did not anticipate that I should have to speak again on this subject, and the meeting will excuse me if I am not very clear. The specimen brought forward by Dr. Davidson is to me an exceedingly interesting one. I owe it to the kindness of Dr. Douglas Powell that I have had an opportunity of comparing sections from my own with those from some other cases. The main point raised by Dr. Davidson's case, I think, is whether this thickening of the internal coat of the vessel is due to an organised thrombus, or whether it is a growth from the inner coat of the vessel itself. With regard to the general question, I would point out that Dr. Davidson's observations differ, not only from my own, but from those of Dr. Barlow, Dr. Gowers, and from the specimen brought before the Society by Dr. Buzzard tonight. I regret that there are not more specimens brought before the Society, because I think it is very desirable, in a question of this kind, that a larger number of specimens should be brought before the So-



ciety, and one should have an opportunity of comparing them carefully with one another, because these are changes which one cannot observe and discuss without more minute examination. In the first place, in Dr. Davidson's specimen, the condition of the outer coat seems to correspond with the changes found in the specimens shown by Dr. Gowers, Dr. Barlow, Dr. Buzzard, and myself; that is to say, there is what Dr. Davidson allows to be a syphilitic new growth occurring in the outer coat and around the vessel, and in this coat there are a number of vessels of new formation. It is thus mainly with regard to the changes in the inner coat that Dr. Davidson differs from Heubner's observations. I was quite aware, when I brought my specimen before the Society, that other hypotheses had been suggested for the mode of growth in the inner coat. In the paper published last year by Friedländer, in the *Centralblatt für die Medicinische Wissenschaften*, it is stated that these changes in the inner coat of the vessel were due to a process which the writer believed to be obliterative arteritis. He had induced artificial pneumonia in rabbits, and had found the same changes in the vessels as those described by Heubner as being peculiar to syphilitic arteritis. I think Heubner lays too much stress upon the syphilitic character of the growth, because the elements and the growth are such as one finds in other forms of fibrous new growth; and I also think the term "specific," as applied to a growth, is, to a certain extent, a limited term. One finds, for example, changes occurring in leprosy, which are to a great extent undistinguishable from changes occurring in syphilis; and I think we may use the term "specific" in this sense, that we find there are changes occurring in syphilis which we do not find occurring in other growths in the human subject. With regard to these changes in the inner coat of the arteries, three views have been stated: first, that the growth is an organised peripheral thrombus—a view which Dr. Davidson has adopted; secondly, that it is a growth probably from the cells of the epithelioid lung, and from the cells between the elastic layers of the inner coat, which are, after all, very closely similar to those of the epithelioid layer; and, thirdly, that it is undistinguishable from atheroma. With regard to any of the specimens shown, I think the question will not be raised, whether they are due to atheroma. I have had an opportunity of asking several gentlemen, who have studied the subject of atheroma fully, to examine the specimens; and they say that there is no comparison between them and any form of atheroma which they have seen. I had examined Dr. Davidson's specimens before I knew what his view was, and it appeared to me to be a beautiful example of a change in the inner coat of the vessel, intermediate between the two cases I brought before the Society. Dr. Davidson's specimen differs to a certain extent from those specimens in one or two points. In the first place, the growth in the inner coat of the vessel is distinctly in two layers, the outer layer distinctly laminated and more fibrous than the inner. The inner is a cell-growth with newly formed vessels, closely corresponding to that in the first specimen which I brought before the Society. In one of my specimens, the first, there was simply a cell-growth in the inner coat, with a new formation of vessels; in the second case, there were apparently two distinctly formed rings of different dates, one inside the other, which very nearly occluded the calibre of the vessel, and it was at first difficult to distinguish whether the one was not a thickening of the middle coat and the other a thickening of the inner coat; but, on further examination, I satisfied myself that the whole of the process was in the inner coat, and that it occurred at two periods. In Dr. Davidson's specimen, there is the outer layer, which is more fibrous, evidently of older formation; and there is the inner layer, which is a more recent cell-growth that has not yet organised itself so completely. In thrombus, there is complete obstruction of the vessel and there is growth of epithelioid cells, which form the processes into the thrombus, and thus gradually tend to its organisation. Dr. Davidson does not appear to have studied this process himself, and he refers to some drawings in Billroth's *Surgical Pathology*, which are, I believe, taken from a work by Bidentkap. Those are utterly denied by Ranvier and Cornil, who have carefully studied the process; and we have specimens which are utterly incompatible with those drawings. What seems to occur in these specimens of Dr. Davidson's is, that there is a growth in the epithelioid layer which closely corresponds to that which takes place in the thrombus, only, instead of taking place in the thrombus, it takes place in the calibre of the vessel; and, instead of forming an organised thrombus itself, leads to the formation of a thrombus. It is, however, a point that can only be decided by a minute examination of specimens. It appeared to me, on looking at the inner layer of the growth in Dr. Davidson's specimen, that these were processes distinctly of a proliferating endothelium projecting from the interior of the inner coat into the calibre of the vessel. That, I think, is a point which can only be decided by the observation of a number of specimens in different stages. With regard to the theory which Dr. Davidson

adopts, I must confess it is a very beautiful physiological theory; but I do not think it is supported by one single specimen brought before the Society. It will, however, be a very interesting matter for further observation.

Dr. GOWERS: I think Heubner disclaimed any idea of there being any specific character in the growth which he described in the vessels. He merely stated that it was very similar to that which occurred under circumstances of inflammation or irritation in the vessel. This change in the inner coat of the vessel is one of great interest; because, if Heubner's description be compared with the description of the histology of the change which Dr. Wilks and Dr. Moxon have given of what they term the semicartilaginous thickening in the arteries, it will be seen that they are parallel, down almost to the minutest details. This change they believe to be in no way associated necessarily with syphilis. If there is this identity of growth, down to the occurrence of little masses of cells in the middle coat, outside the growth, down even to the way in which the growth narrows the lumen of the vessel, then we have a very remarkable resemblance between the changes which occur in syphilis and the changes which occur apart from syphilis in the vessels; and it would seem as if the influence of the syphilitic dyscrasia were marked in the degree rather than in the kind of change which it produced in the inner coat. I cannot help thinking that an essential distinction must be drawn between this change in the inner coat and the nodules occurring upon the outer coat which form such prominent masses—nodules upon the walls of the vessel which seem to resemble rather the gummata seen elsewhere, whereas the change in the inner coat resembles more the products of an ordinary inflammation modified by the special syphilitic taint.

Dr. CRISP: It would be interesting if gentlemen would tell us how their patients have been treated. I ask this, because there are many in the profession who believe, perhaps falsely, that mercury is very apt to produce arterial changes. At any rate, I think we should be cautious in drawing hasty inferences about these arterial changes. They are very common, and I venture to say that hereafter, when the matter is more investigated, it will be found that a number of them occur quite irrespectively of syphilis.

Mr. JONATHAN HUTCHINSON: I really feel, Mr. President, after the extremely interesting contributions to our knowledge of the minute pathology of visceral syphilis which these meetings have elicited from Dr. Greenfield, Dr. Gowers, Dr. Barlow, and others, some diffidence in bringing forward my cases. I have had but little opportunity of pursuing pathological anatomy, and what I shall have to say will chiefly concern drawings made from living patients and clinical observations unsupported by *post mortem* examinations. A great many cases of visceral syphilis have in a more or less fragmentary way come under my observation; but, although I have, whenever I could, followed them up, yet I have had surprisingly few opportunities for making necropsies. Most of the patients have, indeed, persisted in getting well. In point of fact, the only morbid specimen that I have to show was obtained in consequence solely of a mistake in the diagnosis. I am very sorry to say that, during the life of the lady whose brain is before us, I did not suspect that she was the subject of syphilis. If I had, I do not in the least believe that I should have been able to produce the specimen this evening. The particulars of the case are briefly these. I saw the lady only twice, with a three years' interval, and the last time three months before her death. Her family medical attendant had her under observation the whole time, and it was through his energy that we procured the *post mortem* examination. He knew of no reason to suspect her of being syphilitic, and he had attended her two children, who were quite healthy. When Mrs. A— was first brought to me in 1867, she complained of a most severe headache and of dimness of sight. She alleged that her mother and sister had suffered from a similar kind of headache. She was irritable almost to the extent of insanity; and, light being annoying to her, she would scarcely let me look at her eyes. I suspected tumour on the brain. Three years later, I saw her at her own house. She had in the interval been better and worse, but her sufferings from headache had often been most intense. Her friends blamed her and suspected her of exaggeration, asserting that she sometimes seemed to get well very suddenly, and would now seem almost blind, and in a few hours be able to read well. The diagnosis was still tumour; and, although we gave some iodide, it was not pushed with that vigour which a correct diagnosis would have produced. At the necropsy, three months after the second consultation, the skull was found very thick and hard, its dura mater adherent in patches, and in the pia mater, indenting the convolutions, which also were implicated, were a number of dense pinkish-white lumps. These were very evidently syphilitic gummata. We now made further inquiries, and it came out that this lady, although now well married, had been kept by her husband for some years before he married her, and



had, to his knowledge, occupied a similar position in another establishment before that. Still, no one knew that she had had syphilis, and we had to depend upon the character of the osteo-meningeal disease for our diagnosis. Subsequently, however, another link of evidence was obtained. Three years after her death, her second daughter was under my care for a prolonged and severe attack of symmetrical keratitis. Neither this girl nor her elder sister presented any definite indications of taint; the keratitis was, however, well marked and conclusive. Thus, the mother's brain and the daughter's eyes afforded mutual light on the diagnosis in each. Without the one, it might have been disputed whether these lumps of deposit were really syphilitic; and, without the other, it might have been plausibly asserted that here at length we had an instance of interstitial keratitis without any reason to believe in its syphilitic origin. In connection with this specimen of meningeal gumma, I may be allowed to remark that it is surely time that practitioners should avail themselves of the labours of pathologists, and attempt some distinction between the different forms of what is often called so vaguely "cerebral syphilis". The occlusion of an artery and subsequent softening of brain-substance is one thing; a gumma of the dura mater is another. They are different in their symptoms, course, and progress under treatment. If a man be hemiplegic from softening of the corpus striatum consequent on arterial occlusion, there is but little hope that he will recover, however vigorously the iodide may be pushed. It may prevent further arterial disease, but cannot repair the brain. In cases of gumma, the hopefulness of treatment is, on the other hand, indefinite, and the triumphs of the remedy are matters of everyday experience. In many cases, too, the differential diagnosis can be made with fair accuracy. If we say that we recognise three forms of cerebral disease—one in which the symptoms result from arterial occlusion, one from the irritation of gummata, and one from periosteal thickening—we may, I think, assume that sudden attacks of paralysis denote the one, that the second has all the symptoms common to cases of tumour, and that severe pain and headache go with the last. To each of the three conditions, a whole group of symptoms might easily be assigned. We are surely advanced past the stage when it was justifiable to mention all the symptoms which occur severally in each, as if all were to be expected in the condition known as "cerebral syphilis". No doubt, in some cases, all these lesions are present together, and in many two of them; but this ought not to prevent us from trying to discriminate when, as is the case in most instances, discrimination is practicable. I am not sure that we shall not be obliged, as knowledge advances, to admit yet a fourth group of cases, namely, one in which the symptoms are those rather of progressive and slow atrophy than of new growth or inflammation. I suspect that there are such cases, and that they are far less amenable to treatment than any of the others. It is of much interest to make a comparison between the pathological consequences of syphilis as observed in the coats of the eye, and those which occur in the brain and its membranes. Now, we certainly have two forms of choroiditis. In one, as illustrated by the sketch which I now exhibit, small separate gummata, each a distinct swelling, form in various parts of the fundus and go through definite changes. After they have, under treatment, been absorbed there is not usually any tendency to relapse or to recurrence. They are, for the most part, easily influenced by treatment. But there is another form which occurs both in the acquired and in the inherited disease which is not easily cured, and which on the contrary shows a tendency to slow and steady progress. In it we rarely witness any proof of deposit or of inflammation, but atrophy of the choroid and retina ensues with pigmentation, and frequently with involvement of large areas. This form occurs at periods long distant from the primary disease, as a late tertiary. In the inherited disease, it usually happens after the keratitis has got well, and it proceeds, according to my experience, in spite of treatment, until sight is almost destroyed. It sometimes very closely simulates the appearances produced by retinitis pigmentosa, and has also a clinical history as regards rate of progress not very unlike. The syphilitic malady may be distinguished, I think, by certain differences: its imperfect symmetry, constant implication of the choroid, more or less, etc., from the true retinitis pigmentosa; but it would be tedious for me at present to go into this question in detail. (The conditions referred to were illustrated by a number of ophthalmoscopic drawings.) My chief reason for referring to these two varieties of choroiditis is to suggest that there may be parallels in the case of the pia mater and cerebro-spinal centres. It certainly fits with my experience in practice that there are cases of obscure nerve-disorder in the subjects of syphilis unattended by any of the violent accidents, pain, convulsions, sudden attacks of paralysis, etc., which usually accompany gumma and arterial disease, and which are far less easily benefited by treatment. In these, the symptoms—progress in paralysis for the most part—are slowly and quietly developed, and they continue, in spite of the iodide of potassium

and of mercury, steadily to progress. Sometimes it is the spine which is implicated, sometimes the cranial nerves. There is often great difficulty, notwithstanding the known history of syphilis, in deciding whether or not the disease is really syphilitic. I have been familiar for some time with a group of cases in which the curious condition of immobility of the eyes is apt to occur, all their motor muscles becoming paralysed. The levator palpebræ usually escapes. These cases are not attended by any of the symptoms of severe cerebral disease. They do not begin suddenly, but progress slowly, and in some cases, at least, they are not much helped by treatment. I have seen, I think, about half a dozen such, and in all there was a remote history of syphilis. In only one have I been able to obtain a necropsy, and in that the brain has not been sufficiently examined to permit me to report as to its state. Usually one eye is affected at first, but later on both will suffer, and both become absolutely fixed. Dr. Barlow, at our last meeting, produced a living specimen of the enlargement of the spleen, which is not uncommon in syphilitic infants, and he told us, what is, I believe, supported by general observation, that this splenic swelling may wholly disappear, and leave nothing which can be recognised either during life or at the *post mortem* examination. I wish to support his statement on this point, and to extend the observation to the liver also. In several cases I have witnessed, in young persons the subjects of inherited taint, great enlargement of the liver, which has subsequently wholly disappeared. It is difficult to believe that there is any kind of gumma-growth in such cases, and we are obliged rather to fall back upon the hypothesis of mere vascular turgescence. This turgescence may possibly in its turn be due to some disease in the nervous system. I well recollect a lad whose case illustrated what I am saying. He had on more than one occasion such enlargement of the liver that it hung below his navel, and was easily visible as a swelling when he lay on his back in bed. I had had him under observation for years. He had nodes on almost all his long bones, and his mother and several of his brothers and sisters had suffered most severely from syphilis. At length he died. At the necropsy, which was made by my colleague Dr. Sutton, the liver was found natural, and, excepting some patches of slight thickening of capsule, showed no changes. I might just add, in reference to this case, that the lad died of albuminuria, and that his kidneys were in a state of advanced disease (contracting). Dr. Sutton did not consider their state in any way directly connected with syphilis, and he commented on the absence of hypertrophy of the heart as a special feature in the case. It occurred to me to suspect that their disease might possibly have been induced by the very prolonged use of iodide of potassium. This is, however, mere conjecture. It seems clear, however, that among the unexpected incidents of constitutional syphilis we meet occasionally with general enlargement of such viscera as the spleen and liver, independent of any of the conditions of new growth which we recognise as specific, and capable of spontaneous resolution. Let me just add that a parallel condition of temporary great enlargement of the liver is sometimes encountered in cases of xanthelasma without any syphilitic history. I have here drawings which illustrate the common conditions of gumma in the liver, but I will not intrude upon the time of the Society further than just to hand them round. One of them, showing a cicatrix, is valuable because it came from a case of inherited disease. Its subject was a lad who had characteristic teeth and physiognomy, and who had also a large gumma in one testis and disease of the coats of his aorta. The necropsy was made by Dr. Sutton, and I believe that Dr. Turner will subsequently show for that gentleman a drawing of the artery. Arterial disease in inherited syphilis is probably very rare. I should like to ask the attention of surgeons and pathologists to the question of affections of the veins and of the lymphatic trunks in late constitutional syphilis. But few cases of syphilitic phlebitis have, I believe, as yet been recorded; yet probably most surgeons are familiar with the fact that inflammations around varices (and even about healthy veins) are not unfrequent in the subjects of syphilis. I think also that I have seen several cases in which the thrombosis and phlebitis were attended by other conditions sufficiently peculiar to justify a belief that they were of specific origin. In some, there has been great excess of inflammation, a large hard mass forming in the cellular tissue and threatening to slough, much as subcutaneous gummata often do. These cases are much benefited by the iodide of potassium, so far as prevention of sloughing is concerned, but the thrombotic plugging remains. I am not aware that any specimens have been produced showing syphilitic disease of the cerebral veins. As regards the lymphatic trunks, I believe that they are liable to disease just as the arteries are, and that it results in similar conditions of plugging and its consequences. In a clinical lecture, published some months ago, I detailed several cases in which one lower extremity became greatly swollen and remained for long in a state of solid œdema,



there being, in some, reason to believe that the lymphatic trunks were inflamed, whilst in all there was a history of syphilis. In one remarkable case, I had treated the gentleman many years before for syphilitic paralysis of the fifth nerve. In him, a large network of cord-like lymphatic trunks could be felt over the lower part of his abdomen, one thigh being greatly swollen. There was no gland disease—and I am not speaking now of affections of the glands, but of the trunks. It would be very interesting, should opportunity for microscopic examination occur, to ascertain how far in this condition the changes in the walls of the lymphatics are similar to those seen in the arteries. Lastly, before I sit down, may I be allowed to suggest that there is one part of the nervous system which has hitherto been much overlooked in reference to its suffering from syphilis. I allude to the vaso-motor ganglia. It is not improbable that certain vague forms of nerve-disturbance occurring in syphilitic subjects—the severe dyspepsia, for instance, which is sometimes so definitely relieved by the iodide of potassium—may be due to disease of the ganglia. It may, perhaps, be somewhat difficult in respect to many of them, to determine what ought to be the group of symptoms which their disorganisation would be likely to produce. I have begun with the first, the least, and the easiest of investigation—the lenticular. The nerve-filaments proceeding from this ganglion supply motor force to three different structures, and I make bold to believe that when these three structures are wholly paralysed without implication of any other, the disease can be nowhere else than the ganglion itself. I further assert that such cases are met with in practice, and that in my experience their subjects are always those who have suffered from syphilis. The three motor functions referred to are dilatation of the pupil, contraction of the pupil, and accommodation. If the pupil, without being either dilated or contracted, be absolutely motionless, and if there be absolute cycloplegia or paralysis of the ciliary muscle, and if with these conditions there be no defect of the orbital muscles, then I think the disease must be destruction (temporary or permanent) of the ciliary ganglion. I have seen a series of such cases, and although I am sorry to say—no, not sorry, that is not the right word—that I have as yet had no opportunity for *post mortem* dissection, yet so closely have they resembled each other that the diagnosis is, I think, fully justified. In most one eye has been affected in the first instance, and the other has followed after an interval. Some have been benefited by treatment, and others not so. It will be very interesting in the future to try if we can make a plausible guess at the diagnosis of similar disease in any other of the ganglia.

Mr. HULKE: In answer to a question that has been put, I may say that, certainly in two, if not in three or four cases of which I have notes, I have observed considerable thickening of the central artery of the retina. Whether these patients were syphilitic or not, I am not prepared to say; I think that in one of them it would be found that there was positive proof of it. When I speak of the thickening of the vessel, I should rather say a thickening of the walls of the vessel, so that the tube of the vessel was reduced to a mere thread. The vessels were still pervious, and still contained a current of blood. The thickening was irregular; it did not affect the whole tube continuously, but occurred in patches, so that in some parts there was a broad cylinder of blood flowing through; in other parts, there was a mere thin current. Now that I have risen, perhaps I may be permitted to say, with respect to the interesting groups of cases which have been brought together by my friend Mr. Hutchinson, that, when one comes to the bedside, one often finds considerable difficulty in forming any sharp and positive diagnosis in cases of this kind. I remember an instance in which I had an opportunity of making a *post mortem* examination. It was the case of a young gentleman who had acquired syphilis. The circumstances under which he acquired it prevented his mentioning it to any one, or having any treatment for a primary sore. It was quickly followed by constitutional symptoms, which necessitated his return home. He was in one of the colonies, and his return happened the following year, when I was asked to see him, on account of some little imperfection of his sight and something curious about his eye, which was noticed by one of his relatives. I saw him in consultation with two gentlemen, who were treating him for constitutional syphilis. He had nodes upon both shins and, I think, upon some other bones. The symptom which drew attention to the eye was principally a slight enlargement, as it was thought, of the eyeball, but really a slight prominence. The eyeball became more and more prominent, and at last the patient became perfectly blind. It seemed that something had choked the disc; the cornea was on the point of sloughing, and, at the consultation with a fourth surgeon, it was decided by the friends that his eyeball should be removed, which was done, but not by myself. All this time, he had no brain-symptoms; except the prominence of the eyeball, he had no symptoms whatever in relation to the skull.

Some six or seven weeks after the removal of the eyeball and a portion of the tumour which was found at the back of the orbit, there was a slight prominence again, and the orbit became filled up, and the lids became bulged. This went on for another six weeks, and, altogether about three months and a half after the extirpation of the eyeball, he continued free from any brain-symptoms. He then had some headache. Within a day or two of this frontal headache, he fell into an epileptic fit; he then became permanently epileptic, without recovering consciousness, and died in thirty-six hours. On the *post mortem* examination, I found in the great fossa of the skull a large well marked gumma on the dura mater, about the size of a Tangerine orange, compressing the brain and wasting the convolutions with which it came in contact. Here was a well marked syphilitic gumma, and yet, during all the time I have mentioned, there was no headache at all. This shows that there are very considerable exceptions occasionally met with to the rule that these gummata are marked by very violent headache. Then, with regard to another group of cases, I am reminded of a man who, six years ago, came under my care with, as it was supposed at the time, syphilitic palsy of every muscle of the eyeball. I never saw a case where all the muscles of the eyeball were so completely palsied. He had not the slightest power to move either eyeball in any direction. With this, he had some little unsteadiness of gait, but no headache and no other symptoms. Iodide of potassium was given in large doses, and continued for some time, and the man absolutely recovered. He walks to and from his work, and does a hard day's work as a carpenter. This shows that those cases marked by such symptoms occasionally do recover under iodide of potassium.

Dr. BUZZARD: In reference to one of the drawings which Mr. Hutchinson has sent round, representing the fundus oculi of a young lady aged 15, with a large number of minute white spots, I may mention that, some years ago, a boy came under my care in the National Hospital for paralysis, who had double optic neuritis and signs of a cerebral tumour. In addition to the double optic neuritis, there was a large collection of spots precisely resembling those represented in Mr. Hutchinson's diagram. The boy eventually died, and we found, on *post mortem* examination, a mass of tubercle in his cerebellum, and another mass in the medulla oblongata, and there was tubercular meningitis.

The PRESIDENT: Was one eye, or were both eyes affected?

Dr. BUZZARD: I think only one eye. I brought the case before the Clinical Society at the time. I have never seen the peculiarity in any other case.

Dr. GOODHART: In reference to the drawing and specimens that I have exhibited, I will read the notes of four cases on which I have particularly to dwell. The first is the case of a young girl aged 19, who was admitted into Guy's Hospital on October 29th, 1873, under Dr. Pavy. Her father and mother died of phthisis, aged 49 and 50. She was quite well till four years ago, when she attended as an outpatient for horse-shoe shaped ulcer on both legs, and since that time she had had sore throat and a rash, the latter leaving her skin as if it were dirty when it subsided. She had also had much nocturnal pain both in her head and limbs. For three years she had had a cough, which came on suddenly with pain in both sides after a severe cold. On admission, she was described as having been anæmic, dull looking, and somewhat emaciated. Her teeth were good, voice husky, sputa considerable. The chest was fairly well formed, and expanded fairly. The right chest was dull below the clavicle, and a cracked sound was eliminated. The respiration was bronchial. She had much diarrhoea, and died gradually exhausted. The *post mortem* examination showed pigmented scars on both legs, mostly on the inner aspect, but not confined to that region. The right pleura had a localised collection of pus at its front part, and the left was affected by general recent pleurisy. The right lung was solid, with a large cavity at its apex, and several smaller ones elsewhere. The upper part was greyish and tough; the lower, more red, with a smooth section and as if partially hepatised. It sank in water; evidently much recent inflammation existed with that of older date. The lower part of the lung was soft. On the left side the disease was more recent. It was irregularly distributed throughout the lung, rather avoiding the apex. To superficial examination the disease was scattered about in tubercular patches, but a more careful look showed that it ran about in sinuous lines, as if mapping out the various lobules. In colour they were grey, and pellucid looking. There was slight alteration of the epiglottis. Douglas' pouch was thickly covered with small grey granulations. All the other viscera were healthy, and none of them showed any lardaceous change. The second was a case of syphilitic stricture of the rectum, with perforation, fibroid lungs, and Bright's disease. S. G. was admitted under Mr. Durham, on March 11th, 1874. Her mother died, when the patient was a child four years old, of phthisis. She was mar-



ried, and had one child eleven years old. Ten years ago, she had spots on her body, pains in the legs and arms, and in her head since. She had also lost her hair, and eighteen months previously had a severe inflammation in the right eye. Her motions were very narrow, and she passed wind *per vaginam*. Her legs and arms were covered with coppery stains, and in places with a tubercular eruption. The right cornea and iris were dim, and she had evidently had some inflammation in it. The stricture was examined under chloroform. She died rather suddenly. In both lungs, at the bases, there was fibroid disease in the form of white bands cutting off islets of the pulmonary tissue. This condition was confined to the lowest part of each lung. A single small cavity was about the size of a nut, evidently a dilated bronchial tube. There was a suppurative peritonitis; induration and ulceration were extensive in the rectum. The kidneys weighed fifteen ounces, and were mottled yellow, evidently affected by an advanced epithelial nephritis. Iodine gave only a doubtful reaction. The liver and spleen were normal. Case three was one of chronic interstitial pneumonia, with cavitation, fibroid induration, ulceration of the trachea, and amyloid disease of the viscera. J. S., aged 23, was admitted under Dr. Moxon, August 19th, 1874. He had had gonorrhoea two and a half years before, and also a skin-disease which he called "secondaries". Ten weeks before his first admission in 1872, he had ulcerated legs. One sister died of cough. His parents were healthy. He had had a similar cough for three years. He was admitted with all the signs of extensive phthisis. His chest was small, flattened on the right side, hollow under the clavicles, both sides dull at the apices, and they filled badly, the right side worse than the left. Both liver and spleen were enlarged. Urine 1014, albuminous; temperature, 100.4. He became very anasarctous and died. The right lung was so firmly adherent to the chest-wall that much of it was left behind. It was much puckered up and shrunken. Its disease was limited to patches on the posterior part; it was irregularly scattered through the lung, and all of a fibrous nature, the intervening lung-tissue being emphysematous, but otherwise healthy; the apex was spared, the disease commencing about an inch or so from it, and spreading down the back of the lung in patches. About half the lung was thus spoilt; the vessels were all contracted into a tough mass, small cavities being found in the lung-tissue round them. The left lung was in a much earlier state; it also had a cavity in it at the hinder part of the upper lobe; there were one or two small grey nodules scattered round it, but they were very few, and the wall of the cavity had in it nothing tubercular. At the posterior and upper part of the lower lobe, separated by healthy tissue from the region just described, was a mass an inch and a half in diameter, tough on section, and with a smooth dull surface, like a patch of acute pneumonia, though less granular. It had no distinct outline other than that given to it by its own contrast with the spongy lung outside it. It was reddish, like pneumonia, but very tough, and it had various dilated tubes running through it. There were no signs of any softening process. The rest of the lung showed small puckered fibrous patches, but no large extent of disease; its tissue was emphysematous; the pulmonary arteries were healthy, except that one going to the lower lobe of the left lung was plugged by a soft whitish-yellow clot of some date *ante mortem*. Its source could not be found, but it was lodged in the track of a vessel. The trachea was generally red with minute ecchymoses, and about its middle, on the posterior wall, was superficial ulceration over two-thirds of an inch; all the other parts were healthy. The last case I need not go into, as I have already shown it to the Society three or four years ago. It is a case of a woman aged 59, who died of extensive hæmoptysis within a few hours of her admission. The lungs showed a puckering fibrous charge, irregularly distributed throughout the organs, with emphysema between. Some of the fibroid patches had a tendency to separate as sloughs. The liver contained one well marked gumma; the other viscera were healthy. The microscopical features of this disease were so similar in all the cases that a common description will suffice. They all showed great thickening of the bronchial septa, with thickening of the coats of the vessels and bronchi, and dilatation of the latter. The fibrous septa were in places crowded with small cells and nuclei which grew into the lung-tissue between the alveoli, distending the walls of these spaces and thickening them considerably. The alveoli consequently became much contracted, and ultimately disappeared altogether from view, leaving a fibro-nucleated tissue containing good-sized vessels. In some parts, a degenerative change appeared to be going on, from the appearance of glassy swelling noticed in the central parts. In one patch of more rapid cell-growth, the central cells were softening down into cavities, prior to the formation of fibrous tissue. I have been unable to make out in any one of these cases any special affection of the arterics. They are very much thickened as to their outer coats,

and to a corresponding extent, perhaps, of the inner also; but they do not appear to me to have thickened out of proportion to the general thickening that has taken place in the bronchial septa and around all the vessels and tubes which they contain. I would, however, lay stress upon the extreme vascularity of this new tissue: a point dwelt upon by Dr. Greenfield at the last meeting. I have twice seen fatal hæmoptysis in fibroid phthisis, and in neither case could the source of the hæmoptysis be found. In every other instance of fatal hæmoptysis save these two, I have found an aneurism or some open vessel; and therefore I do not think it was missed in these two. I believe the extreme vascularity of the bronchial tissues may explain the hæmorrhage and the concealment of its source. I have brought these cases forward to strengthen the numerical proof, where proof is still wanted, that syphilis is not uncommonly associated with, and I believe causes, fibroid changes in the lungs. They do not constitute, by any means, all the material which I have collected on this point; but, not to take up the time of the Society by any detail, I will only say that in twenty years the *post mortem* records of Guy's Hospital furnish one hundred and seventy-seven cases of visceral syphilis, and in forty-two of that number the lung was diseased. In six, however, it appears to have been only with acute pneumonia; so that the total of chronic lung-disease amounts to thirty-six. Some of these have been noted at the time as peculiar enough to warrant their being called syphilitic disease, and Dr. Moxon has already published notes of some of them both in our *Transactions* and in the *Guy's Hospital Reports* for 1867; but most of them have been called phthisis. I have carefully gone over the whole number, and find that they fall distinctly into two groups, a result for which I was certainly not prepared, notwithstanding that I believed in the existence of a syphilitic form of phthisis. The one group is that of fibroid phthisis, and takes in twenty-four out of thirty-six cases; the other twelve make up the group of ordinary tubercular phthisis, having nothing to distinguish them in any way. The twenty-four fibroid cases were not free from tubercles. In several instances, tubercles are said to have been present in the lungs; but the presence of tubercular-looking grains in the lungs is no evidence of their tubercular nature. And, even if they were tubercles, they may quite possibly have arisen in the chronic inflammatory changes which resulted from the syphilis. But, though tubercles were found in the lungs in six cases, yet all were not prominently tubercular, but, on the other hand, fibrous. Moreover, only three are noted as having ulcers in the intestine. I exclude the larynx, as syphilis is the question under discussion, though only a few had laryngeal ulceration. It is possible that in one or two the intestine was not examined; but I do not suppose it was so in many cases, though their condition is not positively stated in several of the reports. With this large proportion of cases of fibroid disease of all the cases of chronic lung-disease which have occurred in syphilis, there can, I think, be very little doubt that syphilis and fibrous change go together in the lung as elsewhere. Now, with reference to the microscopical characters of this fibroid disease, it of course becomes a question, Is it anything specific; or is it only a syphilitic form of inflammation—tubercle, that is to say, modified by the syphilitic virus? On this point there can, I think, be very little hesitation in arriving at a decision. I can see no difference, in any of the specimens that I exhibit to-night, between those which I suppose due to syphilis, and the more chronic forms of tubercular phthisis, chronic pneumonia, or miners' phthisis: all of these, histologically, are chiefly concerned with a nuclear growth in the interstices of the lung. They are, indeed, but varying forms of inflammation. But, unless we think to find a specific corpuscle in syphilis, the close similarity of the growths which occur in it to those of other diseases was but to be expected, since the range of variation in the arrangement of cells and tissues and in the form of cells is, so far as we know, most limited. I think, too, that this is the case with regard to the disease of the arteries which has been described by Heubner and carefully worked out by Dr. Greenfield. The specimens which were exhibited at the last meeting seemed to me, with the exception of the two remarkable cases of Dr. Greenfield, all to show thickening and overgrowth in the outer coat of the vessels as the earliest stage of syphilitic growth. There is assuredly nothing specially syphilitic in such a process. The same thing may be seen in many inflammatory conditions, both acute and chronic; and, though I have never seen anything like the cellular growth depicted by Dr. Greenfield in the inner coat of the vessel, yet, in all chronic inflammations, oedema, etc., the inner coat thickens with the others. Moreover, such a change in the coats of the vessels as Dr. Greenfield describes is by no means essential to the production of gummata. I have been examining, this last week, two cases of syphiloma of the brain, and I have been unable to find anything quite like it. The course of the vessels is crowded with small nuclei, but the affection of the inner coat



is absent in most of the diseased vessels. And, lastly, I fail quite to see in what the process differs histologically from the endarteritis deformans which occurs in the larger vessels, and which certainly occurs in many cases without syphilis. But, having said thus much, I do not say that the changes are not characteristically syphilitic. I believe they are, but not from any histological definition. To go back to the lung, the changes I have described may not be at all different histologically from tubercle or any other form of growth, yet they are quite distinct to the eye. This fibroid disease of the lung is a disease which is prominently fibrous, and not tubercular; it attacks the base or root of the lung in great part, and not the apex; it is associated in most cases with peculiar puckering of the pleura, and it leads to gangrene, and not to molecular or cheesy changes. It differs from chronic pneumonia and that state of solidity which ensues after contraction of the lung from old pleurisy, in that it is generally less widely spread over the lobe than they; it is nodular rather than diffused, and it is symmetrical, and not unilateral. And then it differs from miners' phthisis in wanting the extreme amount of dilatation of the tubes, and in possessing more solidity from greater growth. Many of the patches of disease look, it is true, not unlike red hepatisation or grey; but they are much more tough, generally less granular-looking, and often somewhat translucent. These are the points which make one think that there is a fibroid form of lung-disease dependent upon syphilis; and, if so, it is a point of importance with regard to treatment. I have laid some stress upon my inability to distinguish between syphilitic and other inflammatory new growths, because it seems to me there is a tendency to tie down those who work with the microscope to find definitions which do not exist; and certainly, in the case of syphilis, much is lost by doing so. Much of syphilis depends upon its character, upon its eruptive form, which I do not think the microscope can show. Its range of view is too limited. To take one point, for example; Dr. Barlow brought forward a case of enlarged spleen in congenital syphilis at the last meeting. This is a condition by no means unfrequent. I have seen several such; and it has been also said to occur in adults in secondary syphilis; and here also I have seen it once or twice; but the point which interests me particularly is, that it is occasionally associated with considerable enlargement of the liver, which subsides so rapidly under treatment, that I cannot conceive that the condition of the organ can be anything more than that of vascular disturbance and acute swelling, a condition, that is to say, which would correspond to some rash on the skin. Then, to take another case, one of the worst livers I ever saw was from a man who died with a severe tubercular syphilide on the skin. The liver was blotched all over in a remarkable way, and I thought I had secured a prize; but, upon examination, it showed little beyond dilatation of the vessels and some slight cirrhosis. Nothing more could be said about it; but I am not disposed to say it was not diseased for all that, any more than one would say the stomach or the skin are healthy because all traces of rash or injection have disappeared after death. I venture to offer this to you, sir, as some explanation of the fact remarked upon by you at the last meeting, that none of us had brought for exhibition the cases that were wanted. It is certain that we have not any, and is it not possible that demonstrable changes do not often exist? Lastly, one word with regard to the symmetry of syphilis, a point of some importance in Mr. Hutchinson's argument during the last session. Is the disease really unsymmetrical, as Mr. Hutchinson supposes? What do the histologists say? I should like their opinion much on this point. These cases of fibroid change in the lung do not show any want of symmetry. In the majority of cases of syphilitic orchitis found in the dead-house, the disease occurs in both of the testes; and, I think, if one examine the various viscera, one will find plenty of evidence that, when it occurs, it is not usually quite local. It is true that visible gummata are often single, but that is easily explained. All observations go to show that late syphilitic lesions are syphilitised inflammation with more or less of an eruptive tendency. The earlier lesions are, I think, due to the amount of *materies morbi* alone. It is as if, in early syphilis, the material or the process were so intense, that the various tissues were at once excited to rebel; but, later on, as some speakers expressed it, the poison becomes thinned out, and it requires some local deterioration of tissue, or perhaps intensification of the poison by increased vascularity, to call the effect of the disease into existence; and, if this be so, it is scarcely likely that the local irritant will act symmetrically.

Mr. HUTCHINSON: Allow me to say one word in explanation. My friend Dr. Goodhart has supplied me with the best arguments in favour of my views. My view was, not that there might be no reason for believing tertiary syphilis to be unsymmetrical, but rather that there should be a reason that it was not due to poison existing at the time free in the blood which was evoking the disease; but

that the tissues had been damaged during the time of syphilitic fever, when the blood was contaminated, and all the tissues of the body had been then affected, so that any local cause acting upon any tissue (by a sort of accident it may be) might evoke this tertiary growth. That seems to be in unison with the experience alluded to by Dr. Goodhart. He admits that you rarely see any large gumma in the tertiary period excepting non-symmetrical, and that is what I should have supposed. The corresponding tissue on the opposite half of the patient's body would undoubtedly have proclivities given to it during the syphilitic poisoning—that is my conjecture—but it needs something more to evoke the growth of the gumma. The gumma does not prove that there is any active virus then in the blood. If it were there, there would be a tendency to symmetrical symptoms. Then I should like to make a remark with respect to the lung and the testis. Dr. Goodhart has not produced any proof, as far as I can see, that these diseases of the lung occur in what most of us would call the tertiary period. It is a question of date. But my argument would be that there is a tendency to disease of all parts during the second stage, the lungs amongst others. I should want to know the distance of time between the primary disease and the death of the patient, before I was prepared to admit that his cases of double lung-disease were examples of symmetrical tertiary deposit. I should be glad if anyone could give us any information as to whether anything analogous to phagedæna occurs in the lung. Everybody knows how common it is in everything syphilitic, and how rare in any other forms of inflammation. As to the period in which the testis is affected, I have rarely seen a patient with a gumma in his testis, except occasionally in a late tertiary period. About half the cases are symmetrical and half non-symmetrical. I think it stands about half way between the disappearance and what we commonly account as secondary symptoms, and those commonly accounted as tertiary. It is certainly not usually a late tertiary symptom.

The discussion was then adjourned.

## COLUMN FOR THE CURIOUS.

ACCORDING to the *Philadelphia Medical and Surgical Journal* for September 23rd, 1876, "Roots, Erbs and Medacle barks" is a New York sign.

BETHLEHEM HOSPITAL.—As "an hospital for distracted people", it was founded by Simon Fitz-Mary, Sheriff of London, in 1247, was known as the Hospital of St. Mary of Bethlehem, and was situated in the vicinity of Bishopsgate Street. In 1675, "the edifice being found too small, and growing ruinous", the site was removed to Moorfields. At the commencement of the present century, it was again removed to Saint George's Fields, Lambeth. Pennant (*History of London*, vol. i, p. 366) relates that the one erected in Moorfields "was built on the plan of the Tuileries, at Paris. Louis XIV was so incensed that his palace should be made the model for a lunatic hospital, that it was said he ordered a plan of the palace of our monarch at St. James's to be taken for offices of the vilest nature."

BARBER-SURGEONS IN BRITANNY.—In a work on surgeons and barbers in Brittany, M. Closmadeuc has recorded some curious facts of practice in the sixteenth century. Venesection was abundantly practised: to such an extent that the *dchevins* were obliged to lay down regulations for the disposal of the blood, and to prohibit its being exposed to the view of passengers or thrown into the gutter. At Rheims, the barbers were prohibited from keeping pigs—why, is not stated. The fee for venesection was ten *sols* (fivepence); for extracting a tooth, five *sols*. M. de Montconys, travelling in Brittany in 1645, learned from a young surgeon, among other secrets, that the injection of warm fox's blood into the bladder was a sovereign means for dissolving calculus; and that, to cure quartan fever, a white herring suspended by the middle, with the head downwards, should be applied to the spine. A little later, the clergy strongly recommended a collection of domestic remedies made by Madame Fouquet, among which was an ointment of horse-dung and fresh hog's lard for dressing bruises; the dung being that of a black horse which had been at grass for fifteen days during the month of May. The monks were in the habit of prescribing such remedies as the following. For quinsy, apply a poultice made of the feces of a healthy boy who has been fed three days on rabbit, with well-baked bread containing little leaven and salt. In cases of difficult micturition, apply to the penis, or near it, a poultice or liniment of fleas, caught in beds, in oil of sweet almonds; or, what is better, introduce two or three bed-bugs or fleas into the urethra.



## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, FEBRUARY 10TH, 1877.

### THE RELATION OF ALCOHOL TO MEDICINE.

THE meeting lately held by the Church of England Temperance Society in the Sheldonian Theatre at Oxford, under the presidency of Dr. Acland, has a good deal of interest for members of the profession. The meeting was one of a series which are still being held throughout the country for the purpose of considering what means can be adopted to check the spread of intemperance; and was attended by a large number of men eminent both in divinity and in medicine. Naturally, on the question of the usefulness or otherwise of alcohol, different views were to be expected from different speakers, especially when it is considered that the platform contained men of all opinions, the sole uniting bond being that all are anxious, by some means or other, to see intemperance checked. With that aim we have, of course, the fullest sympathy; and, were this the proper occasion, we should be prepared to offer an opinion as to whether the Permissive Bill or some modification of it does or does not offer the best means of effecting the object. Here, however, we do not propose to enter into a consideration of the moral or social effects of the use of alcohol, important as these are, but shall attempt rather, confining ourselves entirely to the scientific aspects of the question, to consider the conclusions to which on the whole, in our opinion, science is tending. Since the celebrated declaration, more or less against the use of alcohol, was delivered some time ago by a large number of the leading medical men of the metropolis, professional attention has been more particularly directed to the question; and there can be no doubt that, on the whole, opinion is tending both to condemn the frequent use of alcohol by persons in health, and to hold that its usefulness in disease has been somewhat overestimated. Granting this, and even granting further, for the sake of argument (though this is a hypothetical concession), that much more alcohol has been ordered in the past than was good for the sick, what ought to be our behaviour now in regard to the question? Are we to give up entirely the use of a remedy merely because our predecessors, or we ourselves at a former time, have recommended its too free administration? Certainly not, if it can be shown that certain principles can be laid down regarding its administration, which principles will obviate former errors, and yet enable us to benefit our patients. What, then, are the teachings of science on this subject?

With the opinions of Dr. Richardson we are all now acquainted. The brilliant experiments, the careful chemical and physiological research of Anstie, De Chaumont, Parkes, and Richardson in this country, and of many eminent foreign observers, by means of which existing conclusions have been reached and demonstrated, are now settling down into the every day knowledge, not only of the profession but of the general public. We know that alcohol belongs to that group of bodies whose action is to paralyse the vaso-motor nerves, and so to congest the parts with blood. We know, further, that if this action be continued and increased, the question becomes greater, the blood moves less rapidly, and, soon parting with its nutritive material, acts, in fact, as a poison to the tissues and especially to the nervous tissues. We know, from the examinations which are now common in lunatic asylums, what changes take place in the brains of persons who are the subjects of chronic alcoholism; and from other sources we have

become acquainted with the effects of the habitual and excessive use of alcohol in the other organs of the body. And we know that, speaking generally, the effect of the consumption of considerable quantities of alcohol is to increase the fibrous tissue in the interior of organs; and that this increase of fibrous tissue, sooner or later, has the effect, by pressure on the secreting cells, of deteriorating their function and of diminishing their power. It may also now be taken for proved, that the hardest work, physical and intellectual, in the most depressing cold, and in the most intense and enervating heat, has been performed, not only without the use of alcohol, but has been performed better without it than with its use. And, lastly, there can be no doubt that, in many cases, diseases have been aggravated by the unwise and injudicious, as well as by the excessive administration of alcohol. Especially is this so in the first stages of fevers or inflammations, where, the whole body or the affected part being already in a state of over-congestion, the administration of alcohol can only do harm theoretically, and is in fact found to do so in practice, by still further aggravating the previous congestion. All these things we know, but we were not quite prepared for, nor do we think the evidence substantiates, some of the statements which Dr. Richardson made concerning the use of alcohol. Surely, he was going beyond his data when he asserted that there "was no evidence whatever of any useful service being rendered by the agent". What are the grounds for so sweeping a statement? To quote Dr. Cheyne, and to say that nothing more hinders digestion than alcohol, is beside the question. The statement is at once admitted, since Dr. Cheyne's words are "after debauch in wine", and he evidently refers to the abuse of alcohol, and not to its use. It may be further true that those who abstain from alcohol have the best digestion, but their good digestion may be due rather to their good stomachs than to their abstinence from alcohol. It might as reasonably be argued that no man should consult a doctor, since those who do not do so enjoy the best health. Much wiser, we take it, is the cautious position occupied by the late lamented Dr. Parkes, who, though himself for many years an abstainer, was not prepared to say that small quantities of alcohol did any real harm. For our own part, while we heartily agree with the statements as to the very deleterious effects of over-indulgence in alcohol, and while we think with Dr. Richardson that persons in health do not need it, we are by no means satisfied that no advantages are to be gained from the administration of it at the right time, and in judicious quantities. And we think, further, that it is not very difficult to say what in general the right time is, nor to find out what are the proper quantities. Evidently alcohol causes congestion, and it should, therefore, not be given in the inflammatory or febrile stages of the pyretic disorders—not as a rule then, that is, since there are exceptions even here. But after pyrexia and its congestion, there succeeds depression of pulse and temperature with anæmia; and then we believe the skilful use of stimulants will sometimes prevent patients from dying, will obviate the tendency to suppuration by increasing the blood supply, or will hasten recovery if they do not save life. If care were taken to impress on patients the advice that the proper use of stimulants is a temporary one, and if they were used as medicines ought to be, *to render their further use unnecessary*, then all would be done that is required, while we should not be going to the extreme of altogether disusing a powerful remedy, merely because it has been grossly abused. Other speakers, we are glad to observe, took this ground almost precisely, Dr. Giles pointing out that in the advanced stages of typhus fever alcohol was one of the most useful of remedies. That is, as we take it, in the spanæmic stage of fever, alcohol, by removing the spanæmia through its action on the vaso-motor system, does good. None the less is it hurtful in the early or congestive stages. Dr. Acland's remarks are very cautious, and carefully worded, and illustrated that objection to hasty conclusions which characterises, and ought to characterise, the true scientific mind. If we were asked to summarise the results of this conference—and we believe there may be gathered from it almost all that can be said on the subject—we should say that the evidence justifies the following conclusions.

1. Alcohol acts by paralysing the vaso-motor system of nerves. This paralysis is directly proportional to the quantity administered, and inversely as the stability of the nervous equilibrium of the individual. Stability of nervous equilibrium, or, more shortly, *resistance*, resolves itself into the individual and family history, and might be precisely statable if we had any means of measuring the quantity of the *neurility* in any portion of the nervous system.

2. Alcohol exhibits a phenomenal contrariety as regards the action of small and large doses; small doses exciting, while large ones depress. In this respect, alcohol only conforms to the general law followed by stimulants and narcotics.

3. Alcohol is not necessary for persons in health, and, in fact, the hardest work possible has been done by human beings without its use.

4. Alcohol lowers the temperature, probably not directly, but by exposing a larger quantity of blood than natural to the action of the heat-abstracting outer air.

5. From the foregoing it follows that, in disease, alcohol will do harm in the early febrile stages of the pyretic disorders, but it will prove useful in the subsequent *spanæmic* and depressed stages; and, in fact, this appears to be the case.

6. It follows, therefore, that the wise physician, while he will dissuade his patients from having recourse to the use of alcohol in health, and from habitually using it in any circumstances, will still employ, so far as he can for good, one of the most powerful remedies with whose properties modern science has made him acquainted.

#### INFANT MORTALITY.

THE distressing mortality at the Carlisle Place Orphanage has lately directed public attention to the subject of infant feeding. Few subjects are of greater consequence in a sanitary sense. The number of mothers who are able to nurse their babies seems to be diminishing every day, and the feeding-bottle has become a familiar object in almost every household. It is, then, of great importance to keep before the mind the principles upon which the hand-feeding of infants is conducted, and the rules in which those principles are embodied.

To be successful, there are two points which should be kept constantly in view. In the first place, we must select a diet which combines in itself all the elements of nutrition in a form in which an infant is capable of digesting them. Secondly, we must remember that the digestive organs in early life are delicate and easily deranged. The child's digestive power, therefore, is subject to frequent variations, requiring his diet to be modified from time to time, in accordance with his state of health.

Taking human milk as the natural and most perfect food for a young child, our object must be to make as near an approach as possible to this standard in the substitute we propose to adopt. The milk of some animals, notably that of the ass, resembles woman's milk very closely; but cow's milk, which is plentiful and cheap, is usually chosen, and, when properly prepared, answers the purpose admirably. Cow's milk contains proportionately more curds and cream, but less sugar, than human milk, and these differences can be easily remedied. A more important distinction between the two fluids consists in the much firmer clot produced by the coagulated casein of cow's milk. It congeals into a dense lump, which contrasts remarkably with the light loose flocculent clot of human milk. It is for this reason that the milk of the cow, simply sweetened and diluted with water, can seldom be digested by infants in large towns. Therefore, to make such a substitute for the mother's breast a satisfactory one, further preparation is required. Our object may be attained by adding an alkali, as lime-water, to the milk. The lime, no doubt, acts by preventing the coagulation of the milk and allowing it to pass out of the stomach little changed, to be fully digested by the intestinal secretions in the bowels. To be efficient, the quantity of lime-water should be considerable, forming at least a third part of the mixture. This, with the addition of milk-sugar, and, if the milk be poor, a little cream, is a very useful food.

Another plan for increasing the digestibility of the casein is to add some thickening material, which, by its mechanical action, may separate the particles of curd and prevent them from running together into a large clot. Any thickening material will do this, but it is not unimportant what substance is chosen. The ordinary farinaceous preparations which, under the name of "infants' foods", are commonly resorted to, can only be given during the first months of life at considerable risk. According to the experiments of Korowin of St. Petersburg, it is not until the end of the third month that the salivary and pancreatic fluids are secreted in sufficient quantities to have any decided action upon starch. Therefore, before that age, if we give farinaceous food at all, we must give it with such an addition as will supply the place of the absent secretions and effect the necessary conversion of the starch into dextrine and grape-sugar. Mialhe, more than thirty years ago, suggested the employment of malt for this purpose, and, fifteen years later, Liebig put the idea into practice. "Liebig's Food for Infants", which consists of wheaten flour, malt, and a little carbonate of potash, is a very valuable improvement upon the older foods, and, if carefully manufactured, is rarely found to disagree. It is greatly to be regretted that the various preparations of this food are all sold at a price which practically limits their use to the well-to-do. A manufacturer who would place this boon within reach of the poor would be a real public benefactor.

Other useful thickening materials are gelatine and barley-water. The latter, in which the starch is limited in amount and held in a state of fine division, differs from ordinary farinaceous foods in being well digested by the youngest infants. A mixture of thin barley-water and milk in equal proportions may be given to a child without danger from the birth. In practice, it is found to be useful to vary the food of the child, according to some of the plans suggested above, as judicious variety appears to act a certain stimulus upon the digestive organs.

One word may be said upon the subject of condensed milk. This is a food which is often well digested by infants immediately after birth, although later it is apt to disagree. Owing to the large quantity of sugar it contains, this food is very fattening, and on this account often gives a deceptive appearance of strength. Children fed for too long a time upon this milk generally become rickety.

If the dietary of a child be regulated upon the principles above sketched out; if he be fed regularly from a perfectly clean feeding-bottle, kept clean, warmly clothed, and taken out frequently into the open air, he will almost invariably be found to do well. Exceptional cases are sometimes met with, but these are rare. The real difficulties connected with the hand-feeding of children arise from temporary derangements, often the result of chills, which for the time impair the digestive power. Children are very subject to attacks of gastric catarrh, during which the food taken is apt to undergo fermentation. If a change be not made at once in the diet, the fermenting process continues, vomiting or diarrhoea occurs, the strength of the child is reduced, and his nutrition is for the time in abeyance. In the treatment of such a condition, the quantity of fermentable matter taken must be diminished, and it may be necessary for a day or two entirely to exclude milk from the diet.

The hand-feeding of infants, then, requires intelligence and tact and a vigilant attention to small points of detail. With these, in ordinary cases, success is certain. There is no reason why a healthy child fed artificially, with judgment, should not thrive as well as one suckled naturally at his mother's breast.

#### CONCEALMENT OF THE DEAD BODIES OF INFANTS.

Two very remarkable cases have recently occurred to which it appears desirable to draw attention. The first occurred in the localities of Longwathly, a village near Penrith, and Tue Brook, a suburb of Liverpool, respectively; and, as it involves a serious charge against a woman now in custody, it will suffice to give briefly the facts as stated before the coroner and magistrates.



Recently, the body of an infant was found in a box at an inn in Penrith. The box was stated to have been left in June last by a Mrs. Kirkbride; who never returning to claim it, it was stowed away in a lumber-room. After it had been there for many months, a peculiar odour was observed to emanate from it; it was accordingly opened, and was found to contain the remains of a child in a very decomposed state wrapped in several coverings. An inquest was held on the remains, and, as the medical evidence could not prove that death had resulted from violence, an open verdict of "Found dead" was returned. A warrant was issued for the apprehension of Mrs. Kirkbride; and, subsequently, a further and more careful examination of the box revealed the fact of the remains of another child being contained in it; these latter having, apparently, been in the box a much longer time than the other. As it was ascertained that Mrs. Kirkbride had gone to the neighbourhood of Liverpool, the police were communicated with, and she was taken into custody on the evening of Sunday, the 28th ult. After her removal to prison, which at her own request was done quietly, without the knowledge of her landlady and the other inmates of the house, certain articles were missed, which led to her boxes being searched, when, among other articles, a round tin box was found which, when opened, emitted a most offensive odour. It was examined by the police, and removed by them to the mortuary, where Mr. Henry Yate Pitts carefully examined the contents. These he found to consist of the remains of three newly-born infants in different stages of decay, one being tolerably perfect, but the sex not distinguishable, the remains being in a state of dry decay; the next was the trunk of a newly-born full-grown child without a head, in a more advanced state of decay than the first. While searching for the bones of the child's head, Mr. Pitts found other loose bones which had evidently belonged to a third child; also the bones of the missing head of the second child. Round the neck of one child was a piece of rag, which, making allowances for the difference in size between the neck as it was and as it had been, seemed to have been originally tightly tied. No opinion could be given as to the cause of death, nor as to the children having been born alive. There were appearances indicating that the third child had been in the box many years, the others at different but more recent periods.

After the inquest, the police received information which induced them to search the garden of a house at Hetton near Penrith, where the prisoner formerly resided some time. The result was the discovery of the remains of a sixth infant buried beneath a pear-tree. Mrs. Kirkbride has been remitted to the Penrith police, and will be brought before the local magistrates.

In the second case, the scene is the Regent's Park Road, where are the premises of an undertaker named Harvey. For some time past, complaints have been made of unpleasant odours in the neighbourhood of these premises, which were at first attributed to the establishment of a fishmonger who, in consequence, has suffered great diminution in his business. Closely adjacent, also, was a large infant-school, connected with the church of St. Mary the Virgin, Primrose Hill, several of the pupils of which had been obliged to go home from illness and nausea. At the rear of Harvey's premises, was a stable in which Mr. Leggatt, a cab-proprietor, had been in the habit of putting one or two horses. The man employed at these stables at last discovered at the end of the stable in a hollow a box, which, on being opened, was found to contain the body of a child supposed to be between two and three years old. Further search in the loft and other places led to the discovery of no fewer than seven bodies of various ages. They are in a decomposed state, and beyond identification. Dr. Hardwicke has decided to hold an inquest on one of the bodies, when no doubt all the facts in connection with the affair will transpire. It may, however, be well to point out that this is the third case of a similar kind which has come to light within the past eighteen months, and there is too much reason to fear that this practice of retaining the bodies of infants for an indefinite time is a common one with undertakers of a certain class.

It is quite useless to surround the burial of infants with all kinds of safeguards if such practices are to be permitted, for they seldom come to light until some considerable time has elapsed, by which period the body has become much decomposed, or even reduced to a skeleton, when all attempts at identification and efforts to unravel the mystery are unavailing. There could be no hardship in an enactment which should make it penal for any undertaker to retain any corpse on his premises for a longer period than forty-eight hours; and we trust that his subject will receive the attention of Mr. Secretary Cross, who has repeatedly shown his willingness to do all that lies in his power to promote the social and sanitary well-being of the lower classes.

WE deeply regret to learn that Sir William Fergusson has, during the last few days, shown signs of increasing weakness, with delirium. His condition at the present moment is very critical.

It is announced that Mr. Erasmus Wilson, F.R.S., proposes to bear the expense of transporting Cleopatra's Needle from its Egyptian domicile to the site on the Thames Embankment. He has, we hear, entered into a contract with a firm of engineers, who undertake the task for a sum of £10,000, which is not to be paid unless and until the work is accomplished.

THE Duke of Westminster presided on February 2nd at the annual meeting of the Rhyll Children's Home and Hospital. His Grace said that the home was of national interest, as the children came as inmates from all parts of the kingdom. During the year, the ladies managing the home had become total abstainers, and alcoholic drinks were only given to the children when specially ordered.

THE Local Board of Wimbledon, which is supplied by the Southwark and Vauxhall Water Company, is taking steps to secure a water-supply of its own from artesian wells. Mr. Homersham, C.E., has been consulted, and has given an opinion that a pure and ample supply could be obtained for about £55,000 from wells to be sunk at Wallington.

AT a recent meeting of the Society of Surgery at Paris, Messrs. Ciniselli of Cremona, Longimore of Netley, and Michaux of Louvain, were elected Associates of the Society. Messrs. Bryant of London, Lister of Edinburgh, Albert of Innsbruck, Amabile of Naples, Saxtorph of Copenhagen, and Symvoulidès of St. Petersburg, were elected corresponding members of the Society at the same meeting.

DR. JACCOUD, who was recently named Professor of Pathology in the Faculty of Medicine in Paris, began his course on Wednesday, January 31st, at three o'clock. More than two thousand of the students, says the *Revue Scientifique*, filled the great theatre, the passages, and even the courts of the school, and loudly applauded the popular professor. A great number accompanied him to the gates with enthusiastic acclamations.

WE are requested to state that neither the library nor museum of the College of Surgeons will be open on Tuesday next, the 13th instant, when the Hunterian Oration will be delivered. The doors of the College will be open at two o'clock, when all members will be freely admitted on giving their cards to the porter; no others on any consideration whatever will be admitted. The Oration will be delivered at three o'clock precisely.

AN inquest was held at Manchester on Wednesday on the body of John M'Guinness, aged five years. The boy took a powder bought from a druggist for worms, and died in half an hour. The powder was taken from a bottle which had not been touched for nine years, and, on examination, it was found to be strychnine. The jury returned a verdict of accidental death, and the druggist was absolved from blame, the jury believing that the wholesale dealer from whom he bought the drug had made the fatal mistake.

## LECTURES AT THE ROYAL COLLEGE OF SURGEONS.

PROFESSOR WILSON, F.R.S., will bring his course of lectures on Dermatology to a close on Monday next, and will be succeeded by Professor W. K. Parker, F.R.S., who will deliver nine lectures on the Osteology of Birds. The following is his programme:—Introductory. Remarks on the Morphology of the Vertebrata, and the place of the Bird in the Subkingdom; the main Groups of the Class, and their Geographical Distribution.—The Development of the Chick in the Egg.—The Morphology of the Vertebrate Skull.—The Morphology of the Fowl's Skull.—The main varieties of the Skull seen in the Bird-Class.—The Spinal Column of Birds.—The Shoulder-Girdle and Wing of Birds; with comparisons.—The Hip-Girdle and Leg of Birds; with comparisons.—Recapitulation; with general remarks upon the Vertebrate Form; and Conclusion.

## THE QUEEN'S SPEECH.

THE Queen's speech is chiefly noticeable for an entire absence of all reference to any measure of sanitary reform, or indeed anything which tends in that direction. This entirely accords with Mr. Slater-Booth's recent intimation to the Association of Medical Officers of Health that so much had been done in the way of sanitary reform, that little more could be expected at present. It is, however, a bitter satire on the original programme of a Government which started with a device of *Sanitas sanitatum*.

## MR. DELANE.

THERE are few men who, by their life and work, have had a greater influence on the world's history for the last thirty-five years than the editor of the *Times*. Nor has any one, perhaps, filled uninterruptedly for so long a series of years a post entailing on the person who holds it equal responsibilities, powers, and anxieties. It is hardly possible that services involving such continuous mental and physical labour by night and day should be so long performed, without telling upon the health and strength. A good deal of public concern has been manifested at the reports which have lately been circulated, that Mr. Delane's health was failing. We are happy to be able to say that, although he has not escaped altogether the almost necessary consequences of so many years of severe exertion, his health has allowed him to continue his editorial labours during the past year without interruption except for a brief autumnal holiday, and that he is now as actively and zealously as ever engaged in the functions in which the country so greatly values his services.

## DR. ROBERT LEE, F.R.S.

WE regret to hear of the sudden death, after a few hours' illness, of Dr. Robert Lee, F.R.S., formerly Physician-Accoucheur to St. George's Hospital. Dr. Lee was well known for his researches on the anatomical structure and development of the nerves of the heart and of the uterus. He has not long survived his chief opponent, Dr. Snow Beck, with whom he carried on an active warfare for some years. Dr. Lee will be well remembered by many students and practitioners as an energetic and impetuous teacher, with strong prejudices and much given to denunciation of those from whom he differed. He was an especially warm opponent of ovariectomy and of perineoraphy, but he lived to see both establish themselves in the first rank of useful surgical operations. With many of the faults of a bitter conservative, Dr. Lee had also the merits of honesty, hard work, and original research. We shall next week publish a notice of his life.

## TWO RICHMONDS IN THE FIELD.

WE may call attention to the notice which appears in our diary that the Hunterian Oration of the Hunterian Society will be delivered on the 13th instant, the same day, as it happens, as that which is fixed for the Hunterian Oration at the College of Surgeons by Sir James Paget. The greater does not always include the less; and although the presence of the Prince of Wales may possibly lend peculiar attractions to the College oration, which is not likely to need any other

than intrinsic recommendation, those who reserve their energies for the oration of Dr. Moxon will not go without the reward of hearing an address which comes from one of the most original and fanciful of medical orators. The memory of Hunter will be doubly honoured on that day, and we hope that the members of the Hunterian Society will not stray from their allegiance.

## THE ARMY AND NAVY MEDICAL SERVICES.

WE publish to-day the results of the final examination at Netley for commissions in the medical departments of the British and Indian armies and the Royal Navy. We respectfully invite the attention of the Secretary for War, and his advisers in matters medical, to the fact disclosed by these truth-telling figures. It is this. England, or those who in this matter represent England, deem it wise to send the best educated and most competent men they can obtain in the open market of the universities and schools of this kingdom, not, as we might expect, to take care of the health of the British army and navy of England, but of the native army of India. In the list for the British army, numbering thirty-three young medical officers, one, and one only, has 5,000 marks and upwards; the Royal Navy, out of thirty, not having one who attains this number; while the candidates for the army of India, out of the small number of twelve, have four who have scored 5,000 marks and upwards; the first on the list, Dr. Moorhead, having 5,638 marks, while the fifth and sixth on the same list have close upon 5,000. It will be seen elsewhere that Dr. Moorhead is the winner of the Herbert Prize and Martin Memorial Gold Medal. Will any Member of Parliament in the present session have the courage to ask the Secretary of State for War why all this should be?

## THE PUBLIC HEALTH.

THE following is the return of births and deaths in London and in twenty-two other large towns of the United Kingdom for the week ending Saturday, February 3rd. During last week, 5,857 births and 3,697 deaths were registered in London and twenty-two other large towns of the United Kingdom. The natural increase of population was 2,160. The mortality from all causes was at the average rate of 24 deaths annually in every 1,000 persons living. The annual death-rate was 21 per 1,000 in Edinburgh, 25 in Glasgow, and 26 in Dublin. The annual rates of mortality per 1,000 last week in the twenty English towns, ranged in order from the lowest, were as follow: Portsmouth, 12; Brighton, 16; Leeds, 19; Plymouth, 19; Birmingham, 19; Leicester, 20; Sheffield, 21; Newcastle-upon-Tyne, 22; Bradford, 22; London, 23; Norwich, 23; Nottingham, 23; Hull, 23; Wolverhampton, 23; Oldham, 25; Sunderland, 28; Manchester, 31; Bristol, 31; Liverpool, 32; and Salford, 34. The annual death-rate from the seven principal zymotic diseases averaged 3.3 per 1,000 in the twenty towns, and ranged from 0 and 0.5 in Nottingham and Brighton, to 5.5 and 6.6 in Liverpool, Manchester, and Sunderland. Scarlet fever showed an increased fatality in Sunderland. The deaths from small-pox in the twenty towns, which had been 113 in each of the two preceding weeks, rose last week to 130; 103 occurred in London, 19 in Liverpool, 5 in Manchester (exclusive of 3 fatal municipal cases in the Mensall Hospital), 3 in Salford, and not one in any of the sixteen other towns. During the five weeks ending on Saturday last, the annual death-rate from small-pox was equal to 2.4 per 1,000 in Salford, 1.4 in London, 1.4 in Liverpool, and 0.7 in Manchester. The fatal cases, both in London and Manchester, have shown an increase in recent weeks. In London, 2,565 births and 1,528 deaths were registered. Allowing for increase of population, the births were 28 and the deaths 147 below the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the two previous weeks had been equal to 22 and 21 per 1,000, rose last week to 22.6. The 1,528 deaths included 103 from small-pox, 22 from measles, 23 from scarlet fever, 4 from diphtheria, 41 from whooping-cough, 20 from different forms of fever, and 18 from diarrhoea; thus, to the seven principal diseases of the zymotic class, 231 deaths were



referred, against 210 and 204 in the two preceding weeks. These 231 deaths were 8 below the corrected average number from the same diseases in the corresponding week of the last ten years, and were equal to an annual rate of 3.4 per 1,000. The fatal cases of scarlet fever, diphtheria, whooping-cough, and fever, were considerably below the corrected average weekly numbers, whereas those of small-pox and diarrhoea showed an excess. The 103 deaths from small-pox included 53 certified as unvaccinated, and 14 as vaccinated; in the remaining 36 cases the medical certificates either did not furnish any information as to vaccination, or contained statements that the medical practitioner was unable to certify whether the deceased had or had not been vaccinated. The proportion of deaths in private dwellings shows considerable increase upon that which has prevailed in any week since the disease became severely epidemic. The fatal cases showed a marked increase in north London, and were also more numerous in the west and east districts.

#### POISONING FROM CARBOLIC ACID.

ANOTHER case of accidental poisoning by carbolic acid is reported in the *Liverpool Mercury* of February 1st. The man, who was an assistant at a druggist's shop, appears to have drank the carbolic acid in mistake, thinking it was a cough mixture.

#### METALLOTHÉRAPY.

SOME years ago, a good deal was said of the theory of cure by local application of metals by M. Burq, and great attention was attracted by his persevering efforts to bring to notice alleged curious effects produced by the application of metals upon surfaces deprived of sensation. Trousseau, among others, observed that when a metal was applied for a certain time upon the insensible surface of a limb, at the end of about a quarter of an hour an incomplete sensibility returned on a restricted zone of skin; and from that point spread gradually during the twenty-four hours over the whole limb. Sensibility returned, and at the same time the skin reddened, the temperature rose, and even the muscular force seemed increased. Strange to say, all metals did not act in the same way with the same patients; on some it was gold which acted, on others copper or zinc, but the same metal always acted on the same patient. These observations have been renewed by Drs. Charcot and Dumontpallier; but their explanation is still quite unknown. At the instigation of M. Charcot, who has brought these facts once more before the Society of Biology in Paris, physicists, chemists, and physiologists are studying the question actively, and possibly some useful result may follow either in information as to electrical relations of the body, or in respect to the therapeutical applications of the observation.

#### THE NATIONAL HEALTH SOCIETY.

THE general annual meeting of the National Health Society was held in the rooms of the Society, 44, Berners Street, on January 29th; Mr. Ernest Hart in the Chair. The report of the year's proceedings stated that courses of lectures had been given at mothers' meetings, working men's clubs, and at evening meetings of national schools, with the co-operation of the clergy and other local authorities. Lectures on special subjects of personal hygiene and laws of health had been delivered to the educated classes by Dr. Wilks, F.R.S., Mr. W. Eassie, C.E., Miss F. Lees, Miss Miranda Hill, and other well-known persons, who had freely given their services. The report expressed a hope that the large deputation to the Home Secretary, organised last April, and attended by Dr. Lyon Playfair, Cardinal Manning, and other gentlemen interested in the improvement of the London water-supply, would very speedily see its wishes and the promises of Mr. Cross realised. A hope was expressed that the trustees of Lincoln's Inn Fields would not much longer exclude the public from that fine, but little used, open space. The Society is about to make an effort to procure the use of the School Board school-playgrounds in London for poor children in their neighbourhood on Saturdays and Sundays, when these playgrounds are now closed. Large numbers of sanitary tracts, handbills, and posters had been sold and distributed, and a course of lectures

on health is now being delivered by Dr. Corfield in the rooms of the Society of Arts. A vote of thanks was passed to the Committee for its services during the past year, and some influential names were added to the list. The auditor, Mr. Frederick Pope, and the secretary, Miss Lankester, also received a vote of thanks for their valuable services.

#### THE NORWICH HOSPITAL.

AT the special meeting of the governors and subscribers of the Norwich Hospital, our eminent associate Mr. Cadge, who at present fills the high office of sheriff, was able to produce evidence that the cost of rebuilding the hospital altogether would not exceed that of improving the existing hospital by more than about £5,000. He added strong testimony from Captain Galton and Professor Humphry in favour of that course, which he himself very strongly advocated. Moreover, the Chairman, Lord Leicester, the Prince of Wales, and a number of other influential and wealthy persons had promised large additions to their already munificent donations if this course were adopted. These combined considerations left the subject hardly open to debate, and it has accordingly been resolved to build a new hospital. Mr. Cadge estimates that an excellent new hospital of two hundred beds can be built for £30,000, to cover site, building, and fittings. This is at the rate of £150 a bed. St. Thomas's Hospital cost about £1,000 a bed, we believe, and the new Hôtel Dieu will have cost about £2,000 a bed before it is completed, and with that it is a bad hospital. It will be seen, therefore, that Mr. Cadge has chosen a moderate estimate; but the example of the metropolitan asylums proves that, with judgment and economy, his expectations may be easily realised. We do not, however, profess to be convinced of the necessity of building a new hospital: we believe that the cry for rebuilding old hospitals should be met by the requirement to carry out first all that can be effected by the modern knowledge as to the sanitary results of surgical cleanliness in the dressings of the patients, minute care in the hygiene of nursing, and reforms in the management of the wards. The examples of the Edinburgh Infirmary, the Glasgow Infirmary, St. Bartholomew's Hospital, and Norwich Hospital itself will show how much may thus be effected in reducing mortality; while St. Thomas's Hospital and the Lariboisière, and other Paris hospitals, will show that modern buildings do not confer health upon the patients, or an immunity from the cause of excessive mortality which is now misnamed "hospitalism".

#### COLOUR OF SPECTACLES.

M. JAVAL has reported to the Biological Society of Paris a means by which spectacles can be lined with blue. He remarked upon the general preference now existing for blue glasses over green glasses as protectives; and, discussing the use of coloured glasses, observed that it was not at all certain whether particular colours are deleterious, and whether there is any advantage in extinguishing certain coloured rays. The arguments on which the use of blue glasses are founded are, he says, valueless, and the whole question needs to be reconsidered.

#### SALICYLIC ACID.

M. A. ROBIN asserts, in a communication to the Biological Society of Paris, that, in typhoid fever, salicylic acid almost constantly diminishes the quantity of urine excreted, and the quantity of indican increases under its use; moreover, it produces ulceration of the back of the throat, and even consecutive oedematous inflammation of the larynx. He recommends only very dilute solutions in typhoid fever, for fear of arresting the flow of urine. He had observed a buzzing in the ears as the result of the use of salicylic acid.—M. Leven is opposed to the use of this substance in typhoid fever. Powerless in small doses, it causes serious trouble in the digestive system, which are especially dangerous in that disease.—M. Lepine finds, also, that the acid is very slightly excreted in typhoid, and that it produces a buzzing in the ears, but less intensely and less constantly than with quinine. Valuable in some cases of acute rheumatism, it renders no service in typhoid fever.

## MODERATE DRINKING.

SIR HENRY THOMPSON presided Wednesday night at a public meeting in Exeter Hall, called by the National Temperance League to discuss the question of moderate drinking. Sir Henry Thompson said he doubted whether in many cases, or perhaps in any case, alcohol was valuable in the dietary of healthy people. Indeed, he was not quite sure that to a great many people it was not injurious. He believed that alcohol had a certain value to the human body under very exceptional circumstances, but upon this fact he founded one of the strongest arguments for not bringing it into our daily food. Alcohol acted as a stimulant to the nervous system, and might, for instance, enable a pedestrian who had suddenly broken down to go on and win his bet, although he thus drew a bill on the future. Dr. B. W. Richardson said that his experience of moderate drinking was that it was the moral mainspring of all the drunkenness in the land, and of all the crime to which it led. The meeting was also addressed by Canon Farrar, Mr. E. James, Vice-Marshal Sir B. J. Sullivan, Admiral Sir W. King Hall and other speakers.

## HOSPITAL TREATMENT OF INFECTIOUS DISEASES.

THE Registrar-General reports that, during the year 1876, in the Metropolitan Asylum Hospitals, more than 2,000 cases of small-pox, more than 800 cases of scarlet fever, nearly 300 of enteric fever, and 145 cases of typhus were under treatment. In the London Fever Hospital, 518 cases of scarlet fever, 93 of enteric fever, and 23 of typhus were admitted. No returns were sent to the Registrar-General from the Small-pox Hospital at Highgate. The number of completed cases of small-pox treated in the Asylum Hospitals during 1876 was 1,377, amongst which were 338 deaths (46 per cent. of all the small-pox deaths in London), equal to a mortality of 24.5 per cent. In 1870-1-2, the mortality amongst the 14,808 cases treated in those hospitals was 18.7 per cent. The 1,377 cases of 1876 included 1,018 vaccinated and 359 unvaccinated; the mortality was 13.2 per cent. among the vaccinated and 56.8 per cent. among the unvaccinated. The 804 completed cases of scarlet fever recorded in the Metropolitan Asylum Hospitals, during 1876, showed a mortality of 10.7 per cent., being 8.1 per cent. of 321 cases treated at Homerton, and 12.4 per cent. of 283 cases treated at Stockwell. In the London Fever Hospital, during 1876, of 551 completed cases, 50 were fatal, equal to a mortality of 9.1 per cent. The completed cases of typhus in the two Asylum District Fever Hospitals were 145 last year, the mortality being 19.3 per cent. In the London Fever Hospital, 26 cases of typhus were treated; and the 7 deaths give a mortality of 26.9 per cent. Of enteric fever, 270 completed cases were reported from the Asylum Fever Hospitals, with a mortality amounting to 20.7 per cent. In the London Fever Hospital, 86 cases were fully treated, of which 13 proved fatal, equal to a mortality of 15.1 per cent. Assuming the proportion of deaths to recoveries to be the same among cases of epidemic disease, whether treated at home or in hospital, it may be estimated that, during the year 1876, the number of persons in London attacked by small-pox was 2,994; by scarlet fever, 22,886; by typhus, 796; and by enteric fever, 4,030. These numbers are more probably under rather than over-estimated.

## THE DERBY ASYLUM.

WE observe from the Derby papers that the question long mooted of an union between county and borough for the purpose of providing joint accommodation for pauper lunatics is likely to be decided in the affirmative. The county asylum at Mickleover has, from the date of its opening, been under excellent management, but has laboured under some disadvantages from the small number of its inmates. Dr. Murray Lindsay has, it appears, now succeeded in persuading his Board of Visiting Justices to enlarge the asylum for the admission of the pauper lunatics from the borough of Derby. In many instances, the union of counties and boroughs for asylum purposes, contemplated by the statute, has been prevented by the susceptibilities of the county magnates, who have not been willing to accept a community of official

duties with the successful tradesmen who generally constitute the borough magistracy. But, in this instance, this class difficulty has, to the honour of the Derbyshire justices, had no existence, and the obstacle to a speedy arrangement is understood to arise from the borough side on the question of immediate expenditure. It is said that the new asylum at Leicester is too large for the present requirements of the county, and that the visiting justices have been able to offer the magistrates of the borough of Derby the use of a hundred beds at a lower rate than they could possibly be provided for at Mickleover. Borough magistrates are, no doubt, bound to make the best bargain they can in the interests of their constituents; but, in this instance, something more than the weekly money payment for these lunatics has to be considered. The Derby Asylum is within three miles of the town, while the Leicester Asylum is about thirty miles away. The travelling of patients and officials over the greater distance will swallow up some of the apparent saving of cost; but the more important consideration is, that the increased distance of the patients from their friends will entail a much greater expenditure of time and money in their visitation at the cost of a very poor and suffering class, the relatives of the pauper insane. Dr. Murray Lindsay has very conclusively proved by quite an array of authorities, that the best and most economical size of a pauper asylum is one for six or seven hundred inmates. An asylum of this size is not too large for one directing mind. A medical superintendent with two assistant medical officers can very efficiently discharge the duties of direction, care, and treatment, and the institution is not so large that other important officers need to be duplicated. The cost of a thoroughly efficient administration distributed over such a number of inmates enables an institution of this size to be worked at a lower rate than a much smaller one, or, what is still better, to be kept at a higher standard of excellence at the same rate of cost. We shall be very glad to hear that Dr. Murray Lindsay has succeeded in his praiseworthy efforts to extend the benefits of his asylum to the pauper lunatics of the neighbouring borough.

## NATIVE PHYSICIANS IN ALGERIA.

Two young Algerines, educated in the French School of Medicine at Algiers, have been appointed *officiers de santé* of country districts in the extreme south of Algeria. They have already forwarded reports of the numerous diseases, which are sufficiently intelligent to be thought worthy of publication by the French authorities. The latter contemplate sending more qualified native students into the interior of Algeria, with instructions to make reports on the forms of disease indigenous to the country, so as eventually to form a complete medical geography of Algeria.

## SCOTLAND.

THE first sod of the new waterworks for the supply of Burntisland was cut on January 31st.

A MAN died last week in a Govan police-cell from, it is supposed, an overdose of whiskey.

A WOMAN died at Tobermory last week at the age of 103; and another woman in the same district, who is still living, is said to have reached the age of 105.

THE rainfall at Jedburgh for the month of January has been 4.16 inches, while the average of the same month during the past thirteen years is only 1.87 inches—an increase of 2.29. The rainfall in December at the same station was 6.31.

PROSECUTIONS for adulteration of milk are still frequent in the west of Scotland. Last week, two farmers of Kilmarnock were fined £5 each for adulterating their milk with water and skim milk. In one case, 10 per cent. of water and 12 of skim milk, and in the other 14 per cent. of water, had been added.



It is stated that matters have now been arranged so that the Edinburgh new Water Bill will pass through Parliament in the present session as an unopposed Bill.

THE list of church collections on Hospital Sunday in Edinburgh, which were held in October of last year, has just been published. The total amount collected was nearly £1,750. St. John's (Episcopal) stands at the head of the list with £183; St. Paul's (Episcopal), next, with £118; then St. Stephen's (Established), with £92; and St. George's (Free), £63. The subscriptions of the numerous other places of worship were in smaller amounts.

THE report submitted to the annual meeting of the contributors to the Glasgow Royal Infirmary last week states that 5,037 patients had been admitted into the hospital during the year, and 16,586 out-patients had been treated at the dispensary. The ordinary revenue amounted to £19,000 in round numbers, and the ordinary expenditure to £20,250. On the other hand, there was an excess of extraordinary revenue over expenditure of £1,412. The success of the Medical School had surpassed the expectation of the managers.

#### WATER-SUPPLY OF FORFAR.

As a preliminary step towards settling the question of a further water-supply to the town of Forfar—a question which has given rise to a serious disagreement between the local authority and the Board of Supervision—an analysis of samples of water from the wells which at present supply the town, and also from the proposed sources of a gravitation-supply, has been made by Dr. Tidy of London. The former he finds to be all more or less contaminated; while the latter, though of good wholesome quality, is softer than is altogether desirable for a town-supply; the analysis shows them to be of considerable purity. Of the seven wells at present in use, three, he considers, should not be used for drinking purposes; and the four others, though not so contaminated, are certainly of very doubtful purity, and, in his opinion, their use would be attended with considerable risk.

#### INCOMPATIBILITY OF MEDICINES.

AT a recent meeting of the Pharmaceutical Society (North British Branch), a paper was read by Dr. F. W. Moinet of Edinburgh, on the Incompatibility of Medicines. In it he pointed out that, both in prescribing and in dispensing, it should be borne in mind that three kinds of incompatibility existed in medicines—viz., pharmaceutical, chemical, and physiological; but that medicines were only incompatible in any of these three ways when the intended action of the prescription was defeated.

#### DEATH-RATE OF LEITH.

THE burgh of Leith shows the unusually low death-rate of 14 per 1,000 for last week. The only deaths due to zymotic disease were one from whooping-cough and one from diphtheria. The deaths altogether numbered fifteen, and the births forty, of whom three were illegitimate. For the whole month of January, the death-rate is equivalent to an annual mortality of 23 per 1,000, 46 per cent. of the deaths being of children under five years age.

#### EDINBURGH HOSPITAL FOR INCURABLES.

THE Edinburgh Hospital for Incurables is being carried on successfully at No. 8, Salisbury Place; but the managers find themselves much cramped for want of space, and in their report show that many suitable cases have been refused admittance from want of room. They feel that some extension of premises is absolutely necessary in order to carry out fully the objects of the Association and to meet in a satisfactory manner the wants of the incurable poor. The expenditure during the past year has slightly exceeded the revenue. Out of fifty-three applications for admission, only nineteen had been successful. The medical officers, Dr. G. W. Balfour and Mr. Joseph Bell, report that

they are thoroughly satisfied of the soundness of the principles on which the institution is conducted, and are convinced that, with enlarged means, the benefits may be greatly extended.

## IRELAND.

DURING the month of January, three deaths were registered in Dublin as occurring from small-pox.

#### NATIONAL EYE AND EAR INFIRMARY.

A BAZAAR was held this week in the Exhibition Palace, Dublin, to obtain funds for enlarging this institution. It is proposed that the new hospital shall contain thirty beds, besides special wards for contagious eye-diseases, this latter being an absolute necessity for isolating patients suffering from diseases of this class.

#### CORK LUNATIC ASYLUM.

AT the monthly meeting of the governors of this asylum last week, an application was read from the President of the Queen's College, Cork, requesting permission to have a course of lectures conducted at the asylum for the benefit of the medical students of the College. The advantages of developing a knowledge in this branch of medical science was pointed out; and the Board of Governors unanimously agreed to permit Dr. Eames, Resident Medical Superintendent, to conduct the lectures, believing they would be conducive to the public good.

#### KING AND QUEEN'S COLLEGE OF PHYSICIANS.

A DEPUTATION from this body, consisting of the President, Vice-President, Registrar, and Fellows, waited upon His Grace the Duke of Marlborough on the 31st ult., and presented him with an address in which they offered their congratulations on his arrival in Ireland as the representative of Her Majesty, and stated that, from the time of their incorporation in the seventeenth century, they had always endeavoured, and they believed successfully, to carry out the great trust committed to them: to secure a succession of well-educated physicians, competent to take charge of the health of Her Majesty's subjects. It was also their anxious desire, as it was their duty, to afford Government all the aid in their power in matters relating to public health and sanitary science, which deservedly occupy so much of public attention at the present time. His Grace, in reply, said that he received with much pleasure the congratulations of so eminent a body of public men. Their College occupied a high position among the medical associations of both the Old and New World. It combined with the *prestige* due to its antiquity the lustre which had been gained for it by its members, by successful research and continuous discovery in the art of healing. Their society was composed of men who devoted their time and intellectual powers to the amelioration of the physical condition of their fellow-creatures, and who were constantly risking their lives in battle with disease. To train and secure a succession of men equal to the performance of such tasks was one of the highest benefits that could be conferred upon society. Their advice in all sanitary matters would be of great advantage to the Government, and, whenever offered, would invariably engage his serious attention.

#### HEALTH OF DUBLIN: ANNUAL REPORT.

DURING 1876, there were registered in the Dublin Registration District 9,006 births, being equal to a ratio of 1 in 35, or 29 per 1,000 of the population; and 8,099 deaths, being equal to 1 in 39, or 25.7 per 1,000. The birth-rate was above and the death-rate below the average for the previous ten years. The mortality, however, among young children and persons of advanced age was slightly over the average for the years 1866-75; but this increase was counterbalanced by a decline in the deaths at the intermediate ages. The number of deaths referred to zymotic diseases was 1,419, or 45.1 in every 10,000 inhabitants, being 468 less than the average annual number for the preceding ten

years. Small-pox caused 9 deaths, 1 in the third quarter and 8 in the fourth; fever, 260 deaths; scarlet fever, 194; whooping-cough, 195; measles, 133; croup, 73; diphtheria, 25; erysipelas, 47; and diarrhoea, 243. Bronchitis proved fatal in 1,282 cases; pneumonia, 242; pleurisy, 22; and lung-disease unspecified, 143; the deaths resulting from diseases of the respiratory organs (excluding phthisis) amounting to 1,712, or 21 per cent. of the deaths from all causes, and equal to 54 in every 10,000 inhabitants. Convulsions caused 594 deaths; apoplexy, 101; paralysis, 154; cephalitis, 52; epilepsy, 30; and brain-disease unspecified, 129. To heart-disease, 390 deaths were referred; 34 to aneurism, 99 to liver-disease, 33 to Bright's disease, and 83 to kidney-disease not specified. Phthisis caused 931 deaths; hydrocephalus, 171; mesenteric disease, 127; cancer, 142. The "violent deaths" numbered 216; viz., 192 from accident or negligence, including 83 from fractures and contusions, 46 from drowning, and 37 from burns or scalds; 8 were homicidal, and 13 suicidal.

#### THE PUBLIC HEALTH ACT (IRELAND).

A DEPUTATION of the Dublin Corporation waited last week upon Sir Michael Hicks Beach to bring under his notice their views in reference to the Public Health Act. They stated that the Act which Sir M. Hicks Beach had introduced last session contained, in the opinion of the Public Health Committee, several omissions of important matters, which were of the more consequence since it was intended that this Bill, when it became law, should repeal all former Sanitary Acts and be the only sanitary statute for the future. The Corporation wished to have the Bill amended by introducing the omitted matters, and placed considerable importance upon two: firstly, a clause to enable the Corporation or urban sanitary authority to provide hospital accommodation in time of epidemics, and to make arrangements for the treatment of the sick in such cases; and, secondly, a clause for punishing the occupier of a house who should prevent the owner, when directed by the justices under proper sanitary power, from making the sanitary improvements necessary in the building. Dr. Cameron alluded to the necessity of incorporating the clauses of the Adulteration of Food and Drugs Act of 1875, especially the amendment of that part of it by which fines could not be imposed for the refusal of the servants of the shopkeeper to sell. Better provision should also be made against the sale of diseased meat. Sir Michael Hicks Beach promised to carefully attend to the amendments which had been suggested by the Public Health Committee when again introducing the Bill in the coming session; and the observations of Dr. Cameron would also be considered as to the fusion of the Adulteration Acts and the law as to sale of diseased meat, since their intention was to consolidate all the Sanitary Acts; but the Acts to which he referred were not included in the Public Health Act of England, upon which the Irish Act was principally based.

#### VACCINATION.

THE Council of the Irish Medical Association have prepared a Bill to consolidate the whole Vaccination Law into one comprehensive measure, with an alternative scheme which aims at enacting the necessary reforms without attempting consolidation. The Bills are to be laid before Sir Michael Hicks Beach, Chief Secretary for Ireland, by a deputation from the Association. It is suggested that the prescribed time for compulsory vaccination should be limited to three months as in England, instead of six months as at present; that the certificate of registration should be forwarded to the Registrar of the district in which the birth of the child occurred, as it frequently happens that a child born in one district is vaccinated in another; that the system of granting "awards" to public vaccinators who obtain the most satisfactory results should be extended to Ireland; and that the disparity which exists regarding the fees for vaccination in the two countries should cease, in England the minimum fee being one shilling and sixpence, and the maximum three shillings, whilst in Ireland the maximum fee for vaccination is only one shilling.

### MEDICO-LEGAL CASES.

THE *Times* of Monday includes the report of several cases tried in the Law Courts of more or less medical interest.

#### LIBEL AGAINST A MEDICAL MAN: QUESTION OF PRIVILEGE.

In the case of *Purcell v. Sowler*, tried in the Court of Appeal on Feb. 3rd, before the Lord Chief Justice and three of the Lords Justices, Mr. Purcell, medical officer of Altrincham, brought an action against the proprietor of the *Manchester Courier* for publishing the report of a meeting of the Board of Guardians, at which certain complaints, imputing to him gross and cruel neglect in his duties as medical officer, were contained. The question raised was, whether the reports of such meetings are privileged. Judges in the Common Pleas Division—Mr. Justice Brett, Mr. Justice Archibald, and Mr. Justice Lindley—had given judgment for Mr. Purcell, the plaintiff, on the ground that the matter was not one of public interest and concern. The defendant appealed from that decision. The decision has been confirmed; but the reason on which it was founded is overruled. The Lord Chief Justice observed that it was difficult to imagine a matter of more general public interest than the proper medical treatment of the poor; and, in this case, the report only stated what others had stated at the meeting. Nevertheless, it was clear that the proceedings of Boards of Guardians are not necessarily privileged. They admit reporters on ordinary occasions; yet, when the conduct of any individual is attacked in his absence, and charges are made seriously affecting his character, it would be proper to close their doors and have their discussion *in camera*. If they do not do so, and reporters are present, they must take care not to publish what passes. The other justices concurred, Lord Justice Bramwell saying that public opinion governs the world, and is mostly guided by the press, especially the periodical press. He thought that, if this had been a discussion on the conduct of the plaintiff, the facts not being in controversy, it would have been a matter of public interest, and there would have been a right of comment upon it, and *bond fide* comments would have been protected. But it was not so here; for charges were made by persons upon mere hearsay, and not of their own knowledge, and such charges there was no duty to report. The judgment given for the plaintiff was affirmed, with forty shillings damages.

#### UNRESISTED RAPES.

In another case, tried in the Court for the consideration of Crown Cases Reserved, before the Lord Chief Baron Kelly and three other judges, the point was raised of a class of cases described as unresisted rapes. The facts were these. The prosecutrix, a girl aged 19, in ill-health and subject to fits, was taken by her mother to consult the prisoner, who kept an open stall in Halifax market, at which he professed, for money consideration, to give medical and surgical advice. He desiring to examine her, they went to a public-house, where, after putting questions to the mother and examining the daughter, he stated to them, in such metaphorical language as would perhaps have suggested his meaning to less simple persons, the cause to which he ascribed the girl's illness, and he asked if he might remove it. The mother replied that she did not know what he meant, but that she did not mind if it would do her daughter any good. Thereupon, the mother and daughter both believing that a surgical operation was about to be performed, the prisoner, followed by the girl, went into an adjoining room, where the alleged offence was perpetrated, the prosecutrix making but a feeble resistance, believing, as she swore, that the prisoner was merely treating her medically and performing a surgical operation, as he had advised, to cure her of her illness and fits, and submitting to his treatment solely because she so believed, such belief having been wilfully and fraudulently induced by the prisoner as aforesaid. Unless such submission in law constituted consent, there was no consent to the act. Without calling on the counsel for the Crown, the Court affirmed the conviction. The decision must be considered as a very happy one. Any other would certainly have afforded encouragement to a vile class of criminal offence.

#### LIE-TEA.

In the case of *Regina v. Foster*, stated by the chairman of the last Quarter Session before the same court, the question raised was, whether a hawker, who had sold as good tea sixteen pounds of "lie-tea" containing a quantity of dust, was liable to indictment for false pretences. The question was whether this was only a case of overpraising an inferior article, or fraudulent representation. The Court held that it was a case of fraudulent representation, and the conviction was affirmed.



THE TUNBRIDGE WELLS LOCAL BOARD AND MR. BISSHOPP.

On Thursday, February 1st, in the Common Pleas Division, before Justices Grove and Denman, the case was tried of the Tunbridge Wells Local Board appellants *v.* James Bisshopp, a surgeon practising in the district. This case was noticed in the BRITISH MEDICAL JOURNAL for August, 1876. The magistrates refused to convict, and the Board of Guardians appealed; and the judges now confirmed the decision of the magistrates. We have never seen a more astonishing charge than this. As Mr. Justice Denman observed, "the sufferer was driven from pillar to post, owing to a crotchet of the assistant-clerk as to the mode of filling in a certificate; and, when the poor man came to the doctor a second time for advice, the doctor walks with him himself until he secures the necessary order for admission into the hospital". The course which the Board have taken appears to us to involve, not only a scandalous injustice to Mr. Bisshopp, whose conduct throughout was most humane, thoughtful, and kind, but an abuse of authority and a waste of public money for the purpose of capricious oppression, for which they should be severely called to account by their constituents, and which cannot be too strongly condemned by the public opinion of the locality. Such a proceeding must, we think, excite the just and hot indignation of the ratepayers of Tunbridge Wells. It certainly affords but little encouragement to any medical man to put himself out of the way to endeavour to assist the machinery of the law and to protect the public health of the neighbourhood.

## SPECIAL CORRESPONDENCE.

### PARIS.

[FROM OUR OWN CORRESPONDENT.]

*M. Sée on Salicylic Acid in Rheumatism.—Repair of Divided Tendons.—Coton Hydrophile.—Effects of Fuchsine.*

IN my last, I referred to Professor Sée's practical views in therapeutics, and to his readiness, though with a certain amount of circumspection, to adopt any new invention or discovery in medicine. It is thus, after having given it a fair trial, that he has come to the conclusion that the use of the cold bath in typhoid fever is not only useless, but dangerous. He has prescribed salicylic acid, in a variety of cases, in his ward at the Hôtel Dieu; and the following is the result of his experience, which he lately gave in a clinical lecture. As an antipyretic, salicylic acid has an action very inferior to that of digitalis and quinine; it produces a diminution of the temperature in a manner less marked and less constant. The only affection in which it has, up till now, given any satisfactory results is acute articular rheumatism. But, in prescribing the remedy, M. Sée experienced some difficulty in its administration, owing to its imperfect solubility. He, therefore, prescribed it in powder, in doses of half a *gramme*, or about eight grains, every hour, enveloped in wafer-paper, of which the patient took twelve doses a day. This, M. Sée considers the best mode of administering the remedy, owing to its disagreeable taste. If, however, the patient cannot swallow it in this way, the physician must have recourse to the liquid form, in which case he must remember that it is soluble in alcohol, but very slightly so in water. To obviate this difficulty, the salicylates of soda and of lime have been adopted; but their therapeutic properties are not identical with those of salicylic acid. There is scarcely any drug in the whole *Pharmacopœia* whose elimination from the system is more rapid than that of salicylic acid or its preparations; its presence may be detected in the urine within a few minutes of its ingestion, and this may be done by the addition to the latter of a few drops of a very weak solution of the perchloride of iron, which produces a precipitate of a beautiful deep violet colour. In consequence of the rapid elimination of the drug, it is necessary to administer it in small doses, and at short intervals, about every hour, for instance. The subjects experimented on were five in number, all suffering from subacute rheumatism, affecting only a few of the large joints. In all five, the pain and swelling disappeared on the second day after the administration of the drug. In one of the five, the acid was stopped on the fourth day, the patient appearing cured, but he had a relapse the next day; the treatment was renewed, which produced a complete cure. None of the patients had any cardiac complications. Two of them evinced some degree of intolerance of the drug, as indicated by continued cephalalgia, insomnia, ringing of the ears, symptoms resembling those produced by the sulphate of quinine, the best medicinal agent that has as yet been discovered to combat the various manifestations of rheumatism. Bearing in mind the intimate connection between rheumatism and chorea, Professor Sée was naturally

led to test the efficacy of salicylic acid in the latter affection. A case presented itself at his *clinique*, in a young girl aged 17, affected with chorea, which, however, was very slight. He submitted the patient to the same treatment as that for the rheumatic cases; but, on the second day, he was obliged to stop the medicine, owing to the occurrence of headache, ringing in the ears, and some fever, of which it was impossible to trace the cause. In concluding his lecture, Professor Sée observed "that the results obtained until now, from the administration of salicylic acid in rheumatism, are satisfactory; however, they must not be exaggerated. It should be remembered that the five patients referred to above were affected with rheumatism of a subacute type, and limited to a small number of joints. Before pronouncing definitely, the effects of the salicylic acid should be observed in subjects affected with acute articular rheumatism, accompanied with well marked febrile symptoms". He, therefore, withholds his judgment until he has given the new remedy a further trial.

At a recent meeting of the Société de Chirurgie, a discussion took place as to the advisability or otherwise of enlarging the wound in a limb in cases where the tendons have been severed, in order to approximate the cut ends and endeavour, by means of sutures, to obtain union by the first intention. This is the practice adopted by most surgeons in and out of France; but MM. Duplay, Tillaux, and Terrier are of opinion that it is not absolutely necessary that the cut ends of a tendon should be brought into contact; that, for all practical purposes, it is sufficient to graft them, as it were, to the neighbouring tendons having similar actions or nearly so, and thus save the patient the torture of having his limb dissected by the surgeon in search of one or other of the cut ends of a tendon. With respect to the hand, these gentlemen have been successful with this mode of treatment; but it is only the lower or peripheric portion of the tendon that could be dealt with in this way, as it is more superficial. Then the question arose as to what became of the upper retracted portion, to which MM. Tillaux and Terrier replied that, in superficial wounds, adhesion takes place between the tendon and the skin, and motion is thus restored; but, when the wounds are deep, the cut ends should be drawn as near as possible by proper manipulation and dressing, and the cure may be effected by the immediate union of the tendons without any adhesion of the skin. [Sir James Paget long ago described the process of union between the separated ends of divided tendons by the effusion and organisation of plastic matter. See his *Surgical Pathology*, third edition, pp. 197 *et seq.*—Ed. B. M. J.]

At the same meeting, a report was read on the properties of a prepared cotton, to which the name of "coton hydrophile" was given. It is intended to replace the time-honoured charpie of the French hospitals. The report states that it is simply cotton cleaned and steeped in a solution of soda, in the proportion of one to four parts; and this is allowed to dry without any twisting or pressure. In this way, the cotton becomes hydrometric, and would be preferable to the charpie, as the latter is more expensive and takes a long time to prepare; but I doubt whether the new cotton will be adopted in this country, as the French have a strong prejudice against this substance, whether for surgical purposes or for wearing apparel.

It has hitherto been supposed that the toxic effects of arsenical fuchsine was due to the presence of the arsenic, and that the fuchsine was inoffensive; but MM. Feltz and Ritter have endeavoured to prove, in a paper that was lately read before the Academy of Sciences, that fuchsine by itself possessed toxic properties. By experiments on dogs, they have shown that, by introducing into the stomach or injecting extremely small quantities of non-arsenical fuchsine into the veins, the colouring matter was principally eliminated by the kidneys; this was invariably accompanied by the presence of albumen and granulo-fatty cylinders in the urine, and, after death, the cortical substance of the kidneys was found diseased.

## ASSOCIATION INTELLIGENCE

### MIDLAND BRANCH.

THE fourth monthly meeting of this Branch will be held at the house of the President, Joseph White, Esq., Oxford Street, Nottingham, on Friday, February 16th, 1877.

Coffee at 7.30 P.M.

A paper by G. C. Franklin, F.R.C.S., of Leicester, on the Autumn Diarrhoea of Infants, at 8.30 P.M.; to be followed by Reports of Cases by H. R. Hatherly, L.R.C.P. Edin.

L. W. MARSHALL, M.D., *Hon. Local Secretary.*

Nottingham, February 7th, 1877.

## SOUTH DEVON AND CORNWALL BRANCH.

THE next quarterly meeting of this Branch will be held at the Athenæum, Plymouth, on Tuesday, February 13th, at 3 P.M.

Members who have any paper to read, or communication to bring before the Society, are requested to send the title at once to the Secretary.

Mr. E. H. Edlin has given notice of the following proposal:—That no member of the South Devon and Cornwall Branch be eligible for any office unless he has been a member of the British Medical Association at least two years.

Dinner will be provided at the "Duke of Cornwall" Hotel, at Five o'clock, at 7s. 6d. per head, exclusive of wine. Members intending to dine will kindly give the Secretary at least two days' notice.

WM. SQUARE, F.R.C.S., *Honorary Secretary.*

Plymouth, February 3rd, 1877.

## STAFFORDSHIRE BRANCH.

THE second ordinary meeting of the Session will be held at the London and North Western Hotel, Stafford, on Thursday, February 22nd, 1877, at 2.30 P.M.

VINCENT JACKSON, Wolverhampton. } *Honorary Secretaries.*  
RALPH GOODALL, Silverdale. }

Wolverhampton, February 6th, 1877.

## BATH AND BRISTOL BRANCH.

THE fourth ordinary meeting of the Session will be held at the York House, Bath, on Thursday evening, March 1st: H. F. A. GOODRIDGE, M.D., President.

R. S. FOWLER, Bath. } *Honorary Secretaries.*  
E. C. BOARD, Clifton. }

Bath, February 7th, 1877.

## CORRESPONDENCE.

## ANIMAL VACCINATION.

SIR,—In a letter addressed to you recently (see BRITISH MEDICAL JOURNAL, February 3rd, p. 148), Dr. H. D. Palmer solicits information as to the best means of obtaining and cultivating animal lymph.

All these indications are contained in the pamphlet which I had the honour to forward yesterday to your JOURNAL as well as to Dr. Palmer, and of which I shall be happy to offer copies to any of my colleagues in England on their application.

Dr. Palmer observes, most justly, that the actual price of animal vaccine is beyond the means at the disposal of public vaccinators. This must be the case so long as the Government does not undertake to defray the expenses necessary to the cultivation of animal vaccine, which exacts, on the part of those who have the management of it, time, constant care, and experience.

In Belgium, the Vaccine Institution costs the State about £500 *per annum*. By these means, the Government supplies *gratuitously* the animal vaccine in tubes or on points (the latter are preferable, as the vaccine so prepared keeps better and appears to be more efficacious) to the communal administrations of all the localities where there are no doctors, and also to all the members of the medical profession in this country *every time they require it for the renewal of their stock of lymph*.

—Yours faithfully,

E. WARLDMONT.

Brussels, February 5th, 1877.

## APOPLEXY AND DRUNKENNESS.

SIR,—In the valuable leading article in last week's BRITISH MEDICAL JOURNAL, with the title "Apoplexy and Drunkenness", you have directed attention to the great difficulty, and indeed, in some cases, the impossibility, of distinguishing between the effect of intracranial hæmorrhage, or an epileptic discharge, and intoxication. No one can have held the post of medical officer to a large hospital without having frequently felt himself in doubt as to the cause of the semi-comatose or excited state of a patient picked up in the street, and concerning whom no reliable information can be obtained. The smell of drink, as pointed out in the article, is a most fallacious guide, yet many medical men fall into the trap. Another point of still greater importance, to which you have drawn attention, is the performance of extremely complex actions by persons the subjects of intracranial hæmorrhage. The case I have to relate is a remarkable one, and illustrates your article. I did not see the patient in question, but I had to

inquire into the circumstances at the time, and though I cannot lay my hands on the notes made then, the leading circumstances are very firmly fixed in my memory.

About five years ago, during the pantomime season, a clown of some little celebrity, who was performing at the Pavilion Theatre, was brought to the London Hospital by several companions. They stated that he had been taken ill and had had a fit during the afternoon in the performance of the pantomime. He was brought to the hospital in the full "make up" of his character; the effect of which when near to him in daylight, was very startling and "garish". He was restless and, I believe, threw himself about. There was considerable facial spasm or contortion, but this was so disguised by his paint as to result in ludicrous grimaces. It was like the case of the hero of Victor Hugo's "L'Homme qui rit"; the greater the agony he suffered and the more earnest he became, the more hideously grotesque was the expression of his face. It was thought, and the mistake was not unnatural, that he was playing a practical joke and feigning "having a fit", or else that he was drunk. Strong shocks were given with a rotatory magnetic induction machine. These had the effects of at first increasing the contortions, but afterwards of rousing him to a certain degree of consciousness. He became able, I believe, to give his name, and eventually, assisted by his companions, *he walked out of the hospital*, the nurse, however, noticing that he dragged one leg. He was taken to the theatre in a cab, where he remained seated some time. Later, he was taken home in a cab. On the journey, they called at a friend's house, and he took a cup of tea whilst seated in the cab. Soon after reaching home, he became more unconscious, and after remaining in a state of deep coma for many hours, died. The necropsy revealed a large meningeal hæmorrhage.

Surgeons are familiar with the fact that in arachnoid hæmorrhage arising from a fissured fracture of the skull, the symptoms of pressure may come on very gradually, and that some interval may elapse before they make their appearance. Such cases are not unfrequently sent out of the hospital as "lacerated scalps", to return the next day comatose or hemiplegic. Post epileptic mania or excitement, again, may very readily be confounded with drunkenness. These cases show, as you say, how difficult it is, even for medical men, to diagnose between some forms of mental disturbance, and how unfit the police must necessarily be to form an accurate opinion in a case. Prudent practitioners and medical officers of institutions will tend such doubtful cases carefully, and allow time to make the diagnosis for them.—I am, etc.,

STEPHEN MACKENZIE, M.D.

Finsbury Square, January 29th, 1877.

SIR,—I am glad to see you have taken up the question of the treatment by the police of supposed cases of drunkenness which come under their notice.

As one of the cases you quote was that of a respectable inhabitant of this town, you will perhaps allow me to make a few remarks upon it. It was proved at the inquest that Mrs. Francis had not taken anything of an intoxicating nature. But, even if it had been shown that she had done so, I hold, as you yourself put it in this week's leading article, that all cases of total or partial insensibility coming under police notice should on no account be allowed to remain for any length of time without being visited by a medical man. There can be no doubt that, although a large majority of the cases may be pure and simple intoxication, which recover, if left alone, there is yet a percentage of cases which require medical treatment, and in which the delay of a few hours in providing such treatment may make the difference between life and death.

It is on behalf of this unfortunate class of cases necessary that the attention of the legislature should be called to the present grievous defect in our police arrangements, and to the urgent need of an order being given that all such cases should be seen by a medical man.

I am, yours faithfully,

GEORGE D. BROWN.

Ealing, January 27th, 1877.

## THE ABUSE OF MEDICAL CHARITIES.

SIR,—As the statement which we asked for in a previous letter extends over two and a half columns of the JOURNAL, it may be useful, before making any further remarks on the subject, briefly to summarise the proceedings of the Committee of Council with reference to it.

Having received in April 1875, a memorial from some three hundred members of the Association, many of them not altogether unknown to fame, asking the President and Committee of Council, as the highest authorities in the Association, to take "this important subject" into their consideration, the Committee of Council resolved—(1) That the memorial be presented at the annual meeting, with the suggestion that



a Committee be appointed to consider the whole question, and (2) that the gentlemen who forwarded the memorial relative to the mismanagement of the medical charities be requested to devise some measure of reform, to be considered at the next general meeting of the Association.

Having received from these gentlemen in July 1875, some suggestions of the general principles on which reforms ought, in their opinion, to be based, the Committee of Council in July 1876 (that is, a year afterwards), resolved that, as Drs. Meadows and Fairlie Clarke had not been able to attend, and furnish facts which would justify the Committee in assuming that abuses of medical charities exist, and in the absence of any active interest in the subject, no further action be taken at present.

It thus appears evident that from the very first the Committee of Council declined to comply with the request of the memorialists, that they themselves would take the matter into their consideration, in order that "any changes which may be necessary should be duly weighed by a body which fairly represents the medical profession, and should be recommended by high authority", and resolved instead to propose the appointment of a Committee at the annual meeting—a course which they had a perfect right to adopt, but which, unfortunately, they have not seen fit to carry out.

Next, it appears that the Committee of Council determined to throw the onus of devising a scheme of reform on the two gentlemen who had forwarded the memorial to them, and whose duties might well have been supposed to end there. How much sincerity there was in this request for a scheme of reform may be judged by the fact that, in their final resolution on the subject, the Committee endeavour to throw doubt upon the very existence of abuses for whose reform they had requested a scheme to be drawn up!

This final resolution, indeed, strikes us as being a very remarkable one. Had there been no previous discussion of the subject in the Association and in the JOURNAL, then, even though it had been, as the memorial states, "much discussed of late years both in the medical press and in lay periodicals", the Committee might, perhaps, with some show of reason, have pleaded ignorance of the facts which have, from time to time, been brought forward to prove that great abuses of the medical charities exist, might have ignored the conviction of the three hundred memorialists "that the manner in which these institutions are at present conducted inflicts a serious injury upon many most deserving members of our profession", as well as that of the two gentlemen to whom they had applied to draw up a scheme of reform, that "there can be no doubt that the medical charities have come to be greatly misused"; but when they had only to turn back to the JOURNAL for September 6th, 1873, to find that Mr. G. W. Hastings, presiding over the Public Medicine Section at the annual meeting of the Association in that year, stated that in the discussion which had taken place on the subject, there had been one general and unanimous expression of opinion that the system of out-patient relief, as practised in London Hospitals, was subject to much abuse, and that, in his opinion, the out-patient system seemed to be full of abuses, it does seem passing strange that the Committee should ask for more facts before venturing to assume that any abuses of medical charities exist.

We do not write, however, so much to complain of the action of the Committee of Council, as to suggest that it is desirable that their original resolution should be carried out, and a Committee be appointed at the next annual meeting to consider the whole subject of the abuses of medical charities; and, though two years have elapsed since the memorial was signed, we venture to think that, should this be done, the Committee will not have any reason to complain of the absence of any active interest in this subject.—We are, sir, your obedient servants.

JOSEPH ROGERS.  
H. NELSON HARDY.

#### THE CLINICAL SOCIETY.

SIR,—I trust you will allow me to correct an erroneous statement made by Mr. Barwell in the discussion which took place at the last meeting of the Clinical Society on January 26th, on the Subcutaneous Section of the Neck of the Thigh-bone. According to the report of the meeting in the BRITISH MEDICAL JOURNAL of last week, Mr. Barwell stated: "In Mr. Adams's twenty-two cases, three died." (Page 135.)

This statement refers to my paper read at the Royal Medical and Chirurgical Society on the 10th of October last, and fully reported in the BRITISH MEDICAL JOURNAL of October 21st, 1876. In this report (p. 526), it is stated: "In this table, it was shown that the operation was successful in twenty out of twenty-two cases; death from pyæmia resulting in one case; and death, accelerated by chronic sup-

uration following the operation, in another case, in which the patient died eight months afterwards with symptoms of kidney-disease with albuminuria, as well as tubercular deposit in the lungs."

Instead, therefore, of three deaths, only one directly, and one indirectly after a period of eight months, resulted from the operation; and both these occurred in cases of advanced strumous disease—a class to which, as a general rule, I have stated, the operation is not applicable.

Although a little suppuration occurred in a few cases, with these exceptions all the wounds healed by the first intention, like ordinary tenotomy-wounds, or other operations in which the true subcutaneous character is preserved and the admission of air effectually excluded.—I am, sir, your obedient servant,

W. ADAMS.

Henrietta Street, Cavendish Square, February 6th, 1877.

#### HOMICIDAL INSANITY.

SIR,—I am obliged for the further particulars of the case referred to in the JOURNAL of the 6th ult. From these, it appears that the patient was discharged, not because the Commissioners found that she had not committed any overt act showing her to be a dangerous lunatic, but because they considered that she was sane; "the lay Commissioner observing that she was no more insane than he was". In this opinion, whether right or wrong, the medical Commissioner must have agreed; for, in the case of a person confined in an asylum under legal certificates, the Commissioners have no power to order a discharge on the ground of unfitness unless two of them, one being a medical man, have specially visited and examined the *détenu* twice, at an interval of not less than seven days. Medical opinions cannot, therefore, be set at naught by the dictum of a layman. (8 and 9 Vict., cap. 100, §§ 76-81.)—Yours obediently,

W. F. WADE, F.R.C.P.

#### XANTHELASMA OR XANTHOMA.

SIR,—It is with extreme reluctance that I intrude on your pages with a matter personal to myself. In the obituary notice of our lamented colleague Dr. Frank-Smith, published in your JOURNAL of this day's date, occur the words, "the remarkable disease known as vitiligoidea or xanthelasma, for which he introduced the name 'xanthoma', which has since been adopted by Hebra and Kaposi, and by Dr. Bristowe". The fact is, that Dr. Frank-Smith did *not* introduce the word xanthoma, as that term owes its origin to myself alone.

In the year 1869, Dr. Frank-Smith favoured me, as editor and proprietor of the *Journal of Cutaneous Medicine*, with an excellent paper, entitled, *On Vitiligoidea*. I had, some years before, proposed the term "xanthelasma" for the same disease, as being more explanatory of the appearance of the affection in the skin than that first employed by Addison and Gull. But a further study of the affection showed me that the word xanthelasma was not suitable to the disease when it appeared in the form of tubercles in the subcutaneous tissues and in deep-seated organs, of which there are now numerous examples on record. Under these circumstances, I proposed the word "xanthoma" for the objective disease, retaining xanthelasma for its subjective state of being spread out in the form of a layer. Therefore, when Dr. Frank-Smith's paper came into my hands, I obtained his permission to alter his title into "Xanthoma or Vitiligoidea". I further introduced the word xanthelasma into the first paragraph, and added an editorial note showing the mode of application of the word xanthoma to the two forms of the affection, "papulosum and laminosum". (*Vide Journal of Cutaneous Medicine*, vol. iii, p. 241.)

This is the source of the error fallen into by Hebra and his son-in-law Kaposi, and adopted from them by some of my own countrymen. Kaposi's words are (vol. iii, p. 344), "since then"—that is, since the school of Vienna has shown its superiority in intelligence over that of the rest of the world—"cases have been recorded by others, partly under the original designation" (vitiligoidea, compare Hebra, vol. i, p. 127, with vol. iii, p. 344); "and partly under that of xanthelasma proposed by Er. Wilson, or of the still better one introduced by Wm. Frank-Smith, of xanthoma".—Pray accept my apologies for this encroachment on your valuable pages.—I am, etc.,

London, February 3rd, 1877.

ERASMUS WILSON.

#### ANTISEPTIC SURGERY.

SIR,—The letters of Mr. R. Davy and Mr. E. Owen are calculated to do much good; still I feel pain to find honest men even apparently make, what I will, perhaps vulgarly, call "sidewipes" at antiseptic surgery, and, by implication, at him who may be looked on as its parent.



I, for one, look on Mr. Lister as a man who has conferred incalculable benefits on the human race by his efforts to forward the great principle involved; and I am sure that the time will come when he will have full justice done to his ability and unwearied industry. The great mistake made by many is, in identifying him with carbolic acid instead of identifying him with the great principles that he has endeavoured and endeavours to enforce.

He has not confined himself to the use of carbolic acid as an antiseptic agent further than he finds it to answer the purpose required; he has shown every readiness to adopt other agents when they are calculated to carry out his object.

Mr. Owen is quite right in attributing so many good results to good care taken by the surgeon in the after treatment of cases of operation. And if Mr. Lister did nothing more by his writings and example than to enforce the necessity for such care, he has done good work. The truth is, the cause of antiseptic surgery not being more extensively used is the great pains and trouble necessary to obtain positive results. And it has often pained me to hear surgeons of high position say that they practised antiseptic surgery when they slapped a piece of lint, dipped in carbolic oil, on a wound without further care or precaution.

Good results have doubtless been obtained by Mr. Davy and others by simple dressing carefully applied; but until I find a surgeon who, without adopting Mr. Lister's precaution, whether with carbolic, boracic, or salicylic acid, or any other antiseptic preparations, who will lay open a knee-joint, or, as I have seen him do, the peritoneum, or perform any of the great capital operations with a feeling of perfect safety and assurance against any constitutional disturbance, I will still feel that his precepts and practice are worthy of close attention and study. At all events, before slighting them, I would say, try them with painful attention.

Many of the so-called simple methods are successful so far as they are antiseptic, and are, therefore, productive of good results according to the care bestowed on their practice. Thus, the cold water treatment of Macartney, when properly carried out, is truly antiseptic, but I have seen cold water dressing carelessly used produce disastrous results.—I am, etc.,

J. W. MARTIN, F.R.C.S.I.

Portlaw, January, 15th, 1877.

## PUBLIC HEALTH

AND

### POOR-LAW MEDICAL SERVICES.

#### THE OUTBREAK OF TYPHOID AT TIDESWELL.

A REPORT of Dr. Thorne Thorne's has lately been published on an outbreak of typhoid in Tideswell, which notices several instructive facts that may usefully be borne in mind in connection with other evidences of this disease. It appears that this village contains about two thousand inhabitants, and that, during the second quarter of 1876, sixteen cases and seven deaths occurred in a few houses which were situated close together. Dr. Thorne made a careful examination, and reports that, although the water-supply was said to be constant, yet it was subject to certain irregular but brief intermissions; that the inhabitants were supplied from stand pipes, and the closets from pipes coming into the pans direct from the upper surface of the main, without the intervention of cisterns; that the sewerage was mainly into a water-course, which was partly covered over, and usually had a good flow of water, but, at the time of the outbreak, was much below the ordinary level. There were numerous privy-pits in the village. The circumstances attending the outbreak were an unusually small flow of water in the brook, and the cleansing out of a pit containing slaughter-house refuse on premises adjoining those of the person first attacked. All the early cases occurred in houses near to that of the person who first suffered from the fever, and in all there were special reasons for believing the disease to have been caused by air or water pollution, as the houses were supplied with water from a small main which was connected with three houses in which the pipes opened directly into the pans of the closets. On the medical officer of health examining these pipes, he found the water was not running into the pan, and on applying a lighted taper he found a strong draught from the pan into the pipe, so that the water in the supply-pipe and small main must almost necessarily have been fouled with the excrementitious matter of the fever patients. Dr. Thorne observes on this "that such an occurrence was in itself sufficient to explain nearly the whole spread of the disease in Tideswell subsequently to the occurrence of these two cases". There were also sinks in the houses, which were connected with the sewer; and they, as well as the water-closets, were imperfectly trapped. The

medical officer of health and inspector of nuisances took the necessary steps for preventing the spread of the disease; and the local authority made some arrangements for providing a better and more uniform water-supply, as well as more efficient drainage, which, however, have not been carried out, owing to opposition by the inhabitants, and an expectation of the village being formed into an urban sanitary district within a very short time. Dr. Thorne recommended a better water-supply, better paving and means of drainage, and especially that there should be no direct communication between the interior of the houses and the sewers.

#### HOSPITAL ACCOMMODATION FOR INFECTIOUS DISEASES AT DORKING.

A LONG and animated discussion has taken place at Dorking on this subject, in which many of the stock arguments against making such provision were well aired. It appears from the statements of Dr. Jacob, who by the way deserves much praise for his manner of stating the case, that the disease was brought into Effingham, a village in the Dorking rural sanitary district, by a man who had slept in a house at East Horsley, where a case of small-pox existed. The medical officer thereupon reported it to the Local Government Board, who wrote to the Dorking authorities, asking them what they intended to do for preventing the spread of the disease. Notice of motion was then given by a member of the board, that a suitable building be provided for the reception and treatment of cases of infectious disease. When under discussion, it was mentioned by the seconder that the building ought to be provided, not only for paupers, but for all those who might suffer from infectious disease and could not be properly isolated. This was lost. It was then proposed that the casual ward, "consisting of twelve cells", should be fitted up for the purpose, which the chairman thought was all that was required, especially as any other course would entail a heavy burthen on the rates. Another member followed, who said "he wondered they were not called upon to do something to prevent the floods". Dr. Jacob very earnestly pressed upon the board the necessity of making proper provision, when a letter was read from the Rector of Effingham, containing an offer to build and furnish a temporary hospital on glebe land for six persons, and hand it over during the epidemic to the sanitary authority. After considerable discussion in an unpleasant manner, this was agreed to; one of the arguments against accepting the offer being on a par with the idea of their being called upon to prevent floods, as Dr. Jacob was reminded "that, in the cattle-plague epidemic, the cattle were kept at home and not sent abroad". We suppose the speaker had forgotten that the cattle were poleaxed at home as soon as they showed symptoms of the disease; and, as Dr. Jacob reminded him, there is no power to enable sanitary boards to lock up whole families if one of the members became affected with an infectious disease.

We should not have given so long an abstract of these proceedings, were it not for the importance of the subject, and the entire abnegation of their plain duties that was shown by the majority. Members of boards of guardians and other sanitary authorities should remember that, when they accept office, they become the nominees of the public to carry out their duties in such a way as will best conduce to the public interests. It is true that they carried the resolution to fit up the vagrants' wards for pauper patients, and accepted the Rector's offer of the temporary hospital for Effingham; but the resolutions, carried under pressure of the letter from the Local Government Board and the advice of the medical officer of health, do not in any way alter the objectionable statements that were made during the debate, and only show that public and official opinions were too strong for them to carry out the retrograde action they would otherwise have adopted.

#### DAMP HOUSES A NUISANCE.

THE Sheffield magistrates have given a very important decision on the question as to the power of inspectors of nuisances taking action against the owners of houses which are rendered damp by the drainage from the adjoining land percolating through the walls. It appears that a row of eight small houses in Crookesmoor Road had been built against sloping ground in such a way that the level between the front and back varied from seven to eleven feet. The surface-water from the bank soaked through so as to cause the plaster to be damp and give rise to a bad smell. Medical evidence was given to the effect that the houses were injurious to health, as not only the kitchens but the bedrooms were very damp. The landlord replied that he had asphalted the ground outside, laid down drain-pipes, and proposed covering the walls with cement; but the magistrates nevertheless stated that they considered a nuisance existed, and ordered it to be abated in a month. This is a



very important decision as regards houses which are in a damp and unhealthy condition from having been built partly underground, that is to say, when the ground rests against the wall to the height of three or four feet or more, instead of being kept away by means of an area. We desire, therefore, to call the especial attention of medical officers of health and others interested in sanitary matters to this decision, as we are convinced that too little regard is ordinarily paid to complaints of dampness and consequent injury to health arising from this cause.

#### OUT-DOOR MEDICAL RELIEF IN BARONY PARISH, GLASGOW.

At the meeting of the Parochial Board, held on the 30th ultimo, the Medical Committee brought up a report, in which it was agreed that the four medical officers of the Eastern district should be dispensed with, and, in lieu thereof, that one medical gentleman should be appointed at a salary of £300; this to be in full of all duties performed by him for the board, including vaccination and lunacy fees, and that he should be required to devote his whole time to his duties. At the same meeting, notice of motion was given to dispense with the four officers of the Western district. The resolution, on being submitted to vote, was carried by sixteen for to seven against.

Barony Parish, at the last census, had a population of 234,000. It contains a large proportion of extremely poor; and, consequently, very many of these must require attendance from the medical officers continually. Now, we submit, it is physically impossible that one medical officer should be able to meet the legitimate wants of the sick poor of districts numbering nearly 90,000 inhabitants, spread over an area of one mile and three-quarters from east to west, and one mile and a quarter from west to south—*i.e.*, taking the population as it was in 1871. That the Scotch parochial authorities can dismiss a medical officer at pleasure is well known; and that they do so without hesitation, if he happen to offend them, was fully exhibited by this board in their treatment of Dr. Strehill Wright, who was called on to resign his appointment for daring to call attention to the structural and sanitary deficiencies of their poor-house at Barnhill; but to dismiss them all at once, and to hand over the interests of the sick poor of this large parish to two gentlemen only, is one of the most monstrous abuses of parochial authority we have ever heard of.

We are aware that the Board of Supervision has but little real power; but we understand that, where the arrangements for medical relief are not such as to meet with their approval, they are at liberty to withhold the Parliamentary grant in aid of medical relief. If they should do so, it may bring this board to a sense of propriety, notably as they are moved to this action by the supposition that they shall effect an apparent economy of some £250 to £300 a year.

Should the Board of Supervision decline to interfere, we trust that some member will put a question to the Lord Advocate in the House of Commons.

#### POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

At a meeting of Council of the Poor-law Medical Officers' Association, held on February 6th, at No. 3, Bolt Court, it was resolved that a communication be addressed to the Local Government Board, praying that a general order may be issued granting a certain fee, to be determined by the Local Government Board, to duly qualified practitioners assisting a Poor-law medical officer at any capital operation, or in any case of craniotomy or Caesarean section. The Council also directed Dr. Rogers and Mr. Barnes to watch the case of Mr. Fenton, and to take action in the name of the Association, if necessary.

#### THE CASE OF MR. FENTON, DR. BLOXAM, AND THE ST. GEORGE'S UNION BOARD.

At the usual meeting of the St. George's Board of Guardians, a letter was read by the Clerk, addressed to the Board from the Local Government Board, dated February 2nd, 1877, from which we extract the following:—"The Board observe that Ellen Sullivan was not, at the time of her death, in receipt of relief; and, having carefully considered the evidence of the several witnesses examined at the inquest, the Board do not think that the proceedings of Mr. Fenton were in any way censurable." At the same meeting, the Clerk read another letter from the Local Government Board, of the same date, to this effect: "That they approve of the proposed payment by the Guardians of the St. George's Union of the sum of five pounds five shillings to Dr. Bloxam, medical officer of the A district."

#### PAYMENT OF LUNACY CERTIFICATES GRANTED IN THE CASE OF PAUPERS IN SCOTLAND.

SIR,—In not being able to obtain payment from his board for lunacy certificates granted in the case of paupers, "Parish Medical Officer" has himself entirely to blame. No parochial board will refuse payment in the face of the letter of the Board of Supervision which you kindly published on January 6th. I have never had any trouble in obtaining payment of the usual fee of £1:1, not only from my own board, but from all others that have employed me in such cases. No parish medical officer need or should accept less.—Yours, etc.,  
Leuchars, Fife, N.B., January 29th, 1877. JOHN CONSTABLE, M.D.

#### INSANE PAUPERS IN SCOTLAND.

J. L. P. asks:—Can a Parochial Medical Officer in Scotland claim 2s. 6d. for each quarterly visit to insane paupers? [Perhaps some of our Scottish correspondents acquainted with the Poor-Law of that country will kindly assist us in answering this question.]

### MILITARY AND NAVAL MEDICAL SERVICES.

#### STAFF ALLOWANCES AND REGIMENTAL QUARTERS.

SIR,—Since 1872, when the following specific regulations were made in the subject, staff departmental or educational officers have been entitled to the quarters noted below, viz.:

Inspector-Gen., Hospital...	6 rooms and fuel and light in proportion.
Deputy Inspector-General.	4 " " "
Surgeon-Major ...	4 " " "
Surgeon not attached to a regiment ...	3 " " "
Assistant-Surgeon, six years' service ...	3 " " "
Assistant-Surgeon under six years' service ...	2 " " "

or staff allowances in lieu of these quarters. (Clause 157, Army Circulars, March 1st, 1872.) Under the regulation just issued by the War Office "Medical officers for the future will draw staff allowances; but when quartered in barracks will be only entitled to regimental quarters". The foregoing regulations have become a dead letter. Being no longer entitled to staff quarters, medical officers cannot in a great number of places draw the commuted allowance in lieu of fuel and light, for the commissariat officers will say: "You can have regimental quarters if you like to occupy them; we cannot give you staff allowances, staff quarters, or lodging money." Two rooms are useless to a married officer; he cannot occupy them; he has no alternative left but to hire lodgings out of his already too limited resources, and deprive his family, as a matter of necessity, of many comforts.

We are now departmental or staff officers. We are, in justice, entitled to the same privileges as other staff, departmental or educational officers. The regulation would seem to have been issued either to mollify the wounded feelings of the combatants, who look upon every concession to the profession with envy; or to give to commissariat officers the power of placing medical officers in a position which no other departmental officer is obliged to accept. We are entitled to the support of the Director-General to have this obnoxious regulation cancelled, and, as affecting the *status* and *prestige* of the profession in the army, your advocacy.—I am, etc.,  
X. Y. Z.

#### ARMY MEDICAL DEPARTMENT.

A correspondent sends us the following list of grievances still unredressed in a staff corps:

1. Advantages of the corresponding military rank (such as forage and a groom) not accorded to medical field officers.
2. Regimental quarters in lieu of staff quarters, which means, in effect, *no staff allowances*.
3. Surgeons-major of twenty years' service ranking junior to lieutenant-colonels, instead of with lieutenant-colonels; in effect, only as senior majors.
4. No special designation for officers of twenty years' standing, such as senior surgeon-major.
5. Deficient servants' allowance; should be one shilling and sixpence *per diem*, as in the Royal Engineers.
6. No groom to mounted officers; equivalent to a loss of three shillings *per diem*.
7. High rank in one corps not having the privileges of high rank in other corps.
8. Army Hospital Corps not being commanded by Army Medical Officers.
9. No sub-department, to be responsible for the charge of stores under medical officers, such as stewards or purveyors.

10. Funeral horse trappings; needlessly distinctive uniform.
11. No increase in retired pay or pay of senior officers.
12. No staff forage cap.
13. Too few good service pensions and honorary distinctions.
14. No bonus to stimulate twenty years' retirement; £1000 should be given to officers invalided and broken down by ill health after this service.

The gains to the service have been the curtailment of the duration of appointments in the administrative ranks; the abolition of the band and mess subscriptions; and the twelve years' promotion; all undoubted steps in the right direction.

The department should be embodied in a "Royal Corps" under the Director-General, with a salary of £2,000 per annum attached to the office, and the rank of Lieutenant-General.

#### MILITIA SURGEONS.

SIR.—Two letters have lately appeared in your JOURNAL to the effect that militia surgeons have no real grievances although it happens that they are deprived of nearly all their pay, and, in fact, taking the part of Government against their own professional brethren. There is an old motto, that unity is strength; and it is quite clear that, if we allow ourselves to be eaten up with jealousy of each other and influenced by calculating as to some infinitesimal amounts of taxation that might fall to our lot on account of just compensation being given to medical men for loss of appointments, we will never get anything. If one man who will only attend patients with guinea fees and courtesy accorded to him is to be in constant competition with some one else who will take kicks and half a crown, the raising of the status of the whole profession is next door to hopeless.—Yours, etc.

NOT A MILITIA SURGEON.

ARMY MEDICAL SERVICE.—List of Army Medical Candidates who were successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School, Netley, February 1877.

	Marks.		Marks.
1. Allin, W. B. ..	3460	18. Laffan, G. ..	3402
2. Ryan, M. R. ..	4896	19. Bourke, U. J. ..	3387
3. Reynolds, E. O. ..	4370	20. Robinson, R. ..	3125
4. Robbins, H. J. ..	4445	21. Lamprey, J. J. ..	3072
5. Morris, G. G. ..	4474	22. Allen, W. H. ..	3019
6. Hayes, A. E. ..	4333	23. Gunning, R. C. ..	3110
7. Williamson, J. F. ..	4270	24. Russell, G. M. ..	2945
8. Carey, J. T. ..	4235	25. Cotton, H. ..	2910
9. Rainford, W. J. ..	4183	26. Hunt, J. P. ..	2891
10. Bowker, J. ..	4065	27. Peyton, J. S. ..	2882
11. Tuthill, P. B. ..	4015	28. Carleton, A. W. ..	2857
12. Boyd, T. ..	3830	29. Hughes, G. A. ..	2840
13. Johnston, P. H. ..	3765	30. Keith, A. C. ..	2801
14. Murchison, F. ..	3735	31. Brodie, J. ..	2785
15. Emerson, J. B. ..	3702	32. Eager, F. G. L. ..	2752
16. Hewett, A. ..	3680	33. Large, B. W. ..	2473
17. Roche, E. A. ..	3477		

NAVAL MEDICAL SERVICE.—List of naval medical candidates who were successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School at Netley, February 1877.

	Marks.		Marks.
1. Henwood, J. D. ..	4725	11. Armstrong, G. W. ..	3844
2. Walsh, H. W. D. ..	4537	12. Kellett, L. H. ..	3853
3. McSwiny, M. O. C. ..	4574	13. Daw, J. C. ..	3422
4. Guppy, H. B. ..	4452	14. Newland, C. F. ..	3325
5. Connell, J. J. ..	4427	15. Barcroft, P. J. ..	3297
6. Mugliston, T. C. ..	4415	16. Twigg, G. D. ..	3297
7. Williams, T. E. H. ..	4405	17. Fogarty, G. J. ..	2999
8. Williamson, F. ..	4337	18. Bookey, W. J. B. ..	2880
9. Murdoch, R. ..	3880	19. Browning, J. N. ..	2707
10. Rae, W. M. ..	3850	20. Corcoran, L. W. ..	2490

INDIAN MEDICAL SERVICE.—List of Indian medical candidates who were successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School at Netley, February 1877.

	Marks.		Marks.
1. Moorhead, J. J. ..	5833	7. Eaton, G. B. ..	4825
2. Beaton, C. H. ..	5813	8. Eyre, M. S. ..	4835
3. Owen, C. W. ..	5093	9. Channer, G. H. ..	4400
4. Griffiths, G. S. ..	5833	10. Young, E. W. ..	4435
5. Grant, P. M. ..	4825	11. McCalman, H. ..	4435
6. Lee, W. A. ..	4813	12. Ross, D. R. ..	4300

\* Gained the Herbert and Martin Memorial Prizes.

## MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 1st, 1877.

Godfrey, Charles Walter, The Hundred, Romsey  
Langdon, John Winkley, Chester  
Meek, John William, Macclesfield

The following gentlemen also on the same day passed their primary professional examination.

Beard, Spencer Francis, Sheffield Infirmary  
Crouch, Edward Thomas, Guy's Hospital  
Deakin, James, Owens College, Manchester  
Eliot, George, Westminster Hospital  
Hepburn, David, Middlesex Hospital  
Low, Charles Arthur, London Hospital  
Sharples, C. William, Middlesex Hospital  
Smith, F. Clarence, University College  
Stewart, Frederick George, Guy's Hospital

At the Preliminary Examination in Arts, held at the Hall of the Society, on the 26th and 27th of January, 1877—97 candidates presented themselves; of whom 37 were rejected, and the following 60 passed, and received certificates of proficiency in general education—viz., in the First Class, in order of merit:

1. C. E. Paget and E. Tomlinson. 3. A. L. Copney, H. Greiffenhagen, and R. A. Palmer. 6. G. N. Stephen. 7. C. G. Colville, J. M. France, J. P. Myles, and H. L. Swinson.

In the Second Class, in alphabetical order:

H. L. Albert, G. T. Bates, D. M. Barry, W. C. Beatley, W. B. Benjafield, H. Blackburn, G. A. Branson, E. C. Bray, H. W. A. Burke, J. M. Carvell, H. R. Colborne, C. V. Cotterell, S. J. A. Cotterell, D. R. Davies, E. Davis, E. S. Earle, T. Edwards, A. W. Fairles, J. B. Goodridge, C. H. Greet, E. Harvey, J. P. Hayes, J. W. C. Herbert, H. Holcraft, R. L. Holland, R. Holton, G. Jones, C. H. Lamerle, H. Ley, A. Livingston, D. H. G. Maclean, E. D. Minter, J. D. Maloney, C. A. Morton, G. H. Moxon, W. A. Nutt, Y. O'Keefe, C. Pound, L. O. L. Raymond, W. B. Skelton, D. J. Slater, W. H. Stephens, H. B. Strong, E. C. H. Van Buren, F. J. Walker, H. Webb, T. A. Wise, T. Whitaker, G. C. Wilkin, and J. Woodgate.

#### MEDICAL VACANCIES.

The following vacancies are announced:—

BIRMINGHAM GENERAL DISPENSARY—Resident Surgeon. Salary to commence at £130 per annum, with allowance for cab-hire, and furnished apartments, lights, and attendance.  
DENTAL HOSPITAL OF LONDON, Leicester Square—Dental House-Surgeon. Applications to be made on or before the 14th instant.  
DORSET COUNTY HOSPITAL—House-Surgeon. Salary, £70 per annum, with £10 as Secretary. Applications to be sent in on or before the 21st instant.  
COVENTRY AND WARWICKSHIRE HOSPITAL—House-Surgeon. Salary, £100 per annum, with board, lodging, and attendance. Applications to be sent in on or before the 24th instant.  
DENBIGHSHIRE INFIRMARY—House-Surgeon. Salary to commence at £85 per annum, with board, washing, and residence.  
HOSPITAL FOR WOMEN, Soho Square—House-Physician. Applications to be made to David Cannon, Esq., Secretary.  
KENT COUNTY LUNATIC ASYLUM, Barming Heath. Second Assistant Medical Officer. Salary, £150 per annum, with furnished apartments, etc. Applications to be sent in on or before the 16th instant.  
LEIGHTON BUZZARD UNION—Medical Officer. Salary, £250 per annum, and vaccination fees. Applications to be sent in on or before the 13th instant.  
MALDON UNION—Medical Officer for the All Saints' District. Salary, £80 per annum, and fees. Applications to be sent in on or before the 12th instant.  
MANCHESTER PROVIDENT DISPENSARIES' ASSOCIATION—Resident Medical Officer. Salary, £120 per annum, and private practice allowed.  
NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC—Resident Medical Officer and Registrar. Salary, £100 per annum, with board and lodging.  
NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney—Assistant-Physician.  
ST. GEORGE'S (Hanover Square) PROVIDENT DISPENSARY—Second Surgeon. Applications to be made on or before February 10th.  
ST. MARY, LAMBETH, PARISH—Medical Officer for the Tenth District.  
WESTBOURNE PROVIDENT DISPENSARY AND MATERNITY—Resident Medical Officer. Salary, £100 per annum, and unfurnished apartments, coals, gas, and attendance. Applications to be sent in on or before the 17th instant.  
WILTON UNION—Medical Officer for the Wilton District and Workhouse.

#### MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.  
\*BAKER, Albert, M.D., appointed Honorary Medical Officer to the Dawlish Dispensary.  
\*BAKER, A. de Winter, L.R.C.P. Lond., appointed an Acting Medical Officer to the Dawlish Dispensary, 20th Feb. A. Baker, M.D.  
PRICE, Henry Elthington, B.Sc., M.R.C.S. Eng., appointed House-Surgeon to the London Hospital.

#### BIRTHS, MARRIAGES, AND DEATHS.

The clergy will officiate at the marriages of the following couples:—  
19 Feb. 1877, when the above will be married in church with the usual rites.

#### BIRTHS.

\*DAVSON.—On February 1st, at Mount Galilee, Dartmouth, the wife of T. Adams Davson, M.D., of a daughter.  
MIDDLETON.—On January 25th, at Darlington, the wife of \*G. Middleton, L.R.C.P. Ed., of a son.  
NORTON.—On January 15th, at 3, Redcliff Hill, Bristol, the wife of John A. Norton, M.D., of a son.

HUNTERIAN SOCIETY.—The members of this Society will dine together at the Albion Tavern, on Friday, the 16th instant.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 30 P.M.
TUESDAY.....	Guy's, 1 30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1 30 P.M.—St. Mary's, 1 30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2 30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1 30 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1 30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.—Charing Cross, 2 P.M.—
FRIDAY.....	Royal Westminster Ophthalmic, 1 30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1 30 P.M.
SATURDAY....	St. Bartholomew's, 1 30 P.M.—King's College, 1 30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1 30 P.M.—St. Thomas's, 9 30 A.M. and 1 30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—	Medical Society of London, 8 30 P.M. Dr. Woakes, "On some Sympathetic Ear-symptoms"; Dr. Thorowgood, "Two Cases of Cirrhosis of the Liver, with remarks".
TUESDAY.—	Royal Medical and Chirurgical Society. 8 P.M.: Ballot. 8 30 P.M.: Mr. Henry Morris, "On Dislocations of the Thigh, their Mode of Occurrence as indicated by Experiments, and the Anatomy of the Hip-joint".
WEDNESDAY.—	Hunterian Society. 7 30 P.M.: Annual Meeting for Election of Officers. 8 P.M.: Oration by Dr. Moxon.—Epidemiological Society, 8 30 P.M. The adjourned discussion on Dr. Smart's paper on Dengue.
THURSDAY.—	Harveian Society of London, 8 P.M. Dr. G. de Gorquerue Griffith, "On Faecal Collections simulating Utero-Ovarian Disease"; Mr. Osman Vincent, "On the Anatomy, Pathology, and Treatment of Knock-knee".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## THE HASTINGS PRIZE MEDAL.

In reply to the inquiries of several correspondents, we beg to give the following information.

1. It is expected that the Hastings Medal will be awarded at the next meeting of the Committee of Council, which will probably be held in the second week of April.

2. It is under consideration to substitute for the Hastings Prize an Address to be given at the Annual Meeting.

3. The Hastings Medal has been awarded five times since its institution; viz.: 1864. To J. L. W. Thudichum, M.D. Subject of essay, "Urochrome, the Colouring Matter of the Urine".

1865. T. Herbert Barker, M.D. Subject of essay, "Deodorisation and Disinfection".

1866. Furneaux Jordan, Esq. Subject of essay, "Shock after Operations and Injuries".

1870. J. Milner Fothergill, M.D. Subject of essay, "Digitalis: its Mode of Action and its Use".

1873. Lawson Tait, Esq. Subject of essay, "The Pathology and Treatment of Ovarian Diseases".

## KENT NURSING INSTITUTION.

SIR,—Will you oblige me by bringing the Kent Nursing Institution to the notice of the profession in Kent? The Institution is doing good work, but is at present maintained principally by voluntary subscriptions. Nurses can be had upon reduced terms upon the assurance that the parties are in necessitous circumstances.—I am, your obedient servant,

West Malling, February 2nd, 1877.

SAMUEL PRALL.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## INEFFICIENCY OF LYMPH FROM A REVACCINATED PERSON.

SIR,—Your correspondent H. J. calls upon Dr. F. Brown to give the evidence upon which the assertion is based that lymph from revaccinated persons is useless. He will find such evidence in a paper printed in the *Lancet* for 1871, vol. ii, page 157. Dr. J. B. Barbour, the then Physician to the Metropolitan Fever Hospital at Stockwell, contributed the paper in question, which reported an outbreak of small-pox amongst ten persons, who were patients of one and the same medical man, and all of whom had been recently revaccinated by him. They all showed cicatrices of the secondary vaccination, and had had, to all appearances, "good arms". It was then found to be the practice of this medical man to vaccinate with lymph taken from vesicles produced by revaccination. Although these ten revaccinated cases occurred in the practice of this particular gentleman, there was not, remarks Dr. Barbour, a single case of small-pox following a successful recent vaccination by any other medical man admitted into the Stockwell Hospital prior to 1871, when Dr. Barbour's paper was written; and by that date, it will be remembered, the epidemic of 1871 was already declining. Dr. Barbour's communication would seem to prove that "secondary" lymph, if it may be so termed, is worse than useless. It beguiles the patient into a false sense of security, whereas he is not properly protected from small-pox.—Yours, etc.,

M.B., F.R.C.S.

## SUPPLY OF VACCINE MATTER.

SIR,—I see by various communications to you that there seems to be a want for vaccine matter. I beg to say that I will supply it by post at sevenpence per tube, same as I use for my own patients, to any medical practitioner. Stamps to be enclosed with note of application.—I am, sir, your obedient servant,

JOHN MARTIN, Senior Physician Belfast Dispensary.

9, Clarence Place, Belfast, February 2nd, 1877.

## ULCERATED LEG.

SIR,—The very excellent paper on ulcerated leg in the JOURNAL of Jan. 13th, by Mr. Cochrane, reminds me of one that came under my notice many years ago. A stonemason, young, and otherwise in good health, applied to me to cure a sore leg which had troubled him for some months, caused by whisky and constant standing. My efforts even to relieve him completely failed, and he left me, returning some months later to know what he was to do, as he could work no longer. At that time, his leg, from knee to instep, was one great ulcer; the skin had entirely disappeared; the muscles were wasted to that degree that one was surprised not to see the tibia sticking out along its whole course; and beneath the thin purulent discharge, the whole leg was covered with large deep red granulations. By my advice, he entered a hospital, where I saw him placed, and heard nothing more of him for several months, when one day he walked into the surgery perfectly cured. His history was this. After vainly pursuing several methods of cure, the surgeons proposed, as the last and only resort, amputation. He objected, and left the hospital, returning to the quarries, where a blacksmith lived who cured "sore legs". For a fee of a bottle of whiskey, paid down, and another when the cure was effected, he was taken in hand, laid on his bed, and poulticed thrice a day with linseed-meal, on which was spread a thick coating of acetate of lead. In three months his leg was perfectly well; the most astonishing part of the cure being, that the skin was restored exactly the same as that on the other leg. In gratitude, he said, for my attention to him, he came to tell me of his recovery and its cause, for which I was very grateful to him. Such legs, even of less severity, are seldom seen now, but they must occasionally occur.

I beg permission to add another surgical case, which may act as a warning to young practitioners. A young lady, coming down some wooden steps, slipped on the last and fell, having, as she thought, broken her leg. The pain was so severe, that the best surgeons in the town were immediately at her bedside, and the injury was pronounced to be a mere strain; and leeches, poulticing, etc., went on for many weeks without relief. She could not put even her toe to the ground without agony. She came to London, and was attended by Sir Astley Cooper, Mr. Abernethy, and other great men, returning to Liverpool as bad as she went. But on her way home, it was suggested that she should try the Whitworth bone-setters or doctors near Manchester; and she was placed second on a long form in a shed, next to the consulting-room. On her admission, the room was occupied by Taylor and his daughter, a rough peasant girl, without shoe or stocking, who was present to translate her father's *patois* into modern English. He heard her tale, and, in the gentlest manner, examined her foot; then, getting it between his legs, exactly as if he were shoeing a horse, he gave it a wrench, the pain of which was as nothing to the instant relief she felt from her sufferings. The cure was so instant and complete, that she walked to her carriage. The fee to the doctor was either twopence or fourpence, I forget which.

While in full practice abroad, I once met with a precisely similar case, though in the shoulder, in which I failed, while two young ignorant lads, dragging the arm about, succeeded. Both wore cases of partial dislocation.—I am, etc.,

January 1877.

J. W. MACKENNA, M.D.

## WAKES.

SIR,—I showed your article on the subject of "wakes" to an influential Roman Catholic priest. He informed me that the priests had been trying all they knew to oppose them, but everything they could say and do was perfectly useless.—Yours truly,

G. E. CORRIE JACKSON, L.R.C.P.

Poland Street, Feb. 1877.

\* \* \* The influence of the priest is very great with the Catholic poor, and we should hope much from the general persistent effort to abolish a practice full of injury to the public health, not to speak of other mischiefs.

AN OLD MEMBER.—Mr. John Birkett, the senior Vice-President, will in all probability succeed Mr. Prescott Hewett as President of the College of Surgeons in July next. Mr. Birkett, who is the Government Inspector of Provincial Medical Schools, was admitted a member of the College October 6th, 1837, and is one of its Honorary Fellows. He obtained the Jacksonian Prize in 1843 for his essay on *Diseases of the Mammary Glands, Male and Female*. The other Vice-President is Mr. John Simon, F.R.S. The election takes place soon after the annual election of Fellows into the Council.



**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than **Thursday**, twelve o'clock.

#### COTTAGE HOSPITALS.

X. Y. asks what would be the cost of building a cottage hospital of twelve beds, and also the annual expenditure; and from what hospitals he could get a good report.

#### THE COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN

JANUARY 1877.

The following are the returns of the Society of Medical Officers of Health.

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter etc.	Nitrogen As Nitrates, &c.	Ammonia.		Hardness. (Clarke's Scale.)	
				Saline.	Organic	Before Boiling.	After Boiling.
<i>Thames Water Companies.</i>	Grains.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction ..	18.90	0.135	0.120	0.001	0.007	13.2	3.8
West Middlesex ..	18.40	0.133	0.150	0.000	0.008	13.2	3.8
Southwark and Vauxhall .....	19.00	0.138	0.105	0.001	0.006	13.2	3.8
Chelsea .....	18.80	0.120	0.150	0.007	0.009	13.2	2.9
Lambeth .....	20.90	0.094	0.210	0.006	0.009	14.8	4.2
<i>Other Companies.</i>							
Kent .....	27.90	0.003	0.300	0.000	0.003	20.6	6.0
New River .....	20.50	0.094	0.216	0.000	0.006	14.9	3.3
East London ....	22.70	0.079	0.150	0.001	0.008	14.9	3.3

*Note.*—The amount of oxygen required to oxidise the organic matter, nitrates, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it. The water was found to be slightly turbid in all cases.

C. MEYMOTT TIDY, M.B.

We make the following commentary on this table. As will be perceived, the well known ammonia process has been resorted to, but the analyst has preferred not to express the results in the terms or on the scale adopted by the inventors of the process, and by the great majority of persons who use the process. In a matter of this kind, uniformity of expression is most desirable.

We perceive that, according to the table, the albuminoid ammonia given by the Southwark and Vauxhall is smaller than that given by any other Thames company. Other operators, as our readers will be aware, get a very different result, and find the Southwark and Vauxhall one of the worst, not the best, of the Thames companies. Following the late Dr. Letheby's example, the present analyst still adheres to the permanganate process, and informs us that in the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it. The incorrectness of such a statement has often been pointed out.

#### A QUESTION OF ETIQUETTE.

SIR,—May I trouble you to publish and to give your opinion as to the medical etiquette of the following case?

A certain Dr. H., son of a neighbouring practitioner, opposed my predecessor the beginning of last year, and left after a few months, saying it "did not pay". My predecessor, wishing to dispose of his practice, offered it to Dr. H. on exceptionally easy terms. A correspondence of three letters on each side ended in a thorough exposure of the income, etc., and a letter from Dr. H., stating, though he should obtain the appointments without opposition, he thought he should do better as he was (*locum tenens*, I believe) than by practising here; giving as one of his reasons, that he should not succeed to many of the patients owing to their dislike of his father. I read the correspondence before negotiating for the practice, and agreed with my predecessor in thinking Dr. H. could not oppose me after the liberal offers made him. No sooner had I applied for the public appointments, than I found he was, and still is, opposing me, having retaken his old quarters, which were "to let".

I have heard that Dr. H. says he would not have opposed me, but that there was another medical man applying for the appointments. There was no other applicant, and no other name transpired to the electing body. I can prove the above statements, and have no hesitation in subscribing myself your obedient servant.

WILLIAM PHELPS.

Freshwater, Isle of Wight, January 21st, 1877.

\* \* We cannot see, in our correspondent's letter, any ground for a charge of breach of medical etiquette against Dr. H. It does not appear that he made any agreement or promise not to return: he only "thought he should do better" elsewhere. In changing his intention, he has no doubt acted in a perplexing manner towards our correspondent; but he has not, so far as we can see, gone beyond his right.

#### DEATH FROM CHLOROFORM.

SIR,—I enclose a cutting from a local paper of last Saturday, referring to a death from chloroform. No inquest has been held, and it is well known that three of the surgeons mentioned—Messrs. Roberts, Lund, and Hopwood—were not present, and were in no way responsible. Ought not an inquest to have been held? and is it quite fair to these three surgeons to connect them with an operation terminating in this unfortunate manner?—Yours truly,

ENOCH ROBINSON, Surgeon.

Dukinfield, Cheshire, January 23rd, 1877.

\* \* The above refers to the death from chloroform at Staleybridge, of which we published a fortnight since the newspaper statement. We have since applied to Dr. Dickinson of Staleybridge for particulars, but he has not furnished them.

#### ADMINISTRATION OF CHLOROFORM.

SIR,—In the accounts of deaths from chloroform recently reported, it is said in almost every instance that a piece of lint once folded or a fine handkerchief was used. In the Glasgow Royal Infirmary the chloroform is always dropped on a thick towel, folded at least four times, and with them death from chloroform is almost unknown.—Yours,

S.

**NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.**

#### CONDENSED MILK.

SIR,—In answer to Mr. Hildyard Rogers's inquiry, as to the use of condensed milk as a food for infants, I beg to refer him to a paper of mine, published in the *Lancet* of November 2nd, 1872, and which is quoted *in extenso* by the late Edward Smith, M.D., F.R.S., in his book on *Food*, chap. xxiv, page 323.

It is more than four years since my views were published, but a longer experience has only tended to confirm my opinion, that the constant use of condensed milk is most injurious to infants. Children like condensed milk, and fatten on it, but their power of resisting disease is very low; such children, although remarkably well to look at, will soon die from an attack of measles, scarlet fever, or diarrhoea, of not very great severity, and will sink into a low state much sooner than those children fed on even the milk of London-fed cows. I have invariably found that children brought up on condensed milk are backward in walking and late in teething, also the anterior fontanelle is late in closing; or, in other words, the muscular and osseous tissues are not properly nourished. The children generally, too, have the abdomen rather large. For occasional use, condensed milk is most useful, in summer, for instance, when fresh milk soon becomes sour, and for use at night. But I feel sure that it is not calculated to make infants grow into strong muscular men and women. Whilst in natural cow's milk the proportion of nitrogen (flesh-forming) to carbon (fat-forming) is 1 to 12, in the preserved milk it is not much more than one half, or about 1 to 20.—I am, sir, your obedient servant,

FREDERICK H. DALY, M.D.

101, Queen's Road, Dalston, February 5th, 1877.

SIR,—I beg to endorse everything stated by Mr. Hildyard Rogers in this week's issue concerning the value of condensed milk. I have used it with the very best results in the feeding of infants, when the milk given by several different cows has been tried and found to disagree with the child. I consider it a great boon to the profession, as perfectly pure milk (such as would be obtained from cattle grass-fed) is all but unobtainable in winter.—I am, sir, your obedient servant,

A. M. ALCOCK.

#### ART IN HOSPITALS.

SIR, A misapprehension has arisen as to the *bona fides* of my offer of a hundred guineas towards a fund for introducing art into hospitals, because of the condition that one thousand subscribers should also each contribute a similar sum. I withdraw such condition. I will gladly give one hundred guineas to a responsible committee, as soon as one is framed, to promote the Art Fund of the hospitals of London.—I am, sir, your obedient servant,

J. LAWRENCE HAMILTON.

34, Gloucester Terrace, Hyde Park, February 13th, 1877.

#### A DISPUTED FEE.

SIR,—Will you kindly allow a space in your JOURNAL for the following? Some time ago, I was summoned to visit a gentleman's son (being not their usual medical attendant, nor having made any more visits to the young gentleman than the one). For my opinion I sent in a bill of a guinea, which he refused to pay, on account of its being too much. Will any well known surgeon send me a letter, that I may show it to the gentleman, so as to prove that it is nothing beyond the usual fee? Also, I should feel obliged for a letter from an obstetrician, to show that it is a common thing among medical men to bespeak confinements, and be paid, whether the parties can manage without his aid or not.—I am, sir, etc.,

DAVID GRIFFITHS.

Terfyn Gronant, Rhyl, January 30th, 1877.

#### A PROVIDENT MEDICAL CLUB.

We have received from a correspondent a copy of the handbills of the Whitechapel and St. George's-in-the-East Medical Club, which runs as follows:

"Inhabitants may have attendance and medicine from either of the following doctors: Dr. Loane, 1, Dock Street; Dr. Mahoney, 300, Commercial Road; Dr. Morrison, 57, Cannon Street Road; Dr. Segura, 34, Lemon Street; Dr. Swyer, 32, Brick Lane; Dr. Taynton, 247, Commercial Road.

"*Privileges.*—For each person between 16 and 18 years of age, 3d. a month; for each person over 18 years of age, 6d.; for a man and his wife, 1s.; for each child under 16, in a family where a parent or guardian is a member, 1d. for a benefit club, 4d.; more than three children in a family need not be paid for."

"Apply at 124, Commercial Road, on Tuesdays and Fridays, from 10 to 12 on the evening, to Mr. John Hawkins, Collector."

Our correspondent remarks briefly that this is "disgraceful". We should be glad if he would state his reasons for that opinion. On the face of it, this appears to be a provident club, paying a subscription of five shillings and upwards a year; and it is, we believe, promoted by gentlemen of intelligence and experience, and sincere well-wishers to the district, who consider that there is a great abuse of the out-patient departments of the London Hospital, and other infirmaries and dispensaries, and much mischief wrought by prescribing chemists and quacks. This provident medical club is meant to stem that system of demand and pauperisation. We do not understand why our correspondent considers it to be worthy of censure, and shall be glad if he will explain his views at greater length.

#### ABNORMAL VASCULARITY.

SIR,—Would you or any of the numerous correspondents of your valuable JOURNAL help me in my present difficulty? I have a patient who has passed the menopause, and who suffers from a hemish, which, though frequently met with, she is anxious to get rid of if possible—viz., the appearance of capillary vessels in the cheeks and forehead. I should be glad to learn the exact pathology, and if there be any remedy. An insertion of the above will oblige yours faithfully,

January 1877.

L.R.C.P.L.

#### PROFESSOR SCHIFF.

SIR,—A few weeks ago, I had the pleasure of paying several visits to Professor Schiff in the newly erected physiological institute belonging to the new University of Geneva. He requested me to state on his behalf that, although not at all satisfied with the Vivisection Act in England, he would not have left Florence if he had been able to continue his researches under a similar law. Then, at all events, rumours, tittle-tattle, fables, hearsay, and chicanery would not have been enabled to do their work against him, as only official persons would have been allowed to make their statements. On the other hand, by the observation of such authorised persons, the public mind could not have failed to become convinced that he made his experiments with all possible and real saving of pain to the animals operated upon. He maintains that he goes farther in this respect than the English law requires, and that he is not in the habit of experimenting before his audience during lectures.—I remain, sir, yours obediently,

AUGUSTUS HESS, M.D.



THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, VENTNOR.

SIR,—Considering the limited accommodation at this invaluable hospital, and the large number of patients in various parts of the country who often have to wait several weeks before their turn for admittance arrives, many of whom would be benefited by an immediate residence in Ventnor or neighbourhood, and by the delay (which at present is unavoidable) get rapidly worse in the polluted atmospheres of large towns, and who, when the order arrives for them to proceed to Ventnor, are quite unfit to undertake the journey. I should propose that arrangements should be made to enable such persons to reside in Ventnor until their turn arrives to go into the hospital. If another branch hospital were built where these patients could reside, and be under the care of the medical officers of the hospital proper until they could be admitted, I am persuaded it would be a great boon to many who are afflicted with consumption. Each patient could pay a certain sum per week for board and lodging, so as to cover the expenses of such a branch hospital. The above are only suggestions which, I think, should be favourably entertained by the governors of the hospital, and all who are interested in it. I am, sir, yours faithfully,

H. A. ALBUTT, L.R.C.P. Ed.

Hon. Local Medical Referee to the Consumption Hospital, Ventnor.  
Sheepscar Street, Leeds, January 28th, 1877.

THE DOCTOR TO THE HIGHLANDS BOUND.

"ADIEU, Mayfair, with all thy faults,  
I dearly love thee still;  
Farewell to the golden guineas  
That flow into my till.  
Adieu, night-bell, that breaks my rest,  
And drags me out of bed,  
I'm off t' the Highland mountains  
To rest my weary head.  
My eyes are dim, I scarce can see,  
Or make out any face;  
When Mrs. Jones comes walking in,  
I say, "Just so, your Grace".  
Or if a Princess haps to call,  
And wants a consultation,  
I say a word that sends her off  
In utter consternation!  
But when I'm safely in the train,  
I dream a dream of bliss;  
And think the carriage I love best  
Is that without the *mis*.  
Or if I waken with a start,  
And look both wild and worn,  
My wife with smiles soon smoothes me down,  
Saying, *Everbody's born*.  
Then, looking in her face, I see  
The light of other days,  
And think that I too long have lost  
Her sweet and gentle ways.  
I ask her to forgive me, and  
Think kindly now and then,  
As I've only been neglecting her  
For the wives of other men!  
And so on, whirling through the night,  
We reach our destination,  
And are received with joyous shouts,  
That need an explanation.  
I say, "My dear, what do I hear,  
These sounds of 'dear papa'?  
Is't true that I possess all these,  
As well as their mama?"  
"Ah, yes", she says, with happy smile,  
And mischief in her eyes,  
"Thinking that you had quite forgot  
I plann'd a sweet surprise."  
"Oh, then, dear love, it must be true;  
What a charming little trick!  
I am much richer than I thought,  
With my quiver full of sick."

A COUNTY MEDICAL CLUB.—A conference was lately held at Ipswich of members of the medical profession in Suffolk, the object of the meeting being to consider the propriety of founding a County Medical Club. Sir Edward Harrison presided. It was decided to establish the club, and to divide the county into districts, a provisional committee being appointed to consider the necessary rules.—[The above paragraph appeared in a daily paper: we should be glad to hear further particulars.]

MEDICAL EVIDENCE IN THE LAW COURTS.

SIR,—The case of *Crisp v. Mayo*, concluded on Saturday, January 25th, in the Second Court of the Queen's Bench Division, has served once more to suggest the desirability of an alteration in the present system under which medical men are called upon to give evidence on scientific points which may be raised in the course of trials. At present, medical men are called in by the counsel on either side, and are virtually retained for the plaintiff or the defendant, a course which I cannot but regard as likely to hinder rather than to assist in the elucidation of what all wish to arrive at—the true view of the point at issue. My own experience, as a witness at this trial and on a previous occasion in another court, as to the difficulty of entirely freeing one's mind from the recollection of the interests of one's client, leads me to believe that it would be far better if the medical witnesses could be called, not by or in the interest of one side, but by both leaving the selection to the court if there should be any disagreement. It is always very difficult, under the present system, for a medical witness to be altogether unbiased when he goes into court with the knowledge that, whether it be openly admitted or not, he is in reality engaged to serve a distinct end and to support the line taken by the counsel on a particular side. To remedy this, it would be only needful for both parties to consent to call in the medical witnesses, who would then no longer consider themselves pledged, either tacitly or openly, to either side.

The larger question, whether, in important cases, such as that concluded on the 20th instant, it would be well for the judges to have the assistance of medical assessors, has been raised in the columns of the *Lancet*, and I will not ask you to enter into that part of this subject.—I remain, sir, yours faithfully,  
42, Devonshire Street, Portland Place, W.

W. PUGIN THORNTON.

CARDIAC MURMURS.

ROSENSTEIN, in Ziemssen's *Cyclopaedia*, vol. vi, says: "What are the real causes of the cardiac murmurs? The investigations of Heynsius and Nötel are regarded as proving that the primary vibrations which take place in the blood itself are the real causes of the murmurs, and that the influence of tension and lateral pressure on these motions was nothing, while the influence of the rapidity of the stream was great. If the stream be only rapid enough, murmurs may be produced even in a glass tube of uniform diameter. Clinical experience also lays great weight on the rapidity of the stream. How shall we determine whether a murmur is endocardial or exocardial? 1. Endocardial murmurs are exactly simultaneous with one or other of the cardiac sounds. The exocardial, on the other hand, are heard after or between both sounds, and hang behind. 2. The endocardial are of a various character, blowing, breathing, scratching or rasping, while the exocardial are always rasping, however much the intensity may vary. 3. Exocardial murmurs are generally heard at first over the base of the heart, afterwards at the apex and over its whole extent. Endocardial murmurs do not increase so much in extent, being more local and fixed. 4. Exocardial murmurs, if at all intense, can always be felt, which is not the case to such a degree with endocardial murmurs."

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Sheffield Daily Telegraph; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; The Hull Criterion; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The High Peak News; The Metropolitan; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Middlesex Advertiser; The Rock; The St. Andrew's Gazette; The West Cork Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Warrington Express; etc.

\* \* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. W. H. Broadbent, London; Dr. T. Clifford Allbutt, Leeds; Dr. J. Milner Fothergill, London; Dr. A. Robertson, Glasgow; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. Eustace Smith, London; Dr. A. Hughes Bennett, London; Dr. Prall, West Malling; Dr. Rawdon, Liverpool; Dr. Thorowgood, London; Dr. John Martin, Belfast; Mr. C. Steele, Clifton; Mr. John A. Norton, Bristol; Dr. Heywood Smith, London; Surgeon-Major Porter, Woolston; Mr. G. E. C. Jackson, London; Mr. Erasmus Wilson, London; Dr. Tripe, Hackney; Mr. James Elliott, Middlesborough; Mr. Bisshopp, Tunbridge Wells; Dr. Gowers, London; W.; The Registrar-General of England; Mr. Balmanno Squire, London; The Secretary of the Harveian Society; Dr. T. Claye Shaw, Banstead; Dr. Cobbold, London; Dr. Cayley, London; The Registrar-General of Ireland; Dr. Mackey, Manchester; Dr. Lowe, King's Lynn; The Secretary of Apothecaries' Hall; Mr. Greene, Birmingham; Mr. H. Sewill, London; Dr. L. W. Marshall, Nottingham; The Secretary of the Hunterian Society; Dr. W. Squire, London; Mr. W. Square, Plymouth; Dr. G. H. Evans, London; Dr. Ord, London; Mr. T. Holmes, London; Dr. W. Fairlie Clarke, Southborough; Invicta; Mr. A. Pullar, London; Mr. R. S. Fowler, Bath; Dr. E. C. Board, Clifton; Dr. Hardwicke, Sheffield; Dr. Drysdale, London; Mr. Harper, Holbeach; Dr. Daly, London; Mr. McMunn, Manchester; Dr. Sheen, Cardiff; An Old Associate; M.B.; Mr. Hugh Robinson, Preston; M.R.C.S. Eng.; Our Edinburgh Correspondent; Mr. G. Eastes, London; The Secretary of the Epidemiological Society; Dr. Edis, London; Mr. Roberts, Coningsby; The Secretary of the Royal Medical and Chirurgical Society; Mr. Hamilton Cartwright, London; Dr. Thomson, Peterborough; Mr. Langdon, Southampton; Mr. H. Burdett, Greenwich; Mr. C. Rothwell, Bolton; Dr. Levinge, Limerick; Dr. Goodchild, Leamington; Mr. Vincent Jackson, Wolverhampton; Dr. J. L. Hamilton, London; Dr. Lauder Lindsay, Perth; Mr. George Brown, London; Dr. J. C. Reid, Newbiggin; Our Dublin Correspondent; Dr. A. M. Alcock, Innishannon; Mr. A. Hodgkinson, Manchester; Mr. Jonathan Hutchinson, London; Dr. Joseph Rogers, London; Dr. Bloxam, London; Dr. Charles Hogg, London; Dr. H. Donkin, London; Mr. George Groves, London; Mr. Wickham Barnes, London; A Competitor; Dr. Hitchcock, Lewisham; X. Y.; Dr. W. F. Wade, Birmingham; Mr. E. Mockett, St. Ives; Mr. Bushell Anningsen, Cambridge; Dr. Byrom Bramwell, Newcastle-upon-Tyne; Mr. F. W. Strugnell, London; Mr. Russell Steele, Sandwich; Dr. Goldie, Leeds; Dr. Aitken, Netley; L.R.C.P. Ed.; etc.

BOOKS, etc., RECEIVED.

Atlas of Skin-Diseases. By Tilbury Fox, M.D., F.R.C.P. London: J. and A. Churchill. 1877.  
Vivisection. By George Macilwain, F.R.C.S. London: Hatchards. 1877.

## SCIENCE IN SURGERY:

BEING

## THE HUNTERIAN ORATION

*Delivered at the Royal College of Surgeons of England,  
Tuesday, February 13th, 1877.*BY SIR JAMES PAGET, BART., D.C.L., LL.D., F.R.S.,  
Consulting Surgeon to St. Bartholomew's Hospital, etc.

MAY it please your Royal Highness, Mr. President, my Lords and Gentlemen,—I have no doubt it is my first duty to offer to your Royal Highness the thanks of the whole College of Surgeons for your presence here to-day. In honouring the memory of John Hunter, you make us more than ever proud to be the guardians of his museum and his reputation; you make us more than ever anxious to promote that true scientific surgery of which we reverence him as the great founder; and we shall venture to believe that your Royal Highness approves the efforts of this College for the public welfare, and is anxious to promote the sciences, in the cultivation of which our reputation and our utility are maintained. On all these grounds, and on many others that need not be told to-day, I venture, for the whole of the College of Surgeons, to render to your Royal Highness our very respectful and our grateful thanks.

When time and the favour of my colleagues in the Council brought to me the occasion of delivering the Hunterian Oration, I thought it right to study afresh the character of John Hunter; and now I beg your leave to offer some of the facts and thoughts to which, in my study, I have been led—chiefly to tell, if I can, what were the motives of John Hunter in his scientific life, and what were the chief characteristics and methods of his work; to tell also some of his achievements and the lessons that may be read in the story of his life. I may thus, I hope, however imperfectly, fulfil the design of the founders of the oration by promoting the honour of John Hunter, and perhaps even the advancement of surgery, by showing in his illustrious example the good influence of the scientific mind.

The motive which at first urged John Hunter to the pursuit of science seems to have been only the necessity of earning his livelihood: for we find him at first as the youngest child of a Scotch laird, idle and negligent of education. In the first twenty years of his life, he showed no desire for the knowledge of science, or any of the arts that minister to it, or, indeed, for any intellectual pursuit whatever. We find no tales of early enterprise, no childish love of Nature, no signs of the future mental power. When he was 17, he tried to assist a brother-in-law who was a bankrupt cabinet-maker at Glasgow, and it seems probable that, if he had been successful, cabinet-making might have been the occupation of his life. But happily he failed. His brother-in-law was past helping, and then, after two years more of idleness, what was next to be tried? His brother, William Hunter, was prosperous in London; he was beginning to be esteemed as a great teacher of anatomy and surgery; so he offered to assist him in his dissections, and, if that should fail, he would go into the army. Thus, in mere idleness or of necessity, with no other reason than that there was nothing else to be done, John Hunter drifted into the opportunity of scientific study—drifted into the career into which he was to become great amongst the greatest men of science, and amongst all the surgeons of all times the most renowned. It seems strange that a mind so remarkable, so vigorous, so self-willed as John Hunter's proved, should not have shown or felt some consciousness of its power till it was brought to scientific study. He had not lived in darkness or among dull people. His father was a shrewd and sensible man; his mother was well educated; both his brothers and at least one of his sisters were persons of remarkable mental power. Amongst these his mind had had opportunities of culture and of exercise, but he neglected them as if they were to him useless. And he had lived amongst the same wonders of the organic world, the same truths and utilities in Nature, as moved him in his later years to restless study. But he passed them all by unheeded; no desire of knowledge was stirred in his mind till he came into the presence of scientific men at work. It may be that now, for the first time, his mind had reached the maturity necessary for the desire of scientific knowledge; but I think it is rather that now, for the first time, he found in the society of his brother both the projects and the method of work for which alone he was naturally fitted. In 1748, when John

Hunter came to London, there was great intellectual activity in all the medical sciences; and William Hunter was in the midst of it. He was an intimate associate of the best minds of the time, the best lecturer on and the best teacher of anatomy; fluent and well read; enthusiastic in his devotion to science and to art; a very keen observer, and a laborious collector, wishing to devote all that he could earn in practice to the increase of his museum and his means of teaching. We may, indeed, count William Hunter to have been the first great teacher of anatomy in England, the founder of the first great school; among all the biologists of his time and country, second to none but his brother.

Now, to pass from the idleness of a Scotch farm into the activity of life such as Hunter found here was like being born into a new world; and this was the very world, if not the only world, in which the best parts of his mind could live and grow; for he had a natural fitness for the study of living things. For other things he seems to have had no greater desire or capacity of knowledge than ordinary men have. But this natural fitness was, in the first instance, wholly intellectual. There was no love or desire in it; and so the mind had no motive power until it was set to its right work, and in work found happiness. For the happiness of intellect is in its work; that of the highest intellect in vigorous self-guided work. The highest intellects find a happiness, the desire of which is their enervating motive, not in the reception nor in the mere possession of knowledge, but in the process of acquiring it and of using it in thoughtful exercise. Moreover, to some intellects, and among these some of those by whom the greatest results of science have been achieved, there is but one kind of knowledge which satisfies either in the getting or the having. To Hunter there seems to have been no great intellectual happiness except in the pursuit of the knowledge of living things; and to this he was now brought, and hence onward there was no lack of motive. The mind that had been idle, heedless and aimless, had come to its right field of action; and in that field every opportunity of intellectual pleasure and exercise was afforded to it, and it grew into capacity for all. Gradually the desire for knowledge grew to be an insatiable passion—a motive to incessant work.

With this passion another coincided. Hunter had a passion for collecting. He may have learned it of his brother; or he may have only followed the fashion of the time, which was as dominant then as it is now; but I think it was natural to him—a natural instinct for gathering and keeping; and it worked with his desire for knowledge, and each continually animated and provoked the other. It cannot be maintained that Hunter's desire of collecting was only secondary to his desire of knowledge. Science gave it its first and chief direction; and his great ambition was to have a grand museum, richly illustrated with catalogues and drawings. If he could, he would, I believe, have collected everything by which he might show to himself and his friends every fact in biology that he could find. But even this would not have satisfied his love of collecting. He collected a crowd of things besides, that must have been useless even to himself and must have helped to keep him poor: pictures of considerable cost; engravings; works of art in ivory, bronze, and marble; stuffed birds; and implements of savage warfare. With all these, his house in Earl's Court must have looked like a curiosity shop. This may easily be pardoned. No earnest collector ever yet bound himself within the limits of science, utility, or prudence; and if an extravagant love of collecting, silly as it often is, need be apologised for, the example of John Hunter may be quoted, for it led him constantly into wider and deeper ranges of study, and it incited him to the industry and skill with which he collected the great stores of facts that are treasured in this College. Gathered around them now are the museums of the College itself, twice as large as his own; and they form what Hunter longed to see—the greatest and best museum of anatomy in the world.

One other motive of Hunter's scientific life should be mentioned. He was a master in all the arts of anatomy—dissecting, injecting, and all the then known ways of displaying specimens. I suspect that his first success in life was that which is told of his first dissection. It is said that he was so fond of this study, that it was among the motives that induced him to go beyond the study of human anatomy into that of comparative anatomy, which before his time had hardly been pursued in this country.

These were the motives of John Hunter's scientific life; and they deserve study, for he led that life with as much purity and simplicity as any man. Doubtless, as we read his biography, we may trace the influence of other motives, which added to these their various forces; but they were all casual and subordinate, altogether outweighed by the constantly increasing power of those which I have mentioned, and chiefly by the desire of knowledge; and that desire continued to increase with him with indulgence, with contest against difficulties, with



the constant presence of new objects for his study, and with the encouragement of success. He filled himself with knowledge, and through knowledge he became an ardent lover of Nature. I say "through knowledge"; for Nature, in her manifold perfections, inspires many kinds of love, and Hunter's was almost wholly intellectual. He had none of that love which moves the poet, or the idealist, or the theologian; for, in truth, neither poetry, nor idealism, nor theology ever coloured the simplicity of his scientific mind. He had the social love of Nature, and he writes and speaks of the animals around him as if they were his companions. But his chief love was for the charms of truth that lie hidden beneath the veils, appearances of Nature; and his love for these was continually increased when every search revealed the utility of all he saw, the perfection of adjustment of everything to its purpose, the evidence of design in every change, the evidence of a grandeur in a world of infinite variety of form, held steadfast by few laws. All these were motives to fresh study; and I cannot doubt that he attained to that great achievement and satisfaction of the intellect when it can rest in a loving contemplation of the truth, loving it not only because it is right, but because it is beautiful. I cannot doubt that there is given to some high intellects, in view of a great field of scientific truth, a source of as pure delight as are the sensuous beauties of Nature to a cultivated artist's mind, or virtue to the enlightened conscience. Hunter had a pure calm happiness in such contemplations. So Reynolds, his friend, seems to tell of him; for in that masterpiece of portraiture which teaches like a chapter of biography, Hunter is not shown as the busy anatomist or experimenter searching for objective facts; the records of his works are in the background, and he is at rest, looking out, but as one who is looking far beyond and away from things visible, into a world of truth and law which can only be intellectually discerned. In the clear vision of that world was his reward. It may be the reward of all who will lead the scientific life with the same devotion and sincerity.

Let me now speak of some of the characteristics of his work and of his method. That which first and always strikes one is the vast quantity of work that he did. It is recorded of him by one of his pupils that "he rose regularly at the dawn of day, and never ceased from his labours until the night was far advanced"; by others, that he allowed himself only five hours for sleep; and by another, that, when he gave him a letter of introduction, he was asked to call on him the next morning at five o'clock, and at that hour he found him already at work in his museum. Such as these were the habits of Hunter for at least the last thirty years of his life. And, reckoned in mere quantity, few men have left so large results of scientific labour as Hunter did. Besides the four published volumes of his works, he left many in manuscript, all written or dictated by himself. There is evidence that he dissected the bodies of five hundred species of animals, and, of some of these, several examples. He left records of three hundred of these dissections; and these included none of his studies of human anatomy, or of the hundreds, or even thousands, of morbid structures which he examined. His museum contained nearly fourteen thousand specimens; and all these were either prepared or, at least, very closely studied by himself; and this was all the work of about thirty years, during the whole of which time he was in the active practice of surgery. Even his "amusements", as he calls them, were such as idle men would call hard work. "I amuse myself", he says, "with bees"; and the result of his amusement is in essays, which the best recent writer on the subject calls almost faultless. They might have served alone to gain for him considerable scientific reputation. In evidence of the quantity of work which he would devote to a single subject, let me read to you what he states of his observations on the development of young birds in eggs. After many trials, which were to him unsatisfactory, to investigate the subject in the eggs of chickens, he says: "I kept a flock of geese for more than fifteen years; and, by depriving them of their first brood in my investigation, they commonly bred again the same year. And as hours make a difference in the first days, it becomes necessary to examine in the night as well as in the day, by which reason the latter brood in the summer is best adapted, having then short nights." Surely, one might suppose that this was the one great work of his life, this hourly examination by day and night over parts of fifteen years. Yet it seems, in truth, to have been only a casual by the way pursuit. He became, indeed, so enchanted with the study of young birds in eggs, that he says "one would almost fancy that this mode of propagation was intended for investigation". But though thus he reached very far beyond the results obtained by any before him or in his own time, he did not publish the results, and they were not known until many years after his death. The range of Hunter's work matched with the time which he devoted to it. Never before or since—I think I am safe in saying this—was anyone a thorough investigator and student in so wide a range of science. He was an enthusiastic naturalist; as a compara-

tive anatomist and physiologist, he was unequalled in his time; among the few pathologists, he was the best; among the still fewer geologists and students of vegetable physiology, he was one, if not the chief; and he was a great practical surgeon. He was surgeon to a large hospital in London, and for many years held the largest practice in the metropolis. In all these things at one time, no one but Hunter ever was eminent and successful; for it is not only in the range of his study, but in the thoroughness and depth of it that he is distinguished. It is not possible, indeed, to point out by example the thoroughness of Hunter's studies. Let it suffice to say that, in the whole range of subjects which I have just now indicated, he studied as thoroughly as was possible. There is not one of them in which he did not make investigations wholly original; not one of them of which he did not enlarge the area very far beyond that which had been covered by his predecessors; not one of them in which he did not leave facts and principles on record which it is impossible to count and very hard to estimate.

In all these characters of Hunter's works, we see that which was the dominant character of his mind; massiveness and grandeur of design were indicated in all to which he applied himself. And in perfect harmony with this, was the simplicity of his ordinary method of work. It consisted mainly in the orderly accumulation of facts from every source, of every kind, and building them up in the simplest inductions. If he had been an architect, he would have built huge pyramids, and every stone would have borne its own inscription. He knew nothing of logic, or the science of thought. He used his mental power as with a natural intellect. He worked with all his might, but without art. I know no instance so striking as is in him, of the living force which there is in facts when they are stored in a thoughtful mind.

But Hunter was not only a great observer, he was a very accurate one. I think it would be difficult to find in all the masses of facts which he has recorded, any one which was either observed or recorded erroneously. If there are errors in his works, they are the errors of reason, not of observation. And it may be noted, as a singular example of his accuracy, that when he tells his inferences, it is generally with expressions implying that he regarded them as only probable. A fact he tells without conditions; when he generalises, it is with "I suspect", "I believe," "I am disposed to think", or the like, and I believe there cannot be found one instance in which he endeavoured to add to the force of evidence by any strong assertion of his own opinion, as if his opinion should be taken for weight in a balance of testimony. Nay, there are very few instances in which, on any of the larger questions of biology, Hunter speaks with any positiveness at all. No one seems to have known better than he did that in science strong convictions are not usually the signs of knowledge. He seems to have thought he had never reached further than the nearest approach to truth which was at that time attainable, and that a year or more of investigation would bring him nearer to the truth, and then that which now seemed right would be surpassed or set aside. He used to say to his pupils in his lectures, "Do not take notes of this; I dare say I shall change it all next year".

Another instance of this singular caution was in the slowness with which he published. He was at work for eighteen years before he published anything in his own name. He was forty-three when he published his first work, that on the Teeth, and for his great work on the Blood and Inflammation he may be said to have begun collecting materials while he was a student. Several of the experiments recorded in it for the first time were made while he was house-surgeon at St. George's Hospital. He worked at it for forty years, and he had only just begun to print it when he died.

And his patience was equal to his caution. Abernethy, who knew him well, says, "It is scarcely credible with what pains Mr. Hunter examined the lower kinds of animals", and he quotes Mr. Clift as saying that "he would stand for hours motionless as a statue, except that with a pair of forceps in either hand he was picking asunder the connecting fibres of some structure" that he was examining. A very striking picture this, for this was in the last year of Hunter's life. He was growing old, and he had lately been very ill, and he knew that he was in constant peril of the sudden death in which at last he fell; yet he would stand for hours motionless as a statue; patient and watchful as a prophet, sure that the truth would come; it might be in the unveiling of some new structure, or in the clearing of some mental cloud; or it might be as in a flash in which, as with inspiration, intellectual darkness becomes light.

Now in these things we may discern that, in the character of Hunter, the massiveness and grandeur of design of which I have spoken, and which were matched with a strong will, and a power nearly equal to them, were combined with a singular scientific prudence; and yet he was very fond of scientific enterprise and speculation. The characters may seem incongruous; but they are met with in the



most attractive minds, and they may be studied in Darwin and in some others, the best of our own times. His enterprise was shown in his devotion to experiment. If there were one kind of truths which he preferred before all others, they were those which he could thus obtain. He seems to have had a keen delight in that condition of the scientific mind in which it stands waiting for the solution of a problem which itself has made—standing always, as it were, in the presence of the about-to-be-known. And, as he was always projecting his mind beyond his knowledge, thinking out beyond the course of facts which he could discern in the normal course of nature, so he made every question that he could be the subject of ingenious experiment. He used to say to those about him who seemed too fond of thinking about matters that might be known, "Do not think; try; be patient; be accurate"; and yet, when he came beyond the reach of observation or experiment, there were few who were so bold in thinking as Hunter was; and I believe that his long experience in the art of experiment justified him in this, by training and educating his mind for yet further enterprises. For a well-devised experiment, such as many of Hunter's were, deserves the name of project; in that the mind, throwing itself forward in advance of facts already ascertained, discerns that the truth must be in one of two or a few more probabilities, and then devises means for deciding where it is; and a mind which has been long trained and practised in this art, acquires sometimes the power of thinking out very far beyond the range of facts, and of discerning far off, and even sometimes from a standpoint of partial error, some great truth. Hunter seems to have possessed the power, in a very remarkable degree, of sometimes thus thinking the truth. For example; he thus thought the truth that the blood is alive, and that not in any supernatural or transcendent sense, as others before him had thought, but in the same sense as are all other parts of the same living body. This was a true discovery, of which he saw all the bearings, and it led him to the first steps in a true pathology of the blood. Yet, if we look at the facts on which he based it, we must believe now that they were very insufficient, and we must assign the discovery mainly to the force of a strong clear mind, looking out far beyond its facts.

So in another instance; in the observation which I have just quoted on the development of the bird within the egg, he discerned that marvellous law in development, that every higher creature in its passage from its embryo to its perfect state passes through a series of changes, in each of which it imitates the form of some order lower than itself. And this was no mere lucky guess just made and then left. Hunter saw the fact in all its force, and it became to him a fruitful doctrine.

And I find at least one instance of his projecting his mind far into a doctrine of evolution. When writing on hermaphroditism, which he studied very carefully, he says in a footnote, "Query; Is there ever, in the genera of animals that are natural hermaphrodites, a separation of the two parts forming distinct sexes? If so, that may account for the distinction of sexes ever having happened."

It is not strange that one who could thus sometimes think out rightly far beyond the truth, should strive for a decision on that great question in physiology which, from the earliest days of scientific inquiry, has never ceased to be discussed—the question, What is life? Hunter strove for a decision on it, and his opinion had great influence upon his own pursuits, and much more, for a time, on his reputation and his influence in science. He spoke of life as a vital principle, as something separate from organisation; and, although he spoke also of a *materia vite diffusa* and a *materia vite conservata* in the brain, yet he did not regard it as material, or any property of matter. I believe that he meant by vital principle that which Joseph Henry Green, the most eloquent and philosophical of his interpreters, held: "a power anterior in the order of thought to the organisation which it animates, maintains, and repairs; a power regenerative and constructive." But Hunter could not clearly express this, and I believe he could not clearly think it; for he wrote upon this and several allied subjects very obscurely—so obscurely, that we cannot but believe that his own mind was in uncertainty. And this, I think, we must assign to one of the few intellectual defects we can discern in him, namely, a singular inequality in the powers of language and of thought. In every mind, thoughts and words are so closely interwoven, that each shares always the qualities of the other. Thoughts and words are like mutual reflectors; if either of them distort an object placed between them, the other cannot but receive the distorted image and reflect it. Or, each is alternately master and servant. Thoughts use words for their expression, and then the words take part in directing the next thoughts; if either be erroneous or defective, the other suffers with it. Now, Hunter was a great master of facts; and in plain and customary English he could, with great power, collect, compare, arrange, and construct whatever might be made of them; but he

was not a master of words. His strong large mind does not show in any instance that subtlety which, whether in thinking or in writing, can use accurately many words of scarcely different meanings—a power which is essential to the discussion of abstract ideas, and the want of which not only hinders the expression of thought, but hinders even the process of thinking.

This defect in Hunter was, I believe, a natural one. Most of the defects that might be assigned to imperfect education he corrected in his later years; but to the last he was, whether in thinking or in writing, in language most incomplete; and his mind, strong as it may have been by nature for thinking, was hindered and baffled by its weak associate. Nevertheless, however incomplete his idea of the vital principle may have been, he used it very widely as a hypothesis. It guided him continually to large ranges of study: it enabled him to throw off the shackles and the erroneous chemical and physical doctrines of life which had prevailed in his time; and it served as a single band to hold together all the subjects of his study. Moreover, some of his pupils made it the groundwork of his reputation; and, although it was neither a new doctrine, nor one essential to his system, yet it became the chief dogma of his school, and it served at least the useful purpose that, in a time of need, it kept alive the influence and reputation of his great name.

But what I think most to be observed in respect to the character of Hunter on this point, is the very careful estimate he made of the relative values of hypotheses and facts. He bore well that severest test of the scientific mind, the test of its power to resist subjection to its own hypotheses. Feeble men worship the works of their own minds; they fall down before their own idols made of words; they have more confidence in what they call their principles than they have in plain facts. It was not so with Hunter. He may have admired the hypothesis of a vital principle, and he used it very wisely, but he admired much more the accumulation of facts and the plainest inductions from them. He gathered them as with avarice, he stored them up in memory and in manuscript, and he read in them as he best could the laws of life. This was the principal, the best, and abiding part of his work; and hence comes his great influence in science. But in the mind of Hunter, thus careful in observing and able in thinking, we have an epitome of the whole course and temper of biology. It is eminently a science of observation; yet none who love to think can study the phenomena of life without asking themselves, What is life? or even beyond this, Whence is it derived? An imperious instinct commands us to look beyond or beneath the phenomena. We cannot believe it to be impossible that we should reach far beyond the evidence of the senses; and when beyond phenomena we discern, as we believe, the operation of forces measurable and correlated, still we cannot stay here; for the knowledge how forces act tells us nothing of their origin; and this, especially in respect of life and mind, is what we most earnestly desire to know—What is life, and whence is it derived? Is it a power anterior to the organisation? Is it a power originative and constructive?

Now, I cannot doubt that in the doctrine of the correlation of physical and vital forces we are nearer to the truth than we were in the Hunterian doctrine, which held that life is something altogether alien and different from other forms or methods of activity; but holding the correlation and mutual conversion of the forces does not determine the precedence of either the one or the other. If the vital and physical forces are mutually convertible, either may have preceded the other; the vital force may have preceded the physical, although life appeared late upon this planet, in any of the phenomena in which we can now study it; and even if we were to hold the possible conversion of physical or vital into mental force, into consciousness and will (though against this what I believe to be my consciousness and will are utterly repugnant), yet this would not prove the precedence of the physical force. The opposite conversion can be as well or as ill traced. Mental forces may have preceded physical; mind may have existed before any of the properties of matter; and thus, even in the view of science, the first essence may have been a Being willing and knowing, and the prime source of all the forces whose operations we now trace. I believe there is not anything in science to disprove such a belief as this; but I doubt whether it be in the power of science yet to determine an order of precedence amongst the forces. I cannot imagine anything before a natural force except a supernatural will; and a belief of this kind is held by untutored minds as if it were instinctive knowledge. For man seems naturally prone to believe that, beyond all that there is in the world, there must be a mind, or minds, in the likeness in which his own is created, and with which he is in some kind of personal relation. But science cannot yet reach to the proof of these things; and, until it can reach to proof, science cannot rest and must not rest; but the firm and self-guiding belief that a supernatural Will and Knowledge was, and is, and will be, rests on the whole and manifold evidences of



the Christian faith. These may seem often opposed to what we believe to be true in science. Then let us wait. Time—or, if not time, eternity—will prove that science and the Christian theology are but two sides of truth, and that both sides are as yet only known in part.

I pass from this, which may seem a too far digression, that I may speak of one character of Hunter's mind, which seems to have remained unchanged even from the days of his idleness on the Scotch farm. I mean the unconsciousness of his own mental power. He could be provoked, in his later life, into saying that he knew better than some of those that spoke ill of him; but he said he felt a mere pigmy in the presence of the work he had to do; and even the sensitiveness and vexation with which he sometimes speaks of rivals is enough to prove that he doubted whether he did work good and great enough for permanent renown. He stands, as he stands all other tests, so this of mental greatness, well—the test of self-unconsciousness; and it is happy for science he did so; for, if Hunter had thought of himself as we think of him—wherein, we must admit, he would only have thought justly—he must have lost his time, being self-enamoured, in seeking work that would be adequate to the grandeur of his mind, or putting his mind in attitudes that might command just homage. And, according to his own judgment, he would have failed; for, as he wrote with more than usual disparity of words and wisdom, "There never was a man that wanted to be a great man ever was a great man".

And now, what were some of his achievements? What was his influence in science? We have seen that his work was various; so were its consequences. Hunter worked at life in both health and disease; and in his mind they were manifestations of the same power and design, although sometimes in diseases overborne; but he held them to be parts of one science to be studied alike. Yet he had too much common sense not to see the broad-practical differences between health and disease, and he studied them separately and he taught them separately; and, in estimating his influence on science, we must make a similar separation. His greatest work was on Physiology. Holding, under that name, the science of the whole normal life of all things that live and have lived, he grasped it with the widest mental grasp. He saw and he taught the way to the whole science of life; and this he did as of his own force. He neither followed other men, nor merely drew a plan on which other men would work; but, with his own mind he planned, and with his own hand he wrought, a larger and truer work in the whole science of life than any man before him. And in this work no man succeeded him. His lesser work, great as it was—greater, I believe, than that of any man before or since—was in Pathology; and the influence of this lesser work was greater than that of the greatest of the achievements in physiology; for from among his pupils there went out all the great surgeons of the time next after him—Abernethy, Astley Cooper, Cline, Home, and Blizard. These all boasted of being his pupils; they all taught after his method, and they made the method a tradition in the schools. Hunter was thus, in the fullest sense, the founder of a school of surgery. But from amongst his pupils there went out not one who devoted himself to physiology—not one who worked at it as he did. Although he was an active and influential member of the Royal Society, intimate with all the leading men of science of his time, the founder of a scientific society of his own, yet, in his study of comparative anatomy and physiology, not one of the younger men of science followed him. In all these deeper studies of life, Hunter had not one disciple.

Now, how may we explain so marked a contrast as this? I believe by the different levels of men's minds at that time in the two subjects. There was not, at the time, in this country either capacity or desire for any of the deeper studies of life. There was, as we say, no taste for them; for no one but Hunter had at that time tasted intellectual happiness in the study of them. It was not so in pathology. The practitioners of medicine and surgery were willing and able to receive his teaching; and although, during his life time, it never excited enthusiasm, yet the best of those who heard it could not but see that it was the right way to truth. In comparative anatomy and physiology, Hunter was in advance of his time: not far in advance, for Cuvier and Meckel quickly followed; and then these sciences became, as they have remained ever since, pursuits of the largest intellects. It may well be that, if Hunter had been more apt to teach, he might have made more disciples. Some men, by mere personal influence, can make disciples. Hunter had none of the power by which these men make their schools. He had no attractions easily to be felt; he was too busy and occupied to exercise influence over men. His lectures are said to have been dull and tedious, and ill delivered; and there was really nothing but the power and example of his work that could move men to follow him. These were enough in medicine and in surgery; they were not enough in the deeper sciences of life; and so it came that, when Hunter died poor and with his work half finished, there was not one who could

complete his unfinished essays or write the catalogue of his different collections; there was not one who knew the extent or depth of the work he had done. His works had been like the waves in advance of the on-coming tide. A few of those that watched them, thought them beautiful and grand; but they broke on the shore in what seemed like only trouble and confusion, and the tide passed over them and hid the treasures they had borne.

It was not till Owen came, that the treasures were recovered, and, by that time, others had done the work of Hunter, and had reaped the just reward. But Owen showed—partly in his catalogues of the museum, and much more in his two volumes of *Hunter's Essays and Researches*—how great and various Hunter's work had been; how great beyond that which was shown in the essays which he published. As Mr. Flower has written of him: "Hunter had, before the time of Cuvier and Meckel, collected materials for a work which needed but the finishing touches to have made it one of the greatest, most durable, and valuable contributions ever made by one man to the advancement of the science of Comparative Anatomy."

It may seem useless to dwell on these things, and revive the vain regret that not Hunter alone, but England, lost so great renown. But it is not useless to indicate the grandeur of his character by which our English—I mean, of course, our national—school of Surgery was founded; for it is only by imitation of the founder that the worth and merit of the school can be maintained. Hunter's chief renown in surgery is told by saying that he was the founder of scientific surgery; and so he was; for he first studied and he first taught in the light and with the methods of a large physiology those very processes of disease and repair with which the practice of surgery is concerned. There were excellent surgeons before him and in his time—sagacious, observant, practical men—by whom surgery was being rapidly advanced in both utility and precision. Not to speak of the members of the French Academy, there were, in this country alone, three at least—Cheselden, Percival Pott, and William Sharpe. Of the first two, Hunter was for a time a pupil; and it is great praise of him as a practical surgeon to say that he was worthy to be their successor; but before the time of Hunter surgery was the surgery of experience alone. In so far as it was a science, it stood by itself. It had hardly any connection even with medical science; and with the sciences beyond medicine it had no relation whatever. Between surgery and physiology there was a broad distance. No one strong mind had ever held them both, and seen that they were parts of one science, each to be studied by the other's light, each to be the test of the other's truth. This was Hunter's great work. He brought the scientific method into the study of practical surgery; he welded scientific knowledge with the lessons of experience. In all this, Hunter was not only a great thinker, but he was a great worker. As I have said of his work in physiology, so I may say of this, that with his own mind he planned and with his own hands he did the work, and he left behind him facts and general principles in surgery which it is literally impossible to count.

But, while I thus speak of Hunter's scientific surgery, I desire to correct an error into which, I think, most of his eulogists have fallen, when they have implied that the whole of Hunter's practice was founded upon his scientific knowledge, and that no practice can be sound which is not derived either from pathology or physiology, or at least consistent with what we believe to be truth in them. Now, as for Hunter—and herein again, I think, he may be our model—he was very cautious in making deductions. No one seems to have known better than he did the danger of reasoning from physiology into practical surgery. As he says, "the man who judges from general principles only shows ignorance. Few things are so simple as to come wholly within a general principle. We should never reason on general principles only, much less practise upon them, when we are, or can be, masters of all the facts; but, when we have nothing else but the general principle, then we must take it for our guide." It is in obedience to the wisdom of his principle that, in all his works of surgical practice, it is difficult to find out that he was a great physiologist. In his work on *Venerical Disease* I believe there is not one sentence that would clearly tell it; and, even in his great and chiefly physiological work on the Blood and Inflammation, he very seldom draws any deductions from physiology, and even the deductions from pathology to surgical practice are very few. We can see in every one of his works the same scientific mind, the same earnest desire for the collection and accumulation of facts, the same plain reading out of them, the same swiftness and accuracy in generalising; but the great effort of all is to be "master of all the facts", and then from them to draw the plainest conclusions.

A striking instance of this is in Hunter's great achievement in surgery, the invention of the operation for the cure of aneurism by tying the artery far above the seat of disease. This was no laborious



result of physiological induction; it was a plain result of facts collected in the wards and in the dead-house. I shall not discuss Hunter's claim to the discovery of this operation, it is as clear as the discovery of any fact of science. But, if there must be arbitration between Anel and Desault on the one side, and Hunter on the other, or between France and England (for it has been almost made a national question), let an Italian (Assalini) be the arbitrator; for he had the singularly good fortune to see three decisive operations. In 1781, he saw Spezzani at Padua tie the femoral artery previously to an amputation of the thigh for popliteal aneurism; in June 1785, he saw Desault in Paris tie the popliteal artery for popliteal aneurism, which he did not, according to the then prevalent practice, lay open; and, in December 1785, he saw Hunter at St. George's Hospital tie the femoral artery in the sheath of the triceps muscle for the cure of the same disease—and this operation, he says, "excited the greatest wonder and awakened the attention of all the surgeons of Europe". It was indeed a splendid achievement, and its utility is not half told by counting the thousands of lives which it has been the means of saving; for its yet greater utility is that it still abides as a great testimony of the value of the scientific mind in the practice of surgery.

Such was Hunter's great work in surgery, and this it is which still abides; for, since the time of Hunter, science has never yet been absent in the teaching of our schools. Since his time, the teaching of practical surgery has never been divorced from the study of biology. They have been cultivated in various degrees in various schools by different men, but both have held their ground, and both will still increase and grow. Yes; both will increase, though the great master of art, the greatest practical surgeon of our time, is gone. Men will no longer watch those eyes that were so keen, nor try to imitate those hands that were so strong and yet so sensitive, so swift and light; nor wonder at that keen and clear perception, the prompt invention, the perfect calmness in the greatest difficulties. All these are gone, and with them are gone those things that endeared him to us still more—the warm heart, the friendliness, the generous rivalry, and the social grace. These are gone; but Fergusson's lessons will still remain amongst us; and among them will be this, that every man, according to his ability, should have both art and science, should work with both as with both hands, as if with one mind and one design. It was thus that Hunter wrought in surgery.

These are some of the works that Hunter did for surgery; and now mark what he did for surgeons. Before his time, they held inferior rank in the profession. There were some among them, men of great personal ability, who gained high rank, as Wiseman, Cheselden, Hawkins, and Percival Pott; but for the most part they were subordinate to the physicians, and very justly so, for the physicians were not only better learned in their own proper calling, but were men of much higher culture—educated gentlemen and the associates of gentlemen. From Hunter's time, a marked change may be seen. Physicians worthily retained their rank, as they do now, and surgeons rose to it; and surgery, in the lessons of Hunter, repaid medicine for the teachings of a century. After his time, surgeons came to be the chief anatomists, and took a fair share in the teaching of all the schools; and they gained entrance into the ranks of the most cultivated class. Yes, more than any other man, Hunter helped to make us gentlemen; and the lesson of this fact is very striking, for it was not by any personal qualities, it was not by wealth or social skill, that he did this. There are but few records left of what manner of man he was; but they tell that he was a rough and simple-mannered man, abrupt and plain of speech; warm-hearted, and sometimes rashly generous; emotional and very impetuous, quickly moved to tears of sympathy, as quickly ablaze with anger and fierce words; never appearing to those about him as if he were a man of large mental power; never personally attractive; too busy to attempt to influence those about him; and so he had but few friends, and he obtained the personal regard of very few, and no man paid him the homage of mimicry. The whole of the influence which he exercised on surgery and surgeons was the influence of the scientific mind. What follows? Surely that, if we are to maintain the rank of gentlemen, if we are to hold this highest prize of our profession, it must be by the highest scientific culture to which we can attain; and to this we are bound, not for our own advancement alone, but by the plainest and strongest motives of our duty.

These are some of the grounds on which, beyond all question, Hunter's memory deserves the honour that we pay to it to-day. There are many more than these; but, in want of time, I have omitted some, and, in want of just appreciation of him, I have omitted more. Whatever one might tell of his honour to-day, his claim to honour is not yet closed; for the influence of men like Hunter extends far beyond the time and space of their own conscious activity. Their true thoughts live after them; they not only endure and remain, but, in the continuity of mental

life, they really live; they pass on from one generation to another, and in each succeeding generation they grow and are developed, and come nearer to perfection. Thus the true thoughts of Hunter still live in us, and, when we do honour to his memory, we do it not as to that which is past, but to a power still abiding with us and doing good. His true thoughts still live in us, and they will live beyond us, never ceasing to urge and help men onwards in the pursuit of truth; for in the world of mind, he that is mortal may produce that which may have immortality.

## ON THE RESULTS OF RECENT RESEARCHES IN THE TREATMENT OF PHTHISIS.\*

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(Continued from p. 186 of last number.)

b. Next, let me call your attention to the use of antiseptic agents in the treatment of phthisis, and especially to the use of antiseptic inhalations.

In the first place, let us inquire if the results of modern pathological investigations give us any sound reason for the belief that antiseptic vapours can exercise a remedial influence in tubercular consumption.

Let me quote Rindfleisch's observations on "How Scrofulous Persons become Tuberculous" (Ziemssen, *Cyclopadia of Medicine*, vol. v, p. 639). "When we consider that scrofulous persons are especially predisposed to tuberculosis; that tuberculosis hardly ever occurs except in scrofulous persons; that tuberculous phthisis is only a combination of scrofulous inflammation and tubercle; and that in scrofulous persons an inflammation brings with it the risk of tuberculosis, we can hardly fail to see that, in certain men, as in certain animals, inflammation runs a peculiar course. *The cheesy infiltrations and suppurations of mucous membranes constitute a poison which, when absorbed, produces tubercles.* This constitutes the real relationship between scrofula and tuberculosis. The tubercular poison in most cases is thus manufactured by the patient himself.

"Pulmonary phthisis is almost always a general disease. There is first scrofula, and then a cachexia, from the absorption of scrofulous products."

Rindfleisch considers he has demonstrated that, in the early stage of pulmonary phthisis, there is a combination of two conditions, a circumscribed catarrh of the small bronchi at the apex, and an eruption of miliary tubercles in the acini belonging to these bronchi. "I have never seen", he says, "a circumscribed catarrh of the small bronchi without an initial tubercle granulum, nor an initial tubercle granulum without some bronchial catarrh. I believe, indeed, that the catarrh is the earlier, the tubercle the later, process". "I believe that, in the catarrhal secretions of a scrofulous person is contained the tubercular poison which becomes inoculated in the edges and corners of the narrowest portions of the bronchi", and then gives rise to the tubercle granulum.

I quote this opinion of Rindfleisch because it seems to me to afford a pathological basis, and to give a pathological indication for certain therapeutic processes which have been again and again advocated, but which have never, at any time, thoroughly established themselves in medical practice.

If, as Rindfleisch asserts, the dissemination of tubercle through the lung depends on the infective quality of the secretion of the bronchial mucous membrane when a bronchial catarrh arises in a scrofulous person, then the very obvious remedy is to convey some vapour into the lung which may have the property of disinfecting this infective secretion. It may be objected that there is no such vapour; but such an objection is entirely without foundation, because it would require for its proof that every vaporisable substance had been repeatedly tried and had invariably failed.

There is another possible mode, indicated by modern pathology, in which antiseptic remedies might act. We might be able to add to the blood some agent capable of destroying the infective property of those substances which are absorbed from the foci of scrofulous inflammations, and which we may term the *poison of tubercle*. Could we administer such an agent during or immediately before the possible dissemination of such substances, we should have a remedy for tuberculous phthisis. Such, I take it, are some of the suggestions which modern pathology and research yield towards a rational treatment of phthisis.

\* Read before the Medical Section at the Annual Meeting of the British Medical Association in Sheffield.



But sound practical medicine must rest on an experimental as well as a theoretical basis; and we must, therefore, inquire what results have followed the actual use of antiseptic remedies. Now, I am by no means sure that we shall not discover that many of our remedies for phthisis act antiseptically, which are thought by many to act otherwise. May not the sulphurous mineral waters, such as those at Eaux Bonnes, act in this way? It must, I imagine, often have struck many of us that the theory which explains the action of these waters by the assumption that they develop affections—"rheumatic, gouty, or herpetic"—which "counterbalance tuberculosis", is almost as clumsy and unsound as the "*similia similibus curantur*" of the homeopaths. It seems much more likely that they act by conveying to the blood and the secretions substances which destroy the poisonous and infective properties of the products of scrofulous inflammation; and that these substances, in their turn, set up other forms of irritation of a comparatively harmless kind.

Again, may not much of the beneficial influence of mountain air be due to its antiseptic properties? I shall attempt to answer this question when I come to speak of the influence of mountain climates on pulmonary consumption. But let us consider now, more especially, the use of medicated antiseptic inhalations. Scattered observations as to their value exist in abundance; but we have not as yet, in this country at least, any trustworthy systematic account of their patient, extended, and persevering trial. Much in detail has yet to be worked out with regard to the best modes of their application, the best substances to select, and the kind of cases most suitable to their administration. I have long been considering this important question; and I have, I hope, nearly brought to completion a method of administering antiseptic and other vapours which will be generally acceptable.

But let us gather together a few of these scattered observations to which I have alluded. Dr. Copland mentions the fact that "a young man, who had repeatedly come under his observation in an advanced stage of phthisis, completely recovered his health after he had been for a considerable period employed in the manufacture of *creasote*".

Lemaire's observations on the inhalation of carbolic acid may be briefly summarised as follows. It must be remembered that he gave it also internally in aqueous solution. He found, he says, very remarkable effects follow its use. There was diminution of cough after twenty-four hours, and, in some cases, almost a complete disappearance after a few days. The expectoration was diminished or almost suppressed, and, if the sputa were offensive, their foetor disappeared. In many, the physical condition of the respiratory organs was ameliorated. Two were cured; in others, there was a subsidence or disappearance of *râles*, and parts became pervious to air which had previously been impervious. In cases in the second stage, he had noticed increase of strength, return of appetite and sleep, increased freedom of breathing, and general exhilaration. The amendment, however, did not persist in all cases.

Dr. Sansom also offers his testimony as to the "real value" of the "dry inhalation of carbolicised air" in phthisis. This excellent observer has placed on record many cases in which the internal administration of the sulpho-carbolates appeared to be of great service.

The inhalation of balsamic vapours—frankincense, turpentine, storax, etc.—in phthisis, is of very ancient date, and its value was, from time to time, strongly insisted upon by the older physicians. Again and again has the dilute vapour of tar been advocated as of much use in pulmonary consumption; and so cautious a writer as Dr. Copland observes, at the end of his *Historical Sketch of the Treatment of Pulmonary Consumption*: "The inhalation of the fumes of tar or of *creasote*, or of the terebinthines, very weakly diffused in the atmosphere breathed by the patient, is in some cases beneficial in impeding the advance of tubercles, or the formation of cavities, and in healing the surfaces of cavities which have been formed."

I cannot myself doubt the value of antiseptic inhalations, even if they only have the effect of temporarily cleaning, as it were, the pulmonary surface. It is a process somewhat analogous to that of washing away the decomposing discharges of a foul superficial ulcer.

Sir William Gull has said that he can smell syphilis. I think I can smell phthisis. There is a peculiar nauseating odour in the breath of many phthisical patients, even before the development of marked physical signs. Of course, if antiseptic inhalations are to be of use, they must be frequently employed, and means must be adopted which will insure the antiseptic vapour reaching the whole of the diseased portion of the pulmonary tissues. The vapour must be evenly diffused through the atmosphere the patient breathes. I must now leave this part of my subject; and I fear I have left myself but little time to deal with the two remaining points which I have selected for consideration.

c. I wish to say but little on the subject of the remedial influence of

rest—local rest for the portion of lung diseased in cases of phthisis. I agree with those who, like my colleague Dr. Roberts, have advocated the practice of limiting the respiratory movements in certain forms of acute inflammation within the chest—in cases of pneumonia and pleuritis; but I wholly doubt that enforced inactivity of the respiratory function is advantageous in phthisis generally. When complicated with an acute attack of pneumonia or pleurisy, limitation of the respiratory movements of the chest-wall may be of temporary advantage; but I am disposed to think that those who advocate the establishment of a sort of pulmonary anæmia, as a means of checking the advance of tubercular phthisis, are resting on a false analogy and an erroneous pathology. I have heard of a "lung-splint"! and I doubt not there are instrument-makers who would construct a splint for the liver, if we would let them; but, in either case, I think the instrument-maker alone would be benefited. So far from enforced "rest" being curative in phthisis, the very opposite plan of treatment has been proved to be very beneficial. By the action of mountain air, a sort of lung "gymnastic" is excited. There is greatly increased activity of the respiratory functions; and, in climates where such a mode of life is possible, we hear of living in the open air as the best cure as well as preventive of phthisis.

Let me again quote that eminent pathologist Rindfleisch (Ziemssen, vol. v). He is explaining why it is that the tubercular process usually begins in the apices of the lungs. "We can offer some explanation of this fact, if we can show that the catarrhal secretions of scrofulous persons are less easily removed from the bronchi of the apices; for, if the secretion does thus remain in these bronchi, it will have time to inoculate the surrounding tissues. Two factors have the principal share in influencing the elimination of the bronchial secretions—the respiratory movements of the lungs and the tenacity of the secretion itself. *The more freely the respiratory movements are made, and the more a sufficient hyperæmia is present to mix the thick cellular secretion with serum, so much the less likely will the secretion be to remain in such a part of the lung.*" "In the ordinary upright position of the body, the weight of the dependent arms is exerted on the upper part of the chest, and must restrict the respiratory movements there. This fact corresponds with the almost exclusive occurrence of phthisis in the human race." "In these same persons, it is probable that the secretions at the apices of the lungs are inspissated. According to Virchow, the thickness of a catarrhal secretion, especially the bronchi, is in inverse relation to the amount of blood in the part. It has already been shown that poverty of blood is one of the most important factors of scrofula. By poverty of blood, we mean that there is not a sufficient amount of blood properly to fill the vessels. If the amount of blood in the lungs is insufficient, in the vessels with rigid walls the blood will gravitate to the lower part of the vessels alone; if the walls are elastic, the blood will be found principally in the lower vessels. From this it follows that, in such lungs, most of the blood will be in the lower lobes and least in the apices."

Healing processes in the lungs will, I believe, be best promoted by such measures as favour rather than retard the circulation through the lungs, and which promote healthy oxidation, while they provide as much as possible for the discharge or disinfection of the infected secretions formed therein. With these few remarks, I must for the present leave this part of my subject, and pass on to consider very briefly the influence of mountain-climates in the treatment of phthisis.

d. There can no longer, I conceive, be any doubt of the fact that certain cases of consumption, arising in the plains, become arrested on migrating to the mountains. I need not go over again the evidence which numerous trustworthy observers have brought before the profession as to this fact. I have myself had somewhat unusual opportunities of judging of the influence of mountain climates, especially in the Engadine. There are, however, two interesting questions in connection with this subject which we may briefly consider now. The first is: What is the type of case which is best suited for the trial of the mountain air cure? The second is: What is the special mode of action of mountain climates in these cases? The cases that are benefited by removal to elevated districts are, as we might have predicted, precisely those which are most amenable to other plans of treatment. Cases of very advanced disease, of profound cachexia, cases with active febrile symptoms, are unsuited for such migration. All who have seen much of phthisis know well enough that a great number of cases never do so well as in the quiet and comfort of home. But a restlessness seizes on many consumptive patients, even in advanced stages of the disease, and they will not remain at home. For such cases, a southern watering-place is better suited than a mountain valley. The rarefied air of elevated regions is quite unsuited to cases in which large tracts of lung-tissue are disorganised or hopelessly disabled. With only a small amount of available breathing-space, and only very thin air to breathe,



the difficulty of breathing becomes intense, and there is always danger that such patients may die practically suffocated. I have myself seen one such death. But in cases where the disease is limited to one apex, or where the disease is chiefly catarrhal, and where there is no very intense cachexia or acute febrile symptoms, and the patient's muscular strength is good; or where the disease, though more advanced, is stationary and the general debility is not great; in such cases, removal to a mountain climate is likely to be of much service.\*

The next question is, How does mountain-air act in these cases? It must, in the first place, be borne in mind that in these sparsely inhabited districts we find precisely the opposite social conditions to those under which pulmonary consumption becomes developed. The air is, as I have already said, antiseptic; it is clear, bright, and pure; and there is an almost entire absence of those organic particles which play such an important part in promoting putrefaction. The stimulating and tonic properties of the air rouse the patient to increased muscular activity and promote general nutritive changes. The temperature of the air, though lower, is more equable in the mountains than in the plains. The annual and daily oscillations of temperature are less. The rarefaction of the air necessitates greater activity of the respiratory organs; the air-cells dilate more thoroughly, and the walls of the chest become expanded; the inspirations are more profound, to compensate for the thinness of the inspired air. It follows that there is less stagnation of air in the lungs, and diffusion of the gases set free at the pulmonary surface is favoured.

These are probably but a few of the conditions which contribute to the efficacy of mountain-climates, and I regret to be compelled to pass over many other interesting explanations that have been offered as to the action of mountain-air; and, in bringing this paper to a close, I beg to say I am very conscious of its fragmentary character. But I thought the modern treatment of phthisis an important subject for the consideration of this Association, and that I might, at any rate, be instrumental in inducing others to take up some of the points to which I have alluded and work them out to a more thorough issue; for I believe, in medicine as in morals, there is no better rule than the scriptural one: "Prove all things; hold fast that which is good."

## ON LIFE-ASSURANCE AND SUICIDE.

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IN looking over the rules of a few insurance societies, I could not avoid observing the want of unanimity which prevailed with respect to the manner in which they deal with suicides whose lives have been insured. This induced me to take up the subject, and obtain all the information I could from the different offices in England and Scotland. My information is gained from eighty-one out of ninety-two offices, and from the actuaries or secretaries of several of these I have received valuable assistance and useful facts. The ways are so various in which the different companies treat this subject, that it is not easy to classify them briefly. The general rule is, that a life-policy is forfeited by suicide, whether the assured has been of unsound mind or not; and the following rule occurs so frequently, that it may be quoted to represent a very large proportion, which I cannot accurately ascertain, of all the insurance companies.

"Assurances in this company made by persons on their own lives who shall die by their own act, whether sane or insane, or by duelling, or by the hands of justice, shall become void so far as respects such persons, but shall remain in force so far as any other person or persons shall then have acquired a *bonâ fide* interest therein by assignment or by legal or equitable lien; the extent of such interest to be proved to the satisfaction of the directors."

Some offices act literally upon this rule, whilst others, retaining the

rule, modify it according to individual cases, so that their practice is more liberal than the rule itself warrants. Some of the companies return a portion or the whole of the premiums paid, others pay part or the whole of the sum assured, the directors judging according to circumstances; some refuse to pay anything, if the suicide be shown to be sane; others, again, make no difference between the sane and the insane. Occasionally, the directors weigh the evidence as to *felo de se* and judge accordingly. A few are more liberal and pay in full, as though the assured had died a natural death; and a considerable proportion pay the policy, if a certain time have elapsed after the insurance has been effected. The following table shows the numbers, as far as I can obtain them accurately.

5 always pay without any conditions, and these are the Mutual, New York, Northern, Positive, and Standard.  
2 pay after 6 months' insurance.  
8 " 12 or 13 months' insurance.  
4 " 3 years' insurance.  
1 " 4 years' "  
12 " 5 years' "  
1 " 7 years' "  
48 pay according to the discretion of the directors.

81 Total.

In the last class, the payments are more or less liberal, and the directors do that which seems right to them, and act according to circumstances. There is much uncertainty in this practice, for there appears to be no distinct principle involved which is allowed to guide them in their mode of dealing with the insured. In those companies in which the policy becomes a positive one after the lapse of a certain time, if the assured commit suicide before that time, the directors are willing, in some instances, to take the case into consideration and to return part or the whole of the premiums, or make some allowance. Very few of them, however, look upon the matter as a question of disease, or consider that there is great difficulty in ascertaining that the person who has committed suicide is really of sound mind. Coroners' inquests are not to be relied upon for such a purpose, as it is now comparatively rare to return the verdict as one of *felo de se*. The expression, "Died by their own hands", has been suggested to form part of the rule on this subject; but this term is objectionable, as it would include accidental deaths, including a recent case where an outward application was taken by mistake for medicine. There is, however, a decided tendency amongst insurance offices to regard the act of suicide as the result of disease. Without absolutely saying that, in every case, it ought to be so regarded, it is very certain that there are few exceptions; for, even where the act is the result of a sudden reverse of fortune or domestic calamity, the shock to the nervous system is so great as to prevent the individual from recovering from the effects and thus bearing his misfortunes. Such cases as these are as much to be pitied as any other, and it is sad to see that assurance companies act on a principle which increases the distress of a family, instead of being the means of producing some measure of comfort. The result of my inquiries has fully satisfied me that insurance societies have made too great a bugbear of suicide, and have probably rather injured their business than otherwise by making such penal rules as are generally adopted, although their practice has usually been more lenient. The suicide has also been associated with persons who have been hanged by process of law: a still more objectionable circumstance, thus associating persons of unfortunate and diseased minds with the worst criminals. As there are some honourable and liberal exceptions to these views, it is only fair to give the names of those offices which have adopted a humane system, and one more in accordance with medical science; and, therefore, I have given above the names of those companies which now pay the policies without any conditions. The New York office states that "suicide, being considered an evidence of insanity, does not cause a forfeiture of policies". The Mutual has some valuable remarks in the report of the directors, which afford the best evidence to be obtained that the dread of suicide by insurance societies has been caused by themselves. From the prospectus of the Mutual, I quote the following passage.

"Suicides are abhorrent to the English mind, and in this country at least it may be safely held that suicide is always the result of a diseased mind. The new rule, freeing policies from the risk of being vitiated by suicide, came into force six years ago; the experience of the Society as to suicide over five periods of six years each is as follows.

1844-1849 ...	Percentage of suicides to deaths ...	1.7
1850-1855 ...	" "	1.0
1856-1861 ...	" "	2.3
1862-1867 ...	" "	1.9
1868-1873 ...	" "	0.9

\* I have lately received a letter from a patient who is now (November) at Davos, in the Grisons, intending to pass the winter there. He writes: "I have been feeling improving, and, especially, have felt better since the cold has been a week or two ago. I feel my nerves, or what I am going to be subjected and strengthened. I find the cold much less trying than in the Engadine. I have not had any swelling of the feet or ankles since coming here, and I eat and sleep very well, and do not take more exercise than before." I mention this case, because it is the second I have had under my own care in which phthisical disease had already reached an advanced stage before trial was made of change to a high mountain valley. In this patient, the whole of the upper lobe of one lung is the seat of nodulation, without cavities at the apex. In this, as in the other case I allude to, the first noticeable change in the physical signs was a rapid disappearance of the moist rales, the area of creases remaining unchanged. Some cold, windy weather in the Engadine in August, soon after his arrival, tried him greatly, and his circulation became seriously embarrassed, as was evidenced by lividity of the surface and swelling of the feet and ankles. These symptoms, serious as they were, and showing how much lung-tissue was disabled, have now long since disappeared.



"These figures are somewhat remarkable, and, although it would be absurd to suppose that the new rule prevented suicide, yet it is clear that it has not stimulated it as a practice. The experience of the Mutual thus shows that the risk of an Englishman taking away his own life, in order that his family may reap the benefit of his assurance money, has been hitherto overestimated, and that it is, in fact, so small as to be inappreciable."

On the other side, one manager writes to me and says that he has "long had an impression that the usual condition of forfeiture may in some cases operate as a protection to the assured, presenting a consideration that may influence a very morbid mind to abstain from an act which it is otherwise disposed to commit". This opinion is not supported by any facts, but it is not at all unreasonable. Of the two companies which act upon the liberal principle of only waiting six months before declaring the policy positive, or nearly so, the Scottish Provident Institution has some important observations in its report, which I shall quote. It says: "According to a strict view, suicide should be a cause of forfeiture only where it has been committed with the intention of defrauding the assurers. But the extreme difficulty of obtaining proof that such was the object has rendered it necessary to adopt a broader rule, which has varied in the regulations of different assurance societies. In some, there is a forfeiture, if the party assured die by his own hand, although the act would not amount to *felo de se*; while, in others, it was provided that he must be held *felo de se*, and, therefore, of sound mind. The former rule is adverse to every dictate of justice and sound feeling; for, if the suicide be insane, although his hand be the instrument, his malady is the true cause of death as much as if he died through cholera or fever."

There is another point on which there seems to have been a general agreement amongst the directors of insurance companies; that is, the necessity of taking some precaution that a person should not insure his life with the deliberate intention of relieving himself from the cares and troubles of this life, whilst, at the same time, his concern for those he leaves behind him is such as to impel him to insure his life. It is difficult to obtain instances sufficient to prove anything certain on this subject, as the only evidence at my disposal is given in the prospectus of the Mutual Society, quoted above, and these facts show that a more liberal arrangement does not increase the number of suicides amongst the assured. As there are only five offices which make their policy certain without any conditions, it is impossible to give many facts; but it appears to me that the occurrence of such a business-like and deliberate design of suicide must be very unusual, and would imply an amount of "method in madness" which is extremely rare, or which does not exist at all. In the opinion of the directors of the Caledonian, which is one of the liberal companies, requiring only a delay of six months before accepting the policy as a positive one, "the probability is, that the act of self-destruction would, in such circumstances, follow closely the taking out of the policy, and the knowledge that no payment would be made, if death occurred in that way within six months, would naturally deter a person having an intention of the kind from assuring with this company".

There is still another subject on which directors have been generally unanimous, according to the reports which I have received. They appear to have been more influenced by a commercial spirit in framing their rules than by a concern for the welfare of the family of the person assured. In more than one-half of the reports—and the proportion is really greater—it is stated that the policy shall remain in force, under any circumstances whatever, where any other person shall have acquired a *bona fide* interest in it by assignment or by legal or equitable lien. Now, surely this is exhibiting a much greater tenderness for the creditors of the assured individual than for his sorrowing and perhaps suffering wife and children. If the directors, in the interest of their respective companies, can afford to make such an invariable rule as this with regard to business matters, they can well afford to make a more liberal arrangement for the family of the deceased. The secretary of one company is fully aware of this anomaly, and writes to me thus: "The general rule in these cases—viz., to pay in full only to third parties who have given due notice of their interest in the policy—must often work great hardship to the widow and family, who are not generally dealt with on terms as liberal as those which are accorded to persons who are merely parties to the transaction, and they make a large profit on the transaction." Where the policy, therefore, is alienated, the parties recover the full value of the policy; but, where it is not alienated, the family of the deceased must take their chance of obtaining even the return of the premiums paid, and these without interest. This seems unkind and unjust to the survivors, as the object for which an insurance is usually made is really defeated. The would-be suicide can generally alienate his policy, and so render it perfectly safe.

I have not been able to ascertain the annual number of suicides and

particulars respecting them. From one society, however, I have been favoured with such details, and the number of deaths of this class was twenty-seven during thirty-six years. In very few of the cases, real *felo de se* could not be proved; for, in some instances, the persons were found drowned, others were obviously insane, whilst in some the cause of death appears to have been accidental.

As it is impossible and undesirable, in the course of this paper, to give in detail the mass of information which I have obtained, I shall condense my conclusions into the following statements.

1. The present rules and practice of insurance societies is thoroughly irregular and uncertain, no distinct principle being uniformly acted upon, except that those to whom a policy is alienated are most tenderly considered.

2. The idea of a person's assuring his life, and then deliberately committing suicide, is of such rare occurrence as only to justify very moderate precautions.

3. The fact of a person having insured his life prevents him from committing suicide is a very questionable statement, and has not been proved by any known facts.

4. The present restrictions are severe and unreasonable towards those who are almost always of unsound mind, and ought to be done away with or materially modified.

I would recommend, therefore, an uniform practice, which would meet the views and objections of the insurance societies, and would be far preferable to the present state of things. In order to prevent a person from insuring his life and immediately committing suicide, my opinion is, that in every case the full amount of the policy should be paid after thirteen months; that is, when two annual premiums have been paid. This would be a sufficient protection to the offices, and, if death took place, it would not appear so great a loss to the family, to whom the premiums might be returned. After thirteen months, the policy should be a positive one, and the question of soundness or unsoundness of mind should not be raised at all. Directors would find it advantageous rather than otherwise to come to an agreement on this subject, and it is not likely, with such a few cases, that any increase of premium would be required. A very slight increase, however, would be better than the present uncertainty; and it is strongly urged upon directors of insurance societies to adopt an uniform rule in dealing with deaths from suicide, and thus to remove a reproach which at present exists.

## CASE OF CARIES OF THE TROCHANTER MAJOR SUCCESSFULLY REMOVED WITH THE CHISEL AND MALLET.

By THOMAS ANNANDALE, F.R.S.E.,  
Surgeon to the Edinburgh Infirmary, and Lecturer on Clinical Surgery.

I PUBLISH a note of the following case, as it is an addition to the already recorded instances of caries confined to the trochanter major without any involvement of the hip-joint, and also as an illustration of the advantages of the chisel and mallet in removing bone from situations not easy of access to the saw. I am inclined to think that the disease in the present case had its origin in inflammation and suppuration of the bursa, lying between the trochanter major and the insertion of the gluteus minimus muscle.

D. McCrae, aged 25, was admitted into the Infirmary under my care on May 17th, 1876. For more than three years previously to his admission, he had suffered from pain in the region of the great trochanter and hip-joint, and he had been repeatedly blistered over the painful part, but without benefit. Three months ago, a swelling formed on the inner side of the corresponding thigh immediately below the groin, and has since steadily increased in size.

When examined, the patient was found to have flattening of the buttock on the affected side, and there was well marked fullness over the great trochanter. There was tenderness on pressure over this process, but the movements of the hip-joint caused no pain. The swelling in the thigh was a large abscess. On May 25th, the abscess was opened with antiseptic precautions, and the wound dressed in the usual way. Six weeks after the operation, the patient was sent to the convalescent hospital, the wound not being completely closed, but discharging only a small quantity of thin pus.

On July 31st, the patient's symptoms were much the same as before, and the wound was discharging more freely.

On August 25th, the trochanter major was exposed by a free incision, and then it was found that a portion of its anterior and external surfaces was affected with caries. The disease was superficial, and involved a surface measuring about two inches in length and one in

breadth. The surrounding bone and the hip-joint were healthy. The diseased surface, to a depth of about a quarter of an inch, was chipped off with the chisel and mallet, and a clean-cut healthy surface of bone resulted.

After the removal of the diseased bone, the patient's progress was good, and he was dismissed on September 20th with a strong and useful limb and with perfect movement in the hip-joint. Both wounds were soundly healed.

## CHRY SOPHANIC ACID AS A REMEDY IN SKIN-DISEASE.

By BALMANNO SQUIRE, M.B.Lond.,

Surgeon to the British Hospital for Diseases of the Skin, etc.

IN my previous communication on chrysophanic acid as a remedy in ringworm, I expressed a diffidence in arriving at a summary conclusion on the strength of my own researches. I am, therefore, glad that two observers have responded to this expression on my part by stating their own views; the one stating that Goa powder is "of some value in ringworm", and the other that he "has tried it with the very best results, and ever since has considered it a specific". It will need, however, to be tried by a great many observers before its real competency can be satisfactorily ascertained. Now, inasmuch as some general interest in this remedy has been awakened, and as I have received several letters since my first communication to the JOURNAL on the matter, inquiring of me the best method of employing chrysophanic acid, it may be convenient that I should here briefly state my views on that head.

In the first place, I advocate chrysophanic acid in preference to Goa powder. It is true, the former is the dearer of the two at present; but if any general demand for it should arise, it would no doubt speedily become nearly, if not quite, as cheap as Goa powder now is. My researches with chrysophanic acid, undertaken, in the first instance, to try if it would prove a remedy in psoriasis, were to ascertain if the virtues of Goa powder were possessed by this constituent of it; and I find that they are so, not only in cases of psoriasis, but in cases of ringworm also. One of the great and quite natural obstacles to the use of Goa powder has been that, until very recently, it was a secret remedy; and it even still remains saddled with the drawback of a name which is vague, and by no means self-explanatory, from a scientific point of view. Now, chrysophanic acid, the chemical composition of which is well known, is a more definite substance to experiment with, and a far more satisfactory thing to bring under the notice of clinical observers, if it will only prove itself to be really the active therapeutical constituent of Goa powder, as my researches have led me to think that it is. Then, again, Goa powder ointment is a dark-brown substance, and a very dirty-looking smudge when smeared over the skin, whereas chrysophanic acid ointment, if properly made, is a remarkably clean preparation.

As to the mode of applying the remedy ; the mere pasting the Goa powder on with water or vinegar, which after all will not make it stick, or with lemon-juice, which is scarcely better, is a primitive method of a very inefficacious kind. This appears to be the favourite mode in the East, and seems to be due to an impression that the powder is soluble in these menstrua, which it certainly is not. Then, the mere mixture of the powder and a similar quantity of acetic acid with lard, at the ordinary temperature, is another of the conventional modes of using the remedy. This is a better plan by far than the other one, although what the acetic acid is for, unless with a hopeless view to its dissolving the powder, it is difficult to guess. A far better method is to mix the powder with hot lard, which dissolves it pretty freely, and afterwards retains even when cold a certain portion of it in solution, if, for want of a better expression, I may apply such a phrase to a solid substance. I do not by this mean that *Goa powder* is thus capable of being dissolved ; but certainly 85 per cent of it, that is to say, its chrysophanic acid, can be so dissolved ; or, if pure chrysophanic acid be employed, a perfectly clear solution of it in hot lard may always readily be produced. (About 20 grains of the acid are soluble in an ounce of hot lard.) In the intimate state of admixture of the acid with the lard, which exists when the solution has been allowed to cool, the ointment obtained is far more efficacious than ointment prepared in the conventional way, as is evidenced by the far greater readiness with which it produces the characteristic phenomena of the action of chrysophanic acid on the skin. There exist, therefore, what I should call the comparatively inefficacious, as well as the efficacious, methods of applying Goa powder and equally of chrysophanic acid. It will be an advantage if those who may relate their experience of either remedy in the future will ac-

in what form the remedy shall have been used by them. Then, as to watching for appearances of improvement, I have already referred, in an earlier number of the JOURNAL, to the phenomena that occur in cases of psoriasis treated by chrysophanic acid ointment. In ringworm, however, the microscope is a necessary means to enable us to judge how matters are going on. For example, if sufficient weight of evidence should be adduced that, under the use of the remedy, the trichophyton disappears from the hair and skin, it would scarcely go for much if any one were blankly to disparage the remedy in vague terms, without being able to say also how long it had been used, and on what data he had arrived at a conclusion; nor would it be sufficient even for him to say that, after a certain comparatively brief use of it, he had still found the hair-stumps "diseased"; inasmuch as the injury inflicted on the hair by the trichophyton is irremediable until fresh hair has had time to grow. It is scarcely to be expected of chrysophanic acid, or indeed of anything else, that it will cause hair, which has become split up into its constituent fibres by the development between them of numerous vegetable spores, to glue themselves together again as they were before that phenomenon had happened. I mention this because, in another place, it has been alleged that, after the use of the remedy (although in some cases it had proved quite successful, yet in others), the hair-stumps were still found "diseased". Now, in my previous communication, I stated that it was on the freedom of the still "diseased" hair-stumps from spores that I based my opinion of the efficacy of chrysophanic acid ointment in ringworm. I preferred the obviously still diseased hair-stumps for examination, as being, of all the hairs, those in which the trichophyton, if still existent, would most surely be found. As to the efficacy of the parasiticides in more common use, I think I may venture to say that, if they were good for much, we should not find ringworm, as it unquestionably still is, a very tedious and tiresome complaint to treat.

In conclusion, I beg to point out that the only conclusive test of the value of chrysophanic acid, or of any other remedy for ringworm, is the absence of relapses after apparent recovery under its employment. Meanwhile, the use of the microscope is the next best test. Although this is necessarily an imperfect means of arriving at a conclusion, I have not yet been engaged for a sufficient length of time in investigating the effect of chrysophanic acid on ringworm, to be able to speak with the certainty that I could only derive from long continued observation of cases that have been so treated. I can only speak at the present from the results of a careful use of the microscope; but these results are sufficiently encouraging to induce me to recommend others to try whether chrysophanic acid may or may not possibly prove some slight improvement on the not very excellent means that we at present have at our command.

SURGICAL MEMORANDA.

## AURAL THERAPEUTICS.

WITH reference to the use of Siegle's pneumatic speculum to raise a sunken membrane, or to break down adhesions between it and neighbouring parts, which Dr. Cassells says he has employed without encouraging results, may I be permitted to state that, in two cases which have recently been under my treatment, I have found this manoeuvre of the greatest service? In both of them, there was distinct evidence of adhesions accompanied with marked rigidity of the membranes. These patients rapidly improved under the use of the pneumatic speculum, and in one the improvement was so evident to the patient himself, that on each occasion he frequently exclaimed: "It is the drawing out of the drum of the ear that improves my hearing." Both recovered fair hearing power and lost all tinnitus. Until Siegle's speculum was employed, all other means had failed to obtain this result.

JOHN ST. S. WILDERS, Birmingham.

## THE USE OF PADS IN EXCISION OF TUMOURS.

I have agreed with Dr. W. W. C. [illegible] [illegible] [illegible]  
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]  
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]  
expensive), by reason of its soft and elastic nature, would be the best  
material; and, on account of its latter quality, I occasionally use it as a  
compress after herniotomy. After the removal of larger tumours, such as  
the mamma, I adopt precautions very similar to those mentioned by Dr.  
Campbell, but with this exception—I use *two* pads, one on each side of  
the linear wound. Each pad is made of folded lint, somewhat longer  
than the wound and parallel with its edge. A wide and long piece of  
strapping, also parallel with the long axis of the pad, secures this in



*situ*; and, as the line of the wound is not covered, the last drops of blood are squeezed out between the stitches when this is firmly applied. A pad in the axilla, too, prevents bagging of secretion; and I sometimes use a drainage-tube also for the first three days. Recently I removed a mammary tumour from a patient of Dr. Langmore of Oxford Terrace. I saw that gentleman yesterday, when he informed me that practically the wound was healed on the fifth day, the middle suture alone having occasioned a few drops of pus; and that he attributed this rapid healing to the method of dressing employed.

C. F. MAUNDER, F.R.C.S.

#### REMOVAL OF FOREIGN BODIES FROM THE EAR.

THE following case of extraction of a foreign body from the ear may be interesting, inasmuch as it fully supports the opinion expressed by Mr. Rivington in the JOURNAL of December 16th.

Emma B., aged 19, was admitted on January 11th, complaining of intense pain in her left ear. Thirteen years ago, whilst at play, another child put a small sandstone into the patient's ear. She was at once taken to a medical man, who attempted to remove the foreign body, but failed. The patient complained of pain from time to time, and also of deafness in that ear; but it was not until eighteen months ago that she again applied for surgical treatment. During this time, she had been seen by several surgeons and had received temporary relief. On examining the ear by a speculum and reflected light, a glistening white body was discerned close to the membrana tympani. A lotion of glycerine and laudanum was used to relieve the pain; and, on the 15th, with Dr. Woodhouse's assistance (under whose care the patient was admitted), removal was attempted. When the foreign body was touched by a probe, or any attempt made to remove it with forceps, the patient complained of great pain. The pinna being well retracted, the ear was syringed with warm soap and water, and, in about ten minutes, the foreign body appeared at the external orifice. It was a polished white stone of the size of a pea, and in shape resembling very much the trapezoid bone. After its removal, the pain entirely ceased and the hearing next day was normal. Although it cannot positively be stated that this stone could not have been removed by the ear-scoop, I think there would have been great risk of serious injury to the patient, and the pain would have been intense. The smoothness and shape of the stone, with the smaller extremity externally, rendered removal by forceps almost impossible, and the pain would also have been great. By syringing, the foreign body was removed without the slightest pain or risk.

WILLIAM ODELL, M.R.C.S.Eng., House-Surgeon, General Infirmary at Hertford.

#### CLINICAL MEMORANDA.

##### DELIRIUM AFTER CHLOROFORM.

MARY K., aged 58, was admitted to the Bradford Eye and Ear Hospital on June 13th, 1874, for acute glaucomatous cataract, under Dr. Bronner. Iridectomy was performed the same afternoon, under chloroform administered from Snow's inhaler. After the operation, the heart's action ceased. The tongue was pulled out, the patient turned on the left side, and artificial respiration performed without success; but the application of a magneto-electric current to the phrenic nerve saved the patient. She slept the greater part of the next forty-eight hours, and, when awake, spoke of a terrible storm and of going to the park in it, always nearly in the same words; and was quite unconscious of what passed. After this, she became conscious and rational, without any recollection of what had happened either during the operation or the succeeding two days. She has since (on July 24th, 1874, and April 3rd, 1875) undergone two operations for cataract, each time under chloroform, without any unusual symptom; and her general health has not been affected by the occurrence.

PHILIP MIALI, F.R.C.S., Bradford.

##### MALIGNANT PUSTULE.

HAVING observed in this week's JOURNAL the discussion on a case of malignant pustule which occurred in the practice of Dr. Hector Cameron of Glasgow, I wish to record briefly a case—I believe, of the same disease—which came under my observation last summer.

The subject was a healthy young man aged 23, of temperate habits, and it could not be ascertained whether or not he had been exposed to the infection of any specific animal poison. The case was at first considered, by the assistant under whose treatment it was,

to be merely one of erysipelas; and I believe it had been treated chiefly by saline purgatives. The patient said the disease first commenced by the appearance of a small vesicle on the upper lip a few days before, this being accompanied by redness, pain, and swelling. The whole lip was soon involved by the disease, and became tense, swollen, and brawny, and covered by an abundant crop of vesicles. It finally passed into a gangrenous state, the slough being of a peculiar brown colour and without the appearance of any pus. The swelling was so considerable, that the passage of the air through the nares was obstructed, so that respiration was wholly carried on through the mouth. The general condition was one of intense depression, the pulse rapid and feeble, with delirium, and all the other symptoms of profound blood-poisoning, from which the patient finally sank.

I first saw the case on the day before death, and a tonic treatment was then prescribed: quinine and iron in large and frequent doses; stimulants; locally, incisions and poultices.

As there was no history of exposure to any animal poison, it may be suggested that this was only a case of facial carbuncle, which is the only affection which could be confounded with carbuncle; but, I think, the age of the patient, his previous good health, the rapidly fatal course of the disease, the quickness with which the lip became gangrenous, the character of the slough, all point to the certainty that the disease was of the nature of malignant pustule, and not of ordinary anthrax.

The absence of any evidence of exposure to the specific infection which is supposed to produce this disease is the only fact which militates against this view; but it is possible, and even probable, that the disease may have been contracted without the knowledge of the patient.

J. W. HAMILL, M.D., Surgeon to the Workshop Dispensary and Hospital.

## REPORTS

OR

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### HOSPITAL NOTES.

##### ROYAL INFIRMARY, MANCHESTER.

*Respiratory Inhalers.*—We had an opportunity of seeing, with Dr. William Roberts, several patients who were using the inhalers devised by him, and described in the number of the JOURNAL for February 3rd. One patient in advanced phthisis, with much cough and purulent expectoration, found marked relief from oil of eucalyptus used in the inhaler for an hour at a time, twice or thrice daily. Gubler has noted the good effects of this in bronchorrhoea, and it is well known to be readily absorbable into the blood; it has been found to increase the heart's action and the pyrexial state, but there was no evidence of this in Dr. Roberts's patient. In a case of heart-disease, the oil of juniper was being similarly inhaled to produce diuresis, though so far without definite result. The effects of turpentine and of chloroform were also being tried.

*Chloroform v. Ferments.*—Dr. W. Roberts observed that, in a recent number of the *Annales de Chimie*, Müntz has shown that chloroform is fatal to organised ferments (bacteria, etc.); but is without action on the unorganised, such as are concerned in lactic fermentation, etc.; the former kind are foreign to the healthy body, whilst the latter occur in normal conditions. It is worth while to inquire whether, in septicæmic states, we cannot so far impregnate the blood with chloroform as to make it less susceptible of change by organic poisons: to try, for instance, whether chloral will not do this—using, in addition, occasional inhalations of chloroform-vapour.

*Aneurism: Galvano-puncture.*—Dr. Simpson has had five or six cases in which galvano-puncture has been used; in one, the result was so good as to amount to a cure; in one, suppuration occurred; the others were relieved. A patient, at present in the wards, with a large traumatic aneurism of eight months' duration, affecting the transverse part of the arch and the right innominate, has been punctured three times; the tumour has become harder, and some of the pressure-symptoms are relieved. In two of the applications, a needle from the positive pole was introduced and connected with cells of Foveaux's battery, gradually increased in number to fifty, the plates being only half immersed; at the last application, a few days ago, needles from both poles were introduced into the tumour with no other than good result. The reason for only half immersing the plates was that, when large



plates had been used in a previous case, erosion of the needle and suppuration had followed. Since then, Dr. Simpson had used carbolic acid spray during the operation. In a case of large subclavian aneurism, coagulation had occurred favourably under iodide of potassium; and Dr. Simpson agreed with Dr. Balfour, that the influence of this drug was exerted primarily on the wall of the sac. It was remarked, in the last mentioned case, that the fingers were much clubbed before treatment, but became nearly natural afterwards. Another case of abdominal aneurism had recovered well under iodide of potassium and Tufnell's plan of diet, though the man gained flesh.

**Empyema: Albuminoid Degeneration.**—A case, which will illustrate the evil results of neglected empyema, is at present in the wards under the care of Dr. Leech. The girl, when admitted two years ago, had the left pleura nearly full of pus, which had, however, been discharging for some months from a small natural opening. She refused any operation, and returned, twelve months afterwards, emaciated, with three openings in the thorax and albuminous urine. After paracentesis, a large quantity of fetid pus was withdrawn, and a drainage-tube was then introduced, to the great improvement of her health. During her absence, however, at the Convalescent Institution, the tube slipped into the chest and the orifice closed, whilst one of the former openings discharged dark and very offensive pus. Paracentesis was again performed, and injections used again, with improvement; but the albumen, which for a time disappeared, seems now permanent in the urine, and constant diarrhoea suggests a similar lardaceous change in the intestine.

**Spinal Sclerosis.**—With Dr. Dreschfeld, we saw a marked case in a woman of 67, in whom the malady had gradually developed in the course of eighteen months; its first onset was connected with a sudden attack of vomiting. The patient was not affected when at rest, but any attempt at walking caused tremor of the body and extremities. There was no atrophy or actual palsy, no loss of electro-contraction or sensibility, only the insular sclerosis was considered to affect especially the lateral tracts of the cord in this case. In two other cases, under the same physician, nystagmus was present, implying extension of the condition to the optic tracts.

**Modified Operation for Stricture.**—Mr. Lund favoured us with a demonstration of a method which he is now pursuing with the best results, and which combines the methods of Gouley, Wakley, and Teevan. Given a tight stricture, he first passes a "ferret", one of Gouley's very fine ( $\frac{1}{2}$ ) bougies, and, a drop of urine having been obtained, he screws on a very fine silver catheter, and pushes the "ferret" on into the bladder. Over the catheter he then passes one of Wakley's dilators, withdraws the small bougie, increases the size of his dilators as rapidly as the case will permit, and then completes the operation by passing Teevan's sheathed urethrotome and cutting all strictured portions. He then leaves the patient for two or three days without passing any instrument, agreeing with the theory that the blood-clot will become organised and is better undisturbed.

**Osteotomy.**—In a child with very marked deformity of the legs, consequent on rachitis, Mr. Bradley had divided the tibiae and straightened the fibulae with good results. The osteotomy was performed on the one side with a chisel, but the wound had been troublesome, owing possibly to the rather large instrument used. On the other side, division had been better effected by a fine saw. Antiseptic treatment had not been carried out, but the wound closed by collodion. In several cases of ankylosed hip-joint, Mr. Lund has obtained good movement by passive motion, after division of the neck of the bone by Mr. W. Adams's operation. In a case of ankylosis of the lower maxilla, after scarlatina, the condyles had been divided some time ago, but with only temporary improvement. The girl now can scarcely open her mouth, and the jaw has become small and retracted. Mr. Bradley proposes to remove a small wedge of bone from each side, to secure a more permanent benefit.

**Rhinoplasty.**—At the Edinburgh meeting of the Association, Mr. Hardie showed a case where he had formed a satisfactory new nose from the patient's own finger, which was kept in position for some weeks, and then amputated and covered with a skin-flap. The case has done so well, that he intends to perform the same operation on another girl now in the infirmary, who has lost the nose and cartilages from syphilitic lupus.

**Excision of Knee.**—We saw with Mr. Bradley two cases: a boy, doing fairly well, and a man, with very tedious suppuration. On the whole, experience has been against the operation; any good results have required so long a time. A very good splint for these cases has been devised by Mr. Wartenberg, house-surgeon.

**Puncture of Bladder.**—A very unusual case is at present under the care of Mr. Heath. The man's perinaeum and urethra were lacerated in a railway accident, but there was no extravasation of urine. The

bladder becoming distended, was punctured above the pubes, and a catheter introduced through the cannula and left in. The man now wears a short curved cannula, with a stopcock, and connected with India-rubber-tubing, and can go on very well till a plastic operation can be performed on the perinaeum. Mr. Heath remarked that he had followed a similar plan in a case of ovarian dropsy, where a radical operation was not admissible; the patient had worn a cannula for one or two years, and been able to relieve herself from almost all discomfort.

**Obstruction: Treatment by Morphia.**—An aged man was brought in with history of constipation, obstruction for nine days, and stercoraceous vomiting; he had not been relieved by purgatives, and an operation was desired. There was, however, no evidence of hernia or of intussusception, no peritonitis, no tumour, no blood; and flatus could be occasionally passed. Mr. Bradley thought the case to be one probably of atony and impaction, and ordered the use of the long tube and hypodermic injection of morphia. The injection had not much result at first; but, after the third dose of morphia, the patient became relieved, passed a quantity of faecal matter, and has recovered.

**Distension of Abscess-Cavities.**—Mr. Callender's plan of distending with carbolic acid solution has been used with very good result. We found a case of puerperal septicæmia, with four large abscesses, to be almost well after this treatment; and several cases of psoas and iliac abscess have been equally satisfactory.

## REVIEWS AND NOTICES.

**CLINICAL STUDIES, ILLUSTRATED BY CASES OBSERVED IN HOSPITAL AND PRIVATE PRACTICE.** By Sir JOHN ROSE CORMACK, K.B., M.D. Edin. and Paris, Physician to the Hertford British Hospital of Paris. 2 vols., pp. 548 and 579. London: Churchill. 1876.

THIS collection of papers is gracefully dedicated by the writer to Sir Richard Wallace, with whom he was closely united during the German siege of Paris. The first paper consists of an account of the Relapsing Fever which prevailed in Edinburgh and elsewhere in 1843-4. In it is given a careful account of many cases. The treatment described is much more active than is the fashion at present, and few now would think of giving croton-oil in a malady where there is such marked depression. The second paper is on Cholera, and will interest many who are desirous of refreshing their acquaintance with the past history of this scourge. One section is devoted to "Cholera Collapse; how some recoveries take place". One plan of treatment given is unlimited supplies of a mixture of gum-water and aerated water. The third paper is on Scarlatinous Nephritis, in which the writer endorses Dr. C. J. B. Williams's view "that, *per se*, albuminuria indicates nothing more than congested kidney". Next follows an interesting paper on Puerperal Convulsions; and after that, again, one on the Relations of Granular Degeneration of the Kidneys to Scrofula. Cauliflower Excrescence of the Uterus is the next subject taken up, and is followed by a criticism of the diagnostic value of the Dark Abdominal Line as a sign of recent delivery. A very interesting paper on Hernia of the Uterus, giving the history of a case which occurred in the practice of Dr. Ladesma of Salamanca, with comments, closes the first volume. The interest taken by the corporation of Salamanca in Ladesma's case is highly creditable to them.

The second volume commences with the writer's inaugural dissertation at the University of Edinburgh, to which a gold medal was awarded. The subject of it is Air in the Organs of Circulation; and it is followed by a criticism of a case where death was erroneously ascribed to the entrance of air into the veins, and by the details of a Case of Death from the Entrance of Air by a Rigid Vein in the Neck opened accidentally by a Seton-needle. Then follows a consideration of the Entrance of Air by the Open Mouths of the Uterine Veins. The whole of these papers are worthy of careful perusal. After this, under the head of Reflex Convulsions of Infancy, are a paper on the Treatment of Infantile Convulsions of Reflex Origin, illustrated by a case in which a child was rescued from apparent death by the Hypodermic Injection of Morphia, and another on Infantile Glotto-Laryngeal Spasm. The author then comes to a subject with which his name is intimately connected—*i.e.*, Diphtheria. In a chapter headed "Pharyngo-Laryngo-Tracheal Diphtheria", the author gives a very graphic account of a case of the gravest nature, where, almost at the last gasp, the patient was saved by tracheotomy. This chapter is a highly interesting one. It is followed by an essay on Croup and Diphtheria, the object of which is to show that diphtheria is a disease and croup a symptom. The next chapter is devoted to the Paralytic Affections of Diphtheria, which leads up to the next subject, the Paralytic Affec-



tions of Enteric Fever; after which is given a chapter on the Treatment of the Paralytic Affections of Diphtheria and other Diseases—such as relapsing fever, cholera, small-pox, etc. Then follow a number of short essays on Non-Venereal Discharges from the Genito-Urinary Organs; Scarlatinal Vaginitis; Congenital Syphilis; Chronic Poisoning by Chloroform; Successful Resection of the Shoulder-Joint for Gunshot Wound; Concussion of the Brain; General Paralysis with Insanity; and Short Attacks of Insanity in Women.

A great deal of shrewd good sense, together with an extensive acquaintance with his profession, is exhibited by the writer in these essays. The last essay is very interesting, and the forms of insanity manifested by English people sent abroad for their health are various. The case of a newly married bride, who imagined herself to be just about to be covered with coarse hair (the post-connubial insanity of Skae), and the causal relationship of her malady, are very instructive. On the whole, Sir JOHN ROSE CORMACK has done well to gather his different writings together into one work. He has had great and varied opportunities of observing disease, of which he has carefully availed himself. He is a keen observer and a thoughtful practitioner, and these excerpts from his practice are valuable and well worthy of perusal. The style is pleasant, so that the book will be taken up by many and read in their spare moments; and in doing so they will find that they so secure a considerable amount of information in an agreeable form. As to the get-up of the book, opinions will differ. Certainly the green cover and red edging are unusual in medical works at least.

ON ALCOHOLISM, THE VARIOUS FORMS OF ALCOHOLIC DELIRIUM, AND THEIR TREATMENT. By Dr. V. MAGNAN. Translated by W. S. GREENFIELD, M.D. Pp. 258. London: H. K. Lewis. 1876.

THE work of Dr. MAGNAN on Alcoholism is of world-wide repute, and it is a great advantage to English readers to have it translated for them. Dr. GREENFIELD has done his part of the work well also. The work commences with a contrast betwixt ordinary alcoholic drunkenness in the dog and the toxic effects of absinthe. It is clear that absinthe is a potent and dangerous nerve-poison. The second chapter is devoted to Alcoholic Delirium in Man. Most illustrative cases are recorded at some length, furnishing vivid pictures of the different forms of delirium. The third chapter deals with Febrile Delirium Tremens. Dr. Magnan is in favour of mechanical restraint, but points out the asphyxiating action of the *camisole*, and uses instead of it the *maillot*, a garment equally effective, but free from the chief objections to the strait waistcoat. Dr. Magnan thinks that alcohol is got rid of out of the system in about three days, though in some cases a longer time is requisite. In Chapter IV, Chronic Alcoholism is described, with the physical and psychical degenerations which ensue therefrom. Dementia, premature dotage, and senile degeneration, with obliteration of the moral sense, are the fruits of prolonged drinking. One or two excellently described cases of general paralysis following alcoholic excesses are related at some length. Another form of chronic alcoholism is found; viz., that of hemianæsthesia. This will be comparatively new to some readers. The final chapter deals with the Combinations of Alcoholism with various Forms of Mental Derangement, and its Associations with Intercurrent Disease. The definition of M. Trélat is adopted: "Drunkards are people who get drunk when they find an opportunity of drinking. Dipsomaniacs are diseased persons who get drunk whenever their attack seizes them." General paralysis is largely associated with alcoholism, Dr. Magnan thinks. The delusions retain their form without much change in ordinary general paralysis, while in alcoholic delirium the opposite is the case. When persons of drinking habits are seized with acute disease, cerebral disturbance is readily induced. The weakest part of the work is the treatment. It is largely expectant, and consists chiefly of taking care of the patient and letting him have free supplies of fluid, especially lemonade. Free perspiration tends to clear the system. Little more is done in the recorded cases, though opium, quinine, etc., are spoken of in the last page. On the whole, this work of Dr. Magnan is an acceptable addition to the literature which deals with the question of alcoholism.

ON CATHETERS FOR LEAVING IN THE BLADDER AND WHALEBONE CONDUCTORS. By Dr. A. AMUSSAT, &c. Pp. 15. 1876.

THIS paper is written to recommend the whalebone bougies advocated and used by the author. To meet the emergencies of practice in treating retention of urine, such as inexperienced medical attendants in cases requiring frequent catheterism or the accident of a false passage, he had adapted to each other a slender long whalebone guide or con-

ductor and a catheter open at each end. The former may be used, firstly, as a guide over which a catheter can be slipped into the bladder. Secondly, when the catheter is to be changed, the whalebone guide may be passed through the silver catheter just into the bladder, the catheter withdrawn, and a gum catheter introduced in its stead; the whalebone being then withdrawn. Thirdly, by screwing the whalebone guide into the open end of the catheter, the number of instruments may be reduced and their introduction simplified. Fourthly, this guide may be substituted for the bougie-conductor commonly used with M. Maisonneuve's urethrotome, as that bougie is apt to double up in front of the stricture, or make an elbow close to the metal-fitting. Fifthly, it is useful as a guide in passing the cannula of M. Voilemier's divulsor. Sixthly, to facilitate the introduction of the lithotrite in nervous patients and those who present prostatic hypertrophy, the female blade of the lithotrite may be tunneled for the whalebone guide. Seventhly, in a similar way, this instrument may be made of service in guiding into the bladder Heurteloup's catheter for washing out that organ.

The rod of whalebone is made from sixty to seventy *centimètres* in length, and of a thickness graduated from eight- to twelve-tenths of *millimètres*. It terminates in a smooth olive-shaped bulb.

We are more impressed by the ingenuity of this contrivance than by its serviceability. Whalebone guides and bougies are useful in a few cases of stricture; but, as aids in such surgical operations as those mentioned by Dr. A. AMUSSAT, they are, to our mind, of doubtful service. They tend to lead a surgeon to depend more on the skill of the instrument-maker than upon his own manual dexterity and anatomical knowledge; these are as necessary in passing such slender elastic guides as in introducing blunt-pointed catheters into the bladder.

SPONTANEOUS EVOLUTION AND THE GERM-THEORY OF THE PROPAGATION OF LOW FORMS OF LIFE: WITH EXPERIMENTS ON THE LIMITS OF VITAL RESISTANCE TO HEAT. By NEIL CARMICHAEL, M.D., C.M., F.F.P.S.G., etc. Glasgow: Robert Anderson, 1876.

DR. NEIL CARMICHAEL's paper on *Spontaneous Evolution and the Germ-Theory* is an interesting and valuable contribution to the controversy with respect to biogenesis or abiogenesis. It was read before the British Association at its recent meeting in Glasgow, and contains a record of many experiments performed by the author. Want of space precludes our giving any lengthened account of Dr. Carmichael's experiments, but the tendency of them appears to be opposed to many of Dr. Bastian's theories, and to show that in the cases where he found bacteria in alkaline, neutral, or faintly acid urine after boiling and submitting to a temperature of 122 deg. Fahr., his conclusions that such bacteria were of abiotic origin are not valid, inasmuch as "a temperature of 212 deg. Fahr. can by no means be maintained to invariably destroy the germs in alkaline, neutral, or faintly acid solutions".

From his experiments, Dr. Carmichael draws the following conclusions. 1. Bacteria-germs do exist disseminated in water, in air, and on all exposed surfaces; these may remain latent till placed in conditions suitable to their development, and they then develop into bacteria, which multiply in different ways. 2. The origin of bacteria, or other form of life from non-living material, is still not proven by any who are engaged in the study of this subject. Dr. Carmichael's paper, with its record of carefully performed experiments and logically drawn conclusions, will be found well worthy of perusal.

BOERHAAVE'S OPINION ON TRANSFUSION OF BLOOD. Dr. Beneke of Marburg has called attention in a recent number of the *Berliner Klinische Wochenschrift* to the following passage in Hermann Boerhaave's *Prælectiones Academicæ de Morbis Nervorum* (Section Chlorosis).

"Sanguis est creatura singularis admodum naturæ, in omnibus animalibus determinatæ, et in singulis diversæ, adeoque in homine est humanus, in nullo alio animali reperiundus: hic sanguis, aliunde infusus, non est sanguis illius hominis, cui infunditur, quemadmodum infusiones, præterito sæculo in Anglia aliisque regionibus celebratæ, docuerunt, quibus Medici nonnulli putabant, sanguinem novum, Medecæ more, posse derivari in decrepitem corpus humanum, adeo ut putarent, se panacem invenisse contra mortem; sed auidax omnia tentare gens humana magnis sæpe excidit ausis, et ubi naturam ad suum lubitum vult regere, sæpe serò sapiens suo cum damno fallitur. Institutæ fuerunt illæ injectiones multis in locis, et humores infusi poterant aliquamdiu sustinere corpora, in quæ infundebantur, sed naturam illius corporis mutare non poterant, hinc sponte brevique tempore illa methodus evanuit, ita ut jam in nullo omnino sit usu. Ergo sanguis est unicuique homini proprius, omnisque proportio omnium in eo contentorum est æqualis viribus naturalibus hominis constitutis."



## REPORTS OF SOCIETIES.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 13TH, 1877.

CHARLES BROOKE, F.R.C.S., F.R.S., Vice-President, in the Chair.

## DISLOCATIONS OF THE THIGH: THEIR MODE OF OCCURRENCE AS INDICATED BY EXPERIMENTS AND THE ANATOMY OF THE HIP-JOINT. BY HENRY MORRIS, M.A., M.B.

THE object of this paper was to show that dislocations of the thigh on to the dorsum of the ilium never occur, as is usually stated, while the limb is adducted, unless the dislocation is complicated with fracture; that all kinds of dislocation take place while the limb is abducted; and that it depends upon the degree of extension or flexion, and of external or internal rotation associated with the abduction at the moment of accident, whether the head of the femur will be thrown forward or backward. The anatomy of the hip-joint, the results of experimental dislocations in the cadaver, and the positions of the body at the time when dislocation has actually occurred in the living, were adduced in support of this view. The conclusions arrived at in the paper were the following. 1. The ilio-femoral ligament is a thickened triangular or fan-shaped area of the capsule of the hip-joint and not a Y-shaped ligament; besides the ilio-femoral band, there is a large portion of the capsule very thick and strong; and, if two lines be drawn, one from the tuber ischii to the top of the trochanter major, and the other from the anterior inferior iliac spine to the trochanter minor, all the capsule between them above is thick and strong, whereas all below and between is thin and weak. 2. The thickened portion of the capsule determines the kind of manipulation necessary for reduction, and should be relaxed by flexion and abduction during any attempt to reduce a dislocation of the thigh. 3. The degree of extension or flexion and of external or internal rotation of the thigh at the time of luxation determines whether the dislocation will be pubic, thyroid, sciatic, or dorsal; and subsequently the "bridling" effect of the thickened portion of the capsule fixes and gives character to the dislocation. 4. All dislocations of the thigh, uncomplicated with fracture, occur while the limb is abducted. 5. Posterior dislocations result when flexion and inward rotation accompany abduction; and the anterior when extension with outward rotation accompany abduction; while the downward or thyroid variety occurs during extension and abduction. 6. Of the movements of the usually successful methods of manipulation, the head of the femur is brought (by flexion, abduction, and reverse rotation) to the part of the capsule through which it was displaced, viz., to the lower and inner side of it. 7. The new position of the head of the femur in the sciatic as in the dorsal dislocations is above the obturator internus muscle, though in both varieties the bone leaves the acetabulum through a rent in the capsule below the muscle; and for these reasons the classification of the posterior dislocations into "dorsal above" and "dorsal below" the obturator internus, as made by Bigelow and followed by others, is misleading if not invariably incorrect. 8. Dislocation through a "button-hole" is not possible, owing to the inelasticity of the capsule and the large size of the head of the femur compared with the width of the capsule from pelvis to femur; and in the reputed cases of unsuccessful efforts at reduction of this sort of dislocation, the real obstacle has been either a portion of muscle or of the capsule itself carried before the head of the femur into the acetabulum, or of a fragment of the head of the femur left in the acetabulum. 9. The rim of the acetabulum of itself offers no real resistance to reduction. 10. In the exceptional case of a direct dorsal dislocation, the untorn muscles and capsule would resist reduction by ordinary manipulation; and this resistance would be appreciable by the surgeon. 11. Direct dorsal dislocations, or those which are said to occur during adduction, are always the result of immense violence, and are always associated with fracture of the acetabulum, or of the head of the bone or of both. 12. Violent pain in dislocations at the hip is caused by the sciatic nerve being pressed upon or looped up by the femur; and pain or paralysis after reduction is due to dragging forward of the nerve upon the neck of the bone, or to its rupture in the act of reduction. 13. In reducing dislocations associated with great pain, it would be well to draw the head of the bone away from the side of the innominate bone during the movements of flexion and abduction, so as to disengage the sciatic nerve and thus prevent either of the accidents abovementioned.

MR. WILLETT could not admit the novelty of Mr. Morris's views. Some years ago, a German surgeon—he believed Professor Busch—had visited the London hospitals and demonstrated that all dislocations of the thigh-bone occurred during abduction; that it depended on the

subsequent arrangement of the limb whether the head of the bone should be thrown backward or forward. This doctrine had since been an article of faith at St. Bartholomew's Hospital; and Mr. Willett had for some time taught it to his class. Within the last ten or twelve years, also, it had been the almost universal custom to reduce dislocations of the thigh by manipulation, the whole process of which depended on the fact of the capsule being rent at the lower part.—MR. MAUNDER said that it was evident that the author of the paper had devoted much attention to the subject; and he thought he had proved his case. He had no doubt that Mr. Morris's researches were made quite independently of those of Professor Busch, with which they agreed; but he would ask how it was that Malgaigne, who had carefully studied the subject, had not found that the dislocation was produced in the way now described. Malgaigne spoke of rupture of the lower part of the capsule as the exception rather than the rule.—MR. BARWELL had no doubt that dislocations of the femur were produced in the way described by Mr. Morris. He mentioned the case of a man on whom a mass of coal fell on his sacrum in a coal-mine; this, it might be supposed, would cause the head of the bone to be thrown backwards, whereas it was dislocated forwards on the anterior inferior spine of the ilium. He agreed with Mr. Morris in regarding the ligamentum teres as of little importance in the prevention of dislocation; it probably did little more than protect the vessels passing to the head of the bone. He saw a case some years ago, in which there was congenital absence of the ligamentum teres; but he had no reason for believing that the man was more liable to dislocation of the femur than other persons.—MR. MAC CORMAC said that he had never been able to drive the head of the femur out of the acetabulum except at the lower part of the capsule. He asked if any observations had been made in which the head of the femur was embraced by the obturator internus.—MR. MORRIS, in reply, said that he was not aware that the views which he brought forward had been already taught. It was stated in surgical books, even in the latest editions of the works of Bryant and Holmes, that dislocations of the femur occurred during adduction. As to manipulation, neither Bigelow nor Hamilton explained its results by assuming the theory of abduction, but by supposing that it broke down any portion of capsule that might prevent reduction. In the days of Malgaigne, experiments were probably not so often performed as now; and it was rare to have an opportunity of making a *post mortem* examination of a case of dislocated femur. He did not attach much importance to the ligamentum teres; and believed that it had no power to hold the bone in its place. He was not aware of any case in which the head of the bone was embraced by the obturator internus muscle.

## CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 9TH, 1877.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

*Aortic Aneurism treated by Ligature of the Left Carotid Artery.*—MR. CHRISTOPHER HEATH showed a specimen of aortic aneurism from a man, in whom he had tied the left carotid artery in February 1872, and who had been brought before the Society both in 1872 and 1873. He died in September 1876 from bursting externally of the aneurismal sac, which proved to have sprung from the ascending portion of the arch of the aorta, and not, as had been supposed, from the transverse portion. Mr. Heath remarked that, though the relief from the operation had been marked and undoubted, it was difficult to explain its *rationale*, since the case did not support the view which had been put forward that the branch next beyond the aneurism should be tied. Unfortunately, the clot had been unavoidably removed, so that it was impossible to say whether it had extended for any distance down the aorta from the left carotid; but this vessel was completely filled with clot, which was adherent to the lining membrane of the artery only at the point of ligation. No trace of the catgut ligature was discoverable, and it was remarkable that the coats of the artery showed no evidence of having been divided by it. Mr. Heath said he did not attempt to theorise on the case, but contributed it in order that a complete record might be made of a case in which undoubted benefit had accrued from the application of the distal ligature.

*Aortic Aneurism treated by Ligature of the Left Carotid Artery.*—MR. HOLMES exhibited the patient on whom he had performed this operation, the case having been brought before the Society a year ago. (See *Transactions of the Clinical Society*, vol. ix, p. 114; and the *BRITISH MEDICAL JOURNAL* for 1875, vol. i, p. 414.) The patient, a young woman twenty-one years of age at the time of operation, had a large aneurism, probably connected with the transverse part of the arch of the aorta towards its termination. The left common carotid



was ligatured on October 21st, 1875. Mr. Holmes remarked that it was the only other case, so far as he was aware, in which the suggestion had been carried out, and he had been led to do it by the improvement which followed Mr. Heath's operation in Dr. Cockle's case. The aneurism was supposed to implicate the innominate and the carotid, but turned out to be aortic. The case was one of the worst cases of aortic aneurism he had ever seen; there was a loud *bruit* audible at some distance; the patient had profuse hæmoptysis, and, in Mr. Holmes's opinion, could not have lived a month. Prolonged rest, followed by Tufnell's treatment, caused great improvement; in half a year she was sent to Wimbledon, where exertion led to renewal of the symptoms. The aneurism appeared to be extending up the neck, which was, Mr. Holmes thought, the indication for the operation. Immediate marked benefit followed the operation, and the tumour subsided considerably, the dyspnoea diminished, and hæmoptysis nearly ceased. She was now in comparative comfort, though still in a state in which any exertion might easily cause death. There was still a constant hacking cough. Mr. Holmes thought that the only reasonable explanation of the action of ligature was that a clot was produced in the vessel tied, and that this extended down into a part of the aneurism. Wardrop's explanation left out of sight the circumstance that the collateral circulation increased directly after the ligature. Though prolongation of life could not be anticipated, the girl owed, he thought, a respite to the operation.

Mr. CALLENDER thought the subject not only of great practical importance, but interesting also from the doubt as to the exact results produced in the sac. Mr. Holmes's explanation was probably the correct one, and on this hinged the class of cases to be thus treated. Other important points were; the precise relations of the vessel, the employment of carbolised catgut, and the condition of vessel produced by the ligature.—Mr. BRYANT related a case in which he had acted on the suggestion of ligaturing the carotid. Three weeks ago he had been asked to see a case of aortic aneurism in a man fifty-six years of age, under the care of Dr. Wilks, to ascertain if anything could be done for him surgically. The aneurism involved the aorta and innominate artery, projecting from above the clavicle, pressing on the larynx, and interfering with speech and deglutition. He had already been treated for some weeks on Tufnell's system, but without effect. Mr. Bryant hesitated on account of the age of the man and the fact that the aneurism was obviously aortic; but, encouraged by Mr. Annandale's case, where ligature of the right carotid gave great relief, he resolved to operate. Having placed before the patient the danger of the operation and the inevitable result if left alone, the man consented to the procedure. The right carotid was therefore ligatured about a fortnight ago with carbolised catgut, the artery proving to be remarkably large and thick-walled. The patient went on well for some days. From the second day he seemed better, and the pulsation had much diminished; some, however, continued above the clavicle and sternum, but it was altered in character. He went on well till the ninth day; no suppuration occurred; he took food well; but he then rather suddenly changed, and died on the tenth day. At the *post mortem* examination, the right jugular vein was found to be filled with thrombus, and there were some secondary deposits, which Dr. Goodhart believed to be pyæmic in nature; and the spleen was softened. There was enormous dilatation of the ascending and transverse portions of the arch of the aorta, with extensive atheromatous degeneration and calcareous plates. The ligatured artery was completely plugged; the ligature had disappeared, but the coats of the vessel were cut through and separated a line apart. The left subclavian artery was also completely occluded. The left radial pulse could not be felt before the operation. There was no coagulation whatever in the sac. The operation had, therefore, done no good, although he believed it to have been perfectly justifiable.—Dr. BURNEY YEO said that physicians saw more of the cases of aortic aneurism than surgeons. He had had himself several cases under his own care during the past three or four years, but he had not been led to recommend the operation proposed by Mr. Heath in either of them. He would be glad to know if Mr. Heath and Mr. Holmes had arrived at any definite conclusion in their own minds as to the class of cases of aortic aneurism in which ligature of one or other of the carotid arteries was likely to prove useful. So far as his own observations had extended, he should be inclined to regard the operation as decidedly counter-indicated in those cases where there was obvious general degeneration of the arterial system, as, for instance, in the case mentioned by Mr. Bryant. But, in cases where the disease was limited to a definite portion of the aortic surface and where the rest of the arterial system was fairly healthy, he could understand that this operation might be of advantage. Mr. MAUNDER said that Dr. Yeo had stated that physicians had a larger experience than surgeons of aortic aneurism. Surgeons might, therefore, very justly look to their brethren

practising medicine for the indications for operative interference or not, to which Dr. Yeo alluded. Without doubt, this was one of the chief difficulties to be overcome. He said the subject under consideration was of a grave nature and full of pitfalls. On a former occasion, when Mr. Holmes brought forward his case, he (Mr. Maunder) had ventured to say that the distal operation for aneurism at the root of the neck was in great measure experimental, but was, under certain circumstances (as when the disease was progressing in defiance of approved methods of treatment), perfectly justifiable, even though the precise origin of the tumour could not with any degree of certainty be recognised. He still adhered to this opinion, because his own personal experience of the distal operation, the records of such by other operators, observation of museum specimens, and, lastly, Mr. Heath's preparation now before them, while they all, more or less, upset the *theory* upon which those operations were undertaken, supported the practice.—Dr. MAHOMED expressed his regret at having to appear as the advocate of a special instrument; but thought, after the remarks that had fallen from the President and Mr. Maunder as to the importance of accurately diagnosing the position of aneurisms before determining on an operation, that he was justified in again drawing the attention of the Society to the great value of the sphygmograph for this purpose. He stated that he believed more valuable information could generally be obtained regarding the situation of thoracic aneurism from this instrument alone than from a combination of all other physical signs. He exhibited tracings taken, by permission of Mr. Heath, from the patient upon whom he had lately proposed to operate, and whose heart and aorta were exhibited to the Society, in which, by the sphygmograph alone, he had diagnosed an aneurism implicating the innominate and extending into the transverse arch, and in which was found a small aneurismal dilatation of the commencement of the innominate, which was also pressed upon by the chief aneurism situated on the anterior wall of the transverse part of the arch. He also showed tracings from another case of Mr. Heath, in which an aneurismal dilatation of the aorta before the innominate and an aneurism beyond that vessel were diagnosed by means of the sphygmograph; and also from one in which a diseased ascending arch and an aneurism of the transverse arch which just included the commencement of the innominate (the vessel itself being unaffected) were found after death. Tracings from the case exhibited by Mr. Holmes indicated the freedom of the aorta before the innominate from aneurismal disease, and its presence beyond that vessel.—Mr. MAC CORMAC related a case which bore upon the other cases mentioned that evening. It was that of a man having a large aneurism of the axillary artery, who greatly objected to a cutting operation. Rest, Valsalva's method, Mr. Tufnell's mode of treatment, pressure on the distal side of the sac, both digital and by metal weight, were all tried unsuccessfully. Mr. Mac Cormac then bandaged the arm from the fingers upwards with Esmarch's elastic bandage, and tied the circular band (that acts as a tourniquet) just beyond the aneurism. The sac then pulsed faintly. The pressure was continued for two hours; and, at the same time, the vitality of the limb was maintained by the application of cotton-wool and coils of hot water tubing, in order to keep up its temperature. Upon the removal of the bandage, however, no improvement was manifest in the aneurism.—Dr. GREENHOW desired to bring back the discussion to the original point before the Society. Hitherto, he had tried Mr. Tufnell's treatment only; but, if Mr. Heath's treatment succeeded fairly well, it should be tried in suitable cases. He himself had last session mentioned a case in which there existed an aneurism of the arch of the aorta, with great obstruction to the passage of blood through the left carotid and subclavian arteries, and in which a spontaneous cure of the aneurism had nearly resulted, when death from empyema ensued. In that case, nature had nearly accomplished what Mr. Heath endeavoured to imitate by art (*vide* BRITISH MEDICAL JOURNAL for 1876, vol. i, page 414). Dr. Greenhow would like to know accurately what points guided Dr. Mahomed in performing his diagnosis in these cases.—In reply to Dr. Greenhow, Dr. MAHOMED stated that the signs of aneurism in a sphygmographic tracing were:—1. Diminution in volume of the pulse-wave; 2. A sloping upstroke; 3. Impairment or annihilation of the percussion-element; 4. Partial or complete obliteration of the dirotic and other secondary waves; 5. General diminution, but sometimes increase, of the amount of pressure required to develop the tracing. If all or some of these characters were found in the pulse on the right side and not on the left, the aneurism was of the innominate; if in the right and partly in the left side, it was of the innominate and transverse arch; if in the left only, it was of the transverse arch or root of the subclavian; if these signs were only partially present and equal on both sides, it was an aneurism of the ascending arch; if all were strongly marked and only on one side, it was probably directly in the



course of the subclavian artery and would not be found involving the aorta.—Dr. EDMUNDS remarked that, from Mr. Heath's description, the very first part of the aorta seemed to have given way. Mr. Heath had not designated the "aneurism" sacculated, but it appeared to have been such, coming up into the sternal notch. The supposed condition of things upon which the theory for the treatment had been based was not borne out by the result; the innominate artery came off between the sac and the artery ligatured. He would like to suggest that the benefit accruing from the ligation of an artery in aneurism might possibly be due to the change in situation which it caused to the nodal points in the vessel's wall, whereby they were perhaps thrown from weak points where the sac was inclined to give way to stronger portions of the sac-wall. He then gave particulars of an aneurism of the right carotid in a woman aged 45. All observers had been struck with the perturbability of the action of the heart in these cases; that instability was not due to the size of the aneurism nor its situation. Could anyone throw any light upon that fact? It might be due to some reflex action on the sympathetic nervous system of the heart produced by the pressure of the bulging aneurism.—Mr. HEATH said he had already guarded himself by stating that, although a favourable result was produced in his case, it did not square with the theory upon which the operation was performed. Neither had Dr. Cockle, in his case, said why the benefit resulted. On looking carefully at the preparation, it seemed difficult to believe a clot extended down to the aneurism without occluding the vessel altogether. It was new to him that, in aortic aneurism, one should ever find the disease so localised as Dr. Yeo had seemed to suggest. What decided the point at which the aneurism came off, he did not know. It was certainly thought, before the operation in his case, that the aneurism had sprung from the transverse part of the arch. However, there was the case, which would stand for what it was worth.—Mr. HOLMES said that, in the main, he agreed with Mr. Heath. He thought that the more the operation was limited to cases in which the disease was localised, the better the results would be likely to prove. In cases where it seemed that the patient had a large amount of disease, life would be likely to be prolonged by his being left alone. He thought the best cases for operation were those of aneurism springing from the arch of the aorta and bulging up into the neck. He thought it hopeless to believe that an aneurism of the aorta could be cured by ligation of the carotid.

*Tracheotomy performed four times within a few years upon the same Patient.*—Mr. PUGIN THORNTON brought forward a case of syphilitic laryngitis, in which the operation of tracheotomy had been performed four times. The case was remarkable also from the skin of the patient's face presenting a discoloration very similar to that produced by the long-continued administration of nitrate of silver. The patient, aged 67, a foreman in large horse-stables, contracted a chancre in 1867. This was followed shortly afterwards by a secondary rash. In 1869, concurrently with a rupial eruption, he had sore-throat, the voice being affected, followed some months after by difficulty of breathing. In 1870, the dyspnoea was so great, that his medical attendant informed him that in all probability tracheotomy might have to be performed. This, by treatment, was avoided, it not being until 1871 that the first operation was performed. From some impediment, believed by Mr. Thornton to be in consequence of the tracheal cartilages having become ossified, it was impossible to insert a tube, and the wound was allowed to close in four days. The man, however, experienced great relief by the operation, and was able to return to his work in a fortnight, continuing at it until 1874, when tracheotomy was for the second time performed. It was at this time the face began to get the bluish appearance the man presented at the Society, but whether it was before or after the operation he could not remember. Again, in the following year, recourse was had to tracheotomy, Mr. Dukes of Spitalfields being the operator in these last two instances. He, on both occasions, experienced great difficulty in the insertion of the tube. When the cannula had been worn about a month after the last operation, it slipped out one night, and it was not for many hours that another (Fuller's bivalve) was put in. At the end of a fortnight, this had worked its way out through an abscess at the lower end of the operation-wound. At this time, the patient came under Mr. Thornton's care. He was then suffering from considerable dyspnoea, which, with his lividity of countenance, gave the impression that the man was in an alarming condition of asphyxia. On examining his larynx, Mr. Thornton found that, though the stenosis was very great, yet, by enforcing absolute rest in bed and with specific treatment, an operation might be avoided. It turned out so, and the man left after a short stay in hospital. In July, however, of last year, he came with such urgent dyspnoea, that tracheotomy had to be at once performed. The ossification of the cartilages was so great, that they were sawn through with much difficulty. The tube, on this account, was not removed for the purpose of

cleansing until the eighth day. It was removed for good after it had been worn a little over two months. Mr. Thornton then explained that the stenosis was caused by thickening and ulceration of the vocal cords, the ventricular bands, and the epiglottis. He drew attention to the peculiar character of the discoloration of the face, and to the fact that it did not extend below the neck. The supposition was, that it was due to former imperfect aeration of the blood and non-recovery of the cutaneous vessels afterwards. Mr. Thornton also took occasion to remark upon the advisability of always having a fine saw at hand for use in similar cases.

Mr. MAUNDER said that, curiously enough, the man who had been just seen had for many years, while he resided in the city, been under his care from time to time for syphilis in all its stages. More than once, as a consequence of laryngitis, tracheotomy had been imminent, but had been averted until the occasion first mentioned by Mr. Thornton. It illustrated very forcibly one of the accidents more or less inherent to the operation—severe hæmorrhage from a vein, probably opening directly into the internal jugular, the bleeding occurring at the moment respiration was impeded by the introduction of the cannula into the trachea on a pilot, the patient not being under the influence of an anæsthetic, and not under physical control. The bleeding relieved the apnoea, and the tube was not necessary on this occasion, the patient becoming quickly convalescent.—Mr. CASSON said that he had practised in Derbyshire for seven years, and had there seen several cases of goitre pressing on the trachea. In such cases, the expression of the face often did change to a great extent as years went on, though not to so great an extent as in Mr. Thornton's patient.—Mr. BRYANT said he thought the man did not take in sufficient air for respiratory purposes. He nine years ago had divided the trachea of a man who had stricture of that tube, due to contraction of a scar, and who had permanent blueness of the features from sufficient air not entering the lungs. Probably, if this man were always to wear a tracheotomy-tube, he would get rid of much of the discoloration.—The PRESIDENT inquired if there were any change in the man's appearance after the operation performed by Mr. Thornton.—Mr. THORNTON replied that he thought there had been some improvement produced by it.—Dr. BURNIE YEO suggested that perhaps hyperoxygenation might, if tried, be found of service.—Mr. HOWARD MARSH agreed with Mr. Bryant, instancing a case in St. Bartholomew's Hospital. A cabman with a blue countenance had a kind of fit and suddenly died. It was then found that a papillomatous growth almost completely blocked the passage of the trachea.

#### WEST KENT MEDICO-CHIRURGICAL SOCIETY.

FRIDAY, FEBRUARY 2ND, 1877.

THOMAS CREED, M.D., President, in the Chair.

*Flatulency.*—Dr. ARTHUR LEARED read a paper on flatulency: its causes, effects, and treatment. The author pointed out that, as there is always gas in the intestines, flatulency must be regarded relatively. There were three possible sources of gas:—1. Atmosphere; 2. The blood; 3. Fermentation of food. The oxygen was derived from swallowed air, and was subsidiary to digestion. He opposed the idea of some writers that nitrogen or any gas was evolved from the blood through the mucous membrane, and explained the sudden gaseous distension occurring in hysteria by irregular contraction of parts of the stomach and bowels from defective innervation. Fermentation was undoubtedly the chief cause of flatulency; but Dr. Leared considered common fermentation rare. From hydrogen being largely evolved, he concluded there was a fermentation peculiar to the gastro-intestinal canal. From long experience and observation, the author thought that deficiency of gastric juice was seldom the cause of dyspepsia, seeing that in many cases of wasting diseases, and even during the last hours of life, there seemed sufficient for digestion. In those cases, the fault seemed to lie in the impaired peristaltic action of the stomach, the food lying quiescent, and the gastric juice being unable to convert it into chyme in a reasonable time; hence, fermentation and gaseous distension of the flabby organ occurred. In these cases, strychnia acted well. In many cases of flatulence, the power of expelling gas was lost owing to temporary paralysis from overdistension putting great stress on the muscular coats of the stomach and intestines. Vegetable charcoal, as a gaseous absorbent, was very valuable in these cases. As the dose, to be effective, must be large, and would, perhaps, produce constipation, or possibly obstruction, the author recommended vegetable ivory charcoal in hermetically sealed gelatine capsules (which he some years ago introduced to the profession). He had found them in practice to possess great gas-absorbing powers.



BRITISH MEDICAL ASSOCIATION:  
SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, FEBRUARY 17TH, 1877.

THE HUNTERIAN ORATION.

WE have the pleasure of presenting to our readers to-day a very accurate report of an address which has an enduring interest in medical literature, and will be read by all with the sense of intellectual satisfaction which every work of art, perfect in form and sincere in essence, must give to those who bring to it trained perceptions and the means of appreciating its worth. The character, works, and influence of Hunter have formed the theme of many commemorative orations, some of which have risen far above the common-place. But it is rare to find the combination of technical knowledge, philosophic thought, grace of diction, and high oratorical power which made Sir James Paget's Hunterian address on Tuesday a masterpiece of modern oratory, and a gem of critical literature.

The art of pronouncing *logos* upon the departed heroes of our own and of past ages is but little cultivated among us; it is a special study in the neighbouring country of France; and there such academic studies are brought to a high pitch of polished elegance, and the most accomplished masters of philosophy, science, literature, and politics, delight in an exercise in which they have learned to excel. Few among our greatest public speakers have attained any conspicuous success in their occasional efforts to pronounce commemorative orations; and even Mr. Disraeli has, in this endeavour, made more than one conspicuous failure.

Guided by a sure instinct, inspired by a sympathetic appreciation of the subject of his address, gifted with a rare felicity of expression, and drawing upon the resources of a mind largely stored with instructive facts and elevated reflections to which it has too rarely given expression, Sir James Paget lavished on his task powers and accomplishments such as no orator has ever yet brought to it; he succeeded in producing a picture of Hunter, and presenting a view of his mind and his works, which will live in literature, and which shines with all the beauty of truth, and all the glory of justly imputed greatness.

He wisely chose to make a study of the mind, the character, and the mode of working of the surgeon who, more than any other, wedded science to surgery, and drew it out from among the mechanical arts, to take its place in the amphitheatre of the sciences. It is not vain or useless at this day, when we may see so many examples in the highest places in the metropolis of the dull illiterate prosecution of surgical practice in a merely mechanical and utterly uncultured fashion, to present to the general gaze the picture of a surgeon who was, above all, a pure lover of biological science; whose devotion, enthusiasm, sincerity, and simplicity, made of him the chief agent in raising all his fellow-labourers and followers in surgery to a higher level of knowledge, and to a higher ideal of work. The study of such a life, by a man so capable of discerning all the higher lessons which it teaches, is a valuable possession; its influence cannot fail to be widely, and we trust fruitfully, exerted.

The eulogy which the orator bestowed was not strained or undiscriminating; and as an example of subtle analysis of thought and character, some of its passages are highly interesting. He gives a keen and true explanation of Hunter's failure to found a school, by reason of certain defects of mind and power and his want of enthusiasm as a

teacher, and lack of sympathy with disciples; and he did not omit to note the imperfect reasoning power and confused enunciation of his thoughts which disfigured and detracted from his doctrine of vital force; but he showed fairly and brilliantly how grand was his work, how massive his research, how firm his hold on the facts which he accumulated with untiring energy and countless profusion; and he justly honoured him as the grandest figure in the modern history of surgery, and the founder of scientific surgery.

The oration is resplendent with "purple patches", and starred with gems of thought, which are in themselves of great worth and beauty. Thus, in one place we are led to note that, "In every mind, thoughts and words are so closely interwoven, that each shares always the qualities of the other. Thoughts and words are like mutual reflectors; if either of them distort an object placed between them, the other cannot but receive the distorted image and reflect it; or, each is alternately master and servant. Thoughts use words for their expression, and then the words take part in directing the next thoughts; if either be erroneous or defective, the other suffers with it." And again we are reminded of "that kind of living force which there is in living facts when they are stored in a thoughtful mind". Later, we have an eloquent suggestion that, although the correlation of physical and vital forces affords now the best explanation of "life", there is nothing to indicate the precedence of physical force, or to contradict the priority of mental force in the chain of correlation.

We must not fail to note also this passage. "The whole of the influence which Hunter exercised on surgery and surgeons was the influence of the scientific mind. What follows? Surely that, if we are to maintain the rank of gentlemen, if we are to hold this highest prize of our profession, it must be by the highest scientific culture to which we can attain; and to this we are bound, not for our own advancement alone, but by the plainest and strongest motives of our duty."

Nor can any more seductive inducement to intellectual exertion easily be offered than that with which the address closes, wherein the orator reminds us that "the influence of men like Hunter extends far beyond the time and space of their own conscious activity. Their true thoughts live after them; they not only endure and remain, but, in the continuity of mental life, they really live; they pass on from one generation to another, and in each succeeding generation they grow and are developed, and come nearer to perfection. Thus the true thoughts of Hunter still live in us, and, when we do honour to his memory, we do it not to that which is past, but to a power still abiding with us and doing good. His true thoughts still live in us, and they will live beyond us, never ceasing to urge and help men onwards in the pursuit of truth; for in the world of mind, he that is mortal may produce that which may have immortality." These words fitly close an oration founded plainly enough on a deep study and full appreciation of the work of one of the greatest heroes of intellectual achievement, and pregnant with elevated conceptions of the duty, the powers, the aims, and the rewards of the man of science, and of the surgeon who aspires to be worthy of the profession which Hunter dignified, advanced, and adorned.

CONJOINT EXAMINATION BOARD FOR IRELAND.

WE mentioned some time since that, at the request of the provost and senior fellows of Trinity College, representatives were appointed by the president and fellows of the King's and Queen's College of Physicians, Dublin, and by the Council of the Royal College of Surgeons of Ireland, to confer with representatives appointed from Trinity College; and that instructions were given to these delegates to act together as a committee, and to report to the several colleges as to a scheme for forming a board for conjoining medical examination.

The representatives met for the first time on October 14th, 1876, and held five meetings after that date. After mature deliberation, they agreed to report to the three colleges in favour of a scheme for a conjoint examination, which was to be submitted for the consi-

deration of the governing bodies of the colleges. We have since had to report that the Council of the College of Surgeons has summarily thrown out this scheme, and we understand that they did this without assigning a reason, and without discussing its suggestions *seriatim*. Under these circumstances, it is unnecessary for us to enter upon the details of the scheme which was prepared; and it is only our province to express our surprise that the Council of that College should have adopted a policy of obstructive resistance to a reform for which it had on three previous occasions appeared to exhibit sympathy, and which it had gone so far as, on these three occasions, to testify an intention to promote, in the presence of the negative attitude of the Queen's University in Ireland. Something may be said for a delay on the part of the College of Surgeons in carrying out the details of the scheme, but it is difficult to frame any excuse for the course of deliberate obstruction which it now pursues in respect to the scheme which for the third time its own delegates have, with the concurrence of Trinity College and King and Queen's College of Physicians, now laid before it. Public policy and professional opinion are alike opposed to this course. While the present system of downward competition has been so emphatically condemned by the Government and by the profession, its evils are so apparent and so indefensible, that the system which promotes them must be considered to be doomed.

Those who support a system of this kind prepare for themselves, and for the institution which they govern, no enviable future, nor can they be said to pay a due regard, in the present, to the reputation of the institution which they rule, or to the welfare of the profession which they represent; and especially is that system condemned when teachers examine their own pupils and confer on them licences to practise, as the Dublin College of Surgeons has long done. It is not long since a Bill, prepared by the Government and approved by the General Medical Council, passed the House of Lords, and reached a second reading in the House of Commons, which made conjoint medical examination boards compulsory for all the three kingdoms, on terms far more onerous than those which might have been secured by the voluntary scheme now rejected. That Bill was lost from other reasons, and more especially owing to the opposition of our Medical Reform Committee, which, while approving of the whole of those clauses, desired to add to them one for the direct representation of the profession on the General Medical Council. That opposition, legitimately founded as it was upon the strong and unanimous desire expressed by the profession for direct representation on the General Medical Council, has cost the profession and the country dear. It has postponed for a term of years, of which the end cannot yet be seen, the prospect of obtaining a satisfactory uniform minimum examination for practice throughout the country; and by leaving unamended the penal clause of the Medical Act, it has left the country a prey to the whole tribe of quacks, who still carry on their nefarious practices with comparative impunity. The English corporations and universities have profited by the interval to make serious, although tediously protracted, attempts—about, we hope, to culminate satisfactorily—to unite voluntarily in order to confer the same boon on the public and the profession which that Act of Parliament proposed to compel them to do. The Irish bodies had manifested something of the same liberal and independent disposition, and we had great hope that their intentions might result in some practical scheme. It appears now, however, that there is no foundation for such hope, and it will be necessary for the General Medical Council at its next sitting, unless some other body intervene, to represent to the Government that the evils which the Government Bill undertook to remedy are still rampant in two important divisions of the United Kingdom. We say two, because we hope that, before the parliamentary session is much advanced, the seal will be set upon the English conjoint scheme.

We understand that the late Mr. Alfred Smee is to be succeeded in the post of Medical Officer of the Bank of England by Dr. Herbert Davies.

MR. PEASE, the hon. member for South Durham, will, on the 19th instant, bring in a Bill to amend the law relating to vaccination, so far as accumulating penalties are concerned.

AMONG those present at the Hunterian Oration on Tuesday afternoon, in addition to His Royal Highness the Prince of Wales, were the Duke of Argyll, the Duke of Westminster, Mr. Gladstone, Dean Stanley, Professor Huxley, Professor Tyndall, Professor Acland, Sir George Burrows, Dr. George Johnson, and a few other leading physicians, in addition to a large number of the most eminent of the fellows and members of the College.

IT is stated that, after the oration, a private dinner took place in the Library, to which many eminent guests were invited, and subsequently the museum was thrown open and visited by the diners.

WE deeply regret to learn that Dr. Peacock was seized on Tuesday night with apoplexy and accompanying hemiplegia, but we are glad to learn that he is progressing very favourably. In the afternoon of the day, Dr. Peacock had been present at the College of Surgeons, at the Hunterian Oration of Sir James Paget.

MR. W. J. RIDOUT has bequeathed to Owens College, Manchester, his valuable collection of scientific apparatus and books. The botanical department of the same institution has also been enriched by some important contributions from the Government Gardens and Museum at Kew.

AT a recent meeting of governors of the Cumberland Infirmary, Dr. Macdougall was appointed surgeon in lieu of Mr. Page, who retired, and was elected honorary surgeon. At the annual meeting held afterwards, a satisfactory statement was made as to the condition of the finances, and, on the recommendation of the committee, it was decided to commemorate the services rendered to the institution by the late Mr. George Moore, the Dean of Carlisle, and Mr. Page, by calling three of the new wards by their respective names.

#### THE PIMLICO MURDER.

WE understand that the Home Secretary has referred to Mr. Justice Lush, the judge who tried Treadaway, the subsequent representations which have been made as to his alleged condition of epileptic vertigo with temporary insanity, and that the further opinion of the President of the College of Physicians will be taken as to his physical and mental condition.

#### NOTICE OF INFECTION.

AN inquest has been held by Dr. Hardwicke on a child who is said to have died from suppressed scarlet fever. The evidence of the mother was so short that some doubt is left in this case, as she said that the child was taken ill on the previous day, became worse in the night, and died in the morning, without having had any medical attendance. Mr. Smith, who was sent for, gave evidence to the effect that the family lived and slept in one room; that another child died from putrid sore-throat a week before; and that, in making a *post mortem* examination, he found "ulceration of the throat, disease of the kidneys, effusion into the chest and heart-bag, and swelling of the body". He considered it a case of suppressed scarlatina, but we think it was an attack of drowsy after a mild attack of scarlatina, which had not been observed. The sanitary inspector said that he found eight adults and twelve children in four holdings; that he knew nothing of the case until death had occurred, as no notice had been given him of the other cases in the house. Mr. Smith said "he did not think that doctors ought to be compelled to inform the sanitary authorities of infectious diseases". The coroner replied "he considered that the medical man should give notice to the renter of the house, who ought to give the requisite information to the sanitary officers". We here see the important question raised as to the duty of some one to give notice of the occurrence of infectious diseases to the sanitary authority, which



has been prominently brought before Mr. Slater-Booth's notice by a deputation from the medical officers of health, who are of opinion that the occupier of the house should in all cases give the information. But, as the President of the Local Government Board observed, there would be very great difficulty in compelling persons living in large houses, when there was sufficient means of isolation provided, to give notice to the sanitary authority. He also thought that such notice would most probably give rise to great unpleasantness between the medical attendant and the medical officer of health, if the latter in any way interfered with the former. This subject requires more discussion than it has hitherto received, and will probably end in a line being drawn as to the class of house above which no notice will be required to be furnished. It is certain that, as regards crowded houses occupied by more than one family, and when proper isolation is impossible, some further legislation is required.

#### HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

TWO courses of clinical lectures and demonstrations are being given in this hospital. Dr. C. Theodore Williams commenced on February 5th, a course of six demonstrations "On the Clinical Varieties of Phthisis", which will be continued every Monday at three o'clock. Another course, also of six demonstrations, "On the more Common Diseases of the Chest", was commenced by Dr. Mitchell Bruce, on February 7th, and will be given every Wednesday at three o'clock.

#### HOSPITAL ELECTIONS.

ON the occasion of the late election of an assistant-physician at St. George's Hospital, we urged the advisability of such a modification of the method of election as should relieve candidates from the onerous, expensive, and invidious task of canvassing the whole body of governors. There are peculiar inconveniences and disadvantages attached to such a mode of election, and they were brought into great prominence by the energetic character of that contest and the modes of publicity adopted. We are glad to find that the reform which we advocated has been very speedily brought about. We have received this week a copy of the following law, which has just been enacted at St. George's Hospital.

"The physicians, the surgeons, the assistant-physicians, the assistant-surgeons, the visiting apothecaries, the chaplain, the superintendent and secretary, the solicitor, and the surveyor, shall be elected by a Committee consisting of the vice-presidents, trustees, treasurers, consulting physicians, consulting surgeons, the four physicians, the four surgeons, and twenty-one governors not being officers of the hospital, elected by ballot annually at the Quarterly Court in May, notification of such ballot being made in the circular calling the Court. No appointment shall be made by the said Committee within fifteen days of any vacancy being declared in the daily papers; and the Committee shall appoint any such officer within thirty days of such declaration, or shall report to the Weekly Board their reason for not making an appointment within that time. No member of the Committee shall be eligible to be appointed to any office by the Committee. When a vacancy among the elected members shall occur, either by death, resignation, or otherwise, a ballot shall take place at the next Quarterly Court to fill such vacancy.

"Candidates canvassing, directly or indirectly, any member of the Committee, shall be deemed ineligible for election."

The precedent may be useful at Liverpool, where, as we have recently had occasion to mention, the same subject is under discussion.

#### THE MANCHESTER MEETING OF THE ASSOCIATION.

WE understand that it is intended by the Manchester and Salford Sanitary Association to hold an exhibition of sanitary appliances during the visit of the British Medical Association to Manchester in August next. We have not at present much definite information on the subject, but we understand that advertisements have been inserted in the public papers, inviting applications for space with a view to forming an idea of the scale on which the exhibition may be organised. Other associations, such as the North-Western Association of Medical Officers of Health and the kindred associations throughout the coun-

try, are likely to be interested for the purpose of making the exhibition thoroughly the representative of the most important advanced sanitation of the day. It is intended to secure for the exhibition, if possible, a site adjoining Owens College, where the meetings of the British Medical Association will be held. The interest of such an exhibition is obvious, and it will certainly greatly enhance the attraction and increase the usefulness of the Public Health Section of the meeting. Moreover, it must be alike to the interest of exhibitors and a source of pleasure to inventors, to find this excellent opportunity of bringing their sanitary inventions and improvements under the notice of a great number of members of the profession who especially direct sanitation, and many of whom are wholly devoted to its practice. All communications should be addressed to Mr. Frederick Scott, the Secretary of the Manchester and Salford Sanitary Association, at 78, Cross Street, Manchester.

#### GROCERS' LICENCES.

IT is not unnatural that those who are interested in maintaining the monopoly of the publican interest should take part in the cry against the wine-licences of grocers, as though they were things which were in any way prejudicial to the public interests, or likely to be productive of the growth of evil. We think, however, that this outcry is one at once so mistaken and often so interested, and likely, if it were at all successful, to produce results so directly injurious, that we do not regard it as worthy of being countenanced by thoughtful persons. The improvement in habits of temperance in the community, to which we have to look most hopefully, is that which is likely to be effected by an enlightened and improved public opinion, brought to bear upon those who are addicted to intemperance, or to alcoholic excess. The tendency of the grocers' wine-licence is to rob the drinking-bar of some of its customers, and to substitute home influences for those of the gin-palace and the beer-house. So far as the influence of the beer-house and the gin-palace has weight, that weight is thrown into the scale of immoderate, unnecessary, and rapid drinking, without taking food. The wine and the spirits purchased at the grocery are consumed at home, under family influences, and the checks and restraints which those influences are likely to have upon excess. Moreover, the wine and spirits so purchased are much more likely to be consumed at meal-times, and in rational and comparatively harmless measure. The grocer has no license to allow wine or spirits to be consumed on the premises; and if all licences could be restricted in the same way, it is probable that this would do more to check excessive drinking than any other step which could be devised. Far from desiring to see grocers' licences diminished or restricted in usefulness, we believe that the reduction of duties in 1861, which favoured the importation of light wines, and was the immediate cause of the appearance of the grocer wine-merchant, has tended more than anything else to substitute the use of cheap, light, and wholesome wines for the more potent drinks previously universal in this country; and if they could be so extended as largely to diminish the number of drinking-bars, we should look upon that extension with great favour. We look to the use of cheap wines as one of the most efficient agents in diminishing intemperance, and to the grocers' licence as one of the most practical means of limiting excessive drinking, and of breaking down the hurtful monopoly of the wealthy publicans.

#### EXPERIENCE BY CONTACT.

A CORRESPONDENT thinks he has come across a better illustration of the popular belief that mere contact is experience than the one we gave in the closing paragraph of the article on Apoplexy and Drunkenness. "Miss Moorsom appeared to feel aggrieved that I, who had never been to Walsingham before, should presume to know more about the foundation and destruction of its abbey than she did. It was so very odd, she thought, especially as they had a *History of Norfolk* in the library, and she perfectly remembered having often sat upon it when she was a child." (*Janel's Home.*)

## PRESENTATION TO DR. DE BARTOLOMÉ.

ON Friday, February 2nd, a large number of the local members in Sheffield of the British Medical Association dined together, with the view of presenting to the President, Dr. Martin De Bartolomé, a piece of plate, as a memento of the Sheffield meeting, and in recognition of his generous and able services on that occasion. The present consisted of a handsome silver-covered vase, which bears the following inscription: "Presented to M. Martin De Bartolomé, M.D., by the local members of the British Medical Association, in grateful recognition of his valuable services as President of the Annual Meeting held in Sheffield in August 1876."

## TOMATOES FOR THE NAVY.

MR. J. MACLEAN suggests, in a letter in the *Army and Navy Gazette*, that preserved tomatoes, which are now largely put up in hermetically sealed tin cans in Canada and sell there at about one shilling the bushel, might be supplied to the navy in large cans of fifty pounds at a very moderate price. There is no doubt that such fresh tomatoes would be a most excellent antiscorbutic, and would be highly relished by seamen on board ship with their salt meat.

## THE SEAMEN'S HOSPITAL.

THE fifty-sixth annual meeting of the Seamen's Hospital Society was held this week. The Duke of Northumberland presided. The report stated that 2,106 in-patients of all nationalities were admitted to the hospital during 1876, being an increase of 92 over the preceding year; and the out-patients had increased from 1,685 to 2,786. This hospital, which is most ably officered by an accomplished staff, has always been one of the institutions of which this metropolis and this country as a great maritime nation have good reason to be proud. It is wholly supported by annual subscriptions, under the very able administration of Mr. Burdett, the House Governor and Secretary. Its funds have lately considerably improved; nevertheless, in order to maintain its traditional efficiency and increase its usefulness in proportion to the increase of the demands made upon it, it stands in need of large and liberal aid, and we trust that this will be furnished in ample measure. Such an institution appeals to the charitable of all classes, and in a peculiar degree to all who are benefited by the vast shipping operations of this country.

## THE LONDON FEVER HOSPITAL.

THE annual meeting of governors of this hospital was held at the Freemasons' Tavern, Great Queen Street, on Friday last, and Mr. Mills presided, in the absence of the Earl of Devon. The report of Dr. Broadbent, the honorary physician, was read by that gentleman. It proved that, though the work of the hospital has been supplemented of late years by the erection of the metropolitan asylums for pauper fever-patients, yet the continued need of a place of isolation for the other classes of the community was shown by the admission during the year of 730 patients, some with typhus, some with enteric fever, and a very large number suffering from scarlet fever. Some of these were artisans, who were admitted free; but this year the class who could take private rooms, of which eight are set apart, had availed themselves of these means of securing families against infection. Remarks were made respecting the great cost of patients, and it was replied that the hospital had always to keep up a full staff of nurses, and, moreover, the disease which was treated was always acute, requiring full attendance. In other hospitals, some patients required only a fraction of attendance, but in a fever hospital the utmost attention and care were always required. It was pointed out by Mr. Hugh Owen, the honorary secretary, that the hospital received a grant of more than £200 from the Sunday Hospital Fund. Nothing, however, had come from the Saturday Hospital Fund. In order to prevent the institution from drawing upon its small capital for the payment of current expenses, it being stated that the subscriptions fell off because benevolent people could not visit its wards, it was resolved that an appeal should be made to the public for funds. Thanks were voted to

the medical staff, to the house directors, to Mr. Hugh Owen, and to other gentlemen, for their exertions, often dangerous to themselves, on behalf of those smitten with fever. A vote of thanks to the chairman concluded the meeting.

## TEETOTALISM.

SIR HENRY THOMPSON presided last week at a meeting held at Exeter Hall for the purpose of furthering the cause of teetotalism. He said that alcohol, he believed, had a certain value to the human body as a stimulant; but he who adopted it regularly drew a bill at a high percentage on the future. Constantly whipping a horse could not add to his longevity. Alcohol certainly could be turned to good account in medicine. He did not advise his healthy patients to take it, but he had known the time when a man who was lying on a bed of sickness, with his strength flagging and his nervous system fading away, and who did not care to live, had recovered from a dose of alcohol judiciously administered to him. Alcohol, however, affected different people in a different way; some could take liquor to a large extent with a considerable amount of impunity, while others could take little or none without being physically injured by it. It was the brain-workers who could not stand alcohol without injury. Dr. Richardson, while denying that he had ever said that alcohol was "the devil in solution", said that he thought it was a *bonâ fide* devil indeed. It did not warm, but cooled the body; it did not give muscular power, build up tissue, or supply what nature required. In fact, it was useless in any condition of life, except under exceptional circumstances, on which none but skilled observers could decide.

## PURE DRINKING-WATER.

NOTWITHSTANDING the improvements which the water-companies have effected since 1871, Major Bolton remarks that it is disheartening to reflect they "are rendered nearly abortive and but of little value by the continued and apparently increasing contamination of the waters of the Thames and the Lea on the one side, and by the apathy and carelessness of a great number of the consumers on the other".

## DR. ÉMILE DUBOIS.

OUR Paris correspondent writes:—Another name may be added to the list of those who have fallen victims to disease contracted in the execution of their duty, by the death of Dr. Emile Dubois, which took place on Wednesday the 7th instant, in the fifty-seventh year of his age. Dr. Dubois had been attending a gentleman suffering from gangrenous erysipelas. He recovered; but the lamented physician succumbed to the disease contracted from the patient. Emile Dubois was a successful accoucheur, and was formerly President of the Société de Médecin Pratique. He was in no way related to the celebrated accoucheur, Paul Dubois, but, it was said, that the *prestige* of the name he bore contributed in no small degree to the extensive practice he had acquired.

## ABUSE OF MEDICAL CHARITY.

THE *Liverpool Daily Courier* concludes a very able article on this subject by observing that "the mass of evidence collected on this subject goes to prove that there should be only two classes of dispensaries—provident and poor-law; that these should be in some way affiliated to the hospitals, so that in certain cases exceptional scientific skill may be readily brought to bear on them; that the hospitals should be rigidly reserved for the purposes and persons they were instituted for; and that the medical men engaged in the outdoor work of the medical institutions should all receive either salary or honorarium. It is suggested that, by the affiliation of hospitals and dispensaries, students might obtain that domiciliary education which is denied them in the hospitals, where perfect arrangements for ventilation and nursing leave them nothing to think about in these respects. Among the dwellings of the people matters are very different; arrangements as substitutes for the hospital appliances have to be improvised, and the medical attendant has to give direction for the proper ventilation of the sick apartment. It is considered that if the students of three years' stand-



ing spent six months as assistants in dispensaries, they would derive much advantage. But the first step to reform is to check abuses on the medical charities, and this is just the step which has not been taken so far."

#### DR. MOXON'S HUNTERIAN ORATION.

THE annual Oration of the Hunterian Society was delivered on Wednesday evening in the large theatre of the London Institution in Finsbury Circus, by Dr. Walter Moxon. There are few tasks more difficult than that of portraying with originality and yet with truth the character of individuals. Hunter's character, though so grand and prominent, forms no exception to this; so that it is something to be able to say that, with two Hunterian orations delivered on consecutive days, we have listened to both with the delight which endows an intellectual feast, and we would go again to hear either a second time, if to do so had been possible. To Sir James Paget attached the lustre, and the crowded audience, and richly were they merited. Of Dr. Moxon perhaps less was asked, not less expected, and not less received. The leading features of Hunter's mind, and therefore of his work as the orator conceived him to be portrayed in his writings, were his systematic collection of facts, both of natural history and physiology, to answer the questionings which his mind had raised, not to create fresh questions; and that he ever subordinated his passion for the acquirement of knowledge to his one chief aim—that of the advancement of surgery. The orator endeavoured to show how in this Hunter pursued Bacon's system of philosophy, and how he achieved success in a line of inquiry where Mill had shown by logic that success was impossible. He showed how false is the common interpretation of the axiom, "knowledge is power", and how knowledge is *not* power, if it be the mere accumulation of "fact-heaps", aimless and useless, and that it is only when acquired in an orderly method for the solution of the problems of life that it becomes available as power. The lecturer concluded by contrasting the acting principle of Hunter's life with the system of medical education now in vogue, and he contended that our system tends towards the collection of "fact-heaps", and not to the advancement of our art in the science and practice of healing. But a sketch like this can give no idea of the scope of the lecture; it was throughout rich in suggestion, humorous in its touches, original and skilful in its treatment, and the lecturer finished a discourse of an hour and a half amid the unanimous applause of an audience both numerous and appreciative.

#### THE METROPOLITAN WATER-SUPPLY.

DR. FRANKLAND, F.R.S., reports, as the result of his analysis of the waters supplied to the metropolis and its suburbs during January, that, taking the average amount of organic impurity obtained in a given volume of the Kent Company's water during the last nine years as unity, the proportional amount in an equal quantity of water supplied by each of the metropolitan companies, by the Tottenham Local Board, and the Colne Valley Company was: Tottenham 0.7, Kent 1.3, Colne Valley 1.4, New River 5.0, East London 5.1, West Middlesex 6.0, Lambeth 6.0, Grand Junction 6.9, Chelsea 7.0, and Southwark 8.0. The Thames continued in high flood during January, and the water delivered by each of the companies deriving their supply from that source was again most objectionably polluted with organic matter, although to a somewhat less extent than in December; the water, however, was declared to be "quite unfit for dietetic purposes", even after efficient filtration. The West Middlesex Company moreover, alone supplied efficiently filtered Thames water; the water delivered by each of the four other companies drawing their supply from that river contained moving organisms, and in three of the samples fungoid growths were found. The Lea water was of better quality than that of the Thames, but was more polluted than in December, and was "unfit for domestic use". The East London water was efficiently filtered; but that delivered by the New River Company was slightly turbid, and contained moving organisms. The water supplied to the

metropolis or its suburbs from deep wells by the Kent Company, the Colne Valley Company, and the Tottenham Local Board, was entirely unaffected by the long continued heavy rains and floods, was palatable, bright, and sparkling, and contained but mere traces of organic matter. The Colne Valley Company's water is softened by lime before delivery; and, whereas the Kent and Tottenham waters showed 28 deg. and 33½ deg. of hardness, the Colne Valley water showed but 5 deg.

#### DEATH FROM ASPHYXIA DURING THE ADMINISTRATION OF CHLOROFORM.

ON Friday, the 9th instant, Dr. Hardwicke held an inquest on the body of a married woman aged 43, who for three months had been an in-patient of University College Hospital, suffering from an aneurism of the aorta that pressed on and flattened the trachea at the lower part of the neck. Mr. Heath was about to tie the left carotid artery, and chloroform had been given for about two minutes, when the patient exhibited signs of obstruction to the respiration; the inhalation was then at once discontinued. The semirecumbent position seemed to have increased the pressure on the windpipe, and, though efforts at respiration were made, air did not enter the chest. Artificial respiration was found to be of no use, whereupon laryngotomy was performed; but the left innominate vein, as was afterwards discovered, being occluded, some veins crossing the larynx were much dilated and wounded in the operation. A quantity of blood entered the air-passages, and, though it was sucked out, the delay was fatal. The patient had taken but little chloroform when the obstruction to the respiration became alarming. The following verdict was recorded and signed by the coroner and the majority of the jurors: "That the deceased expired from asphyxia from a tumour in the throat while under the effects of chloroform."

#### EDINBURGH UNIVERSITY CLUB.

THE annual general meeting of the Edinburgh University Club was held at St. James's Hall on Monday, February 12th; Dr. William Playfair in the chair. The annual report and the financial statement for the year were read by the Honorary Secretary and Honorary Treasurer, and very satisfactory evidence given of the prosperity of the Club both from a social and pecuniary point of view. At the dinner which followed, Dr. William Playfair again presided, and was supported by a large number of members and guests. In proposing "The Army", the chairman took occasion to remark upon the small number of Edinburgh graduates now joining the department; and Dr. Combe, in reply, explained how recent alterations had deprived military medical service of much of its old attraction as a life-career. In proposing the toast of the evening, "Alma Mater", the chairman referred to the great and increasing prosperity of the University of Edinburgh, and adverted in feeling terms to the loss sustained by the Club in the deaths of Professor Laycock, Dr. Sibson, and Sir William Fergusson. The Right Hon. Lyon Playfair, M.P., responded in some eloquent observations, and gave a sketch of the present requirements of the University in respect to increased accommodation. Before sitting down, he proposed "The Sister Universities"; and the Rev. Dr. Gordon, in reply, drew an interesting contrast between the more aristocratic constitution of Oxford and Cambridge, and the greater sympathy with the wants of the people which enabled the Scotch Universities to bring their training within the reach of the poorer classes of society. Other toasts followed, and some excellent songs wound up a most successful evening.

#### THE WORCESTER DISPENSARY AND FROUDENT MEDICAL INSTITUTION, AND DR. WOODWARD.

ALTHOUGH the general meeting of this institution, which took place on the 30th ult., did not result in the reinstatement of Dr. Woodward as one of the medical officers, we consider, after a careful perusal of the report in the local journals, that that gentleman is to be congratulated on the tone adopted towards him by the majority of the speakers, for we do not find that any attempt was made to justify the

action of the Committee in excluding him; indeed, the only explanation of his dismissal came from the chairman, in the account he gave of the mode of election, wherein he showed that, certain gentlemen having announced themselves as candidates, each member of the Committee wrote down on a slip of paper the names of those gentlemen he desired to see elected; and the chairman, on counting the votes up, found that two of the old officers, Dr. Woodward and another, had been rejected. The chairman also asserted that this result had been arrived at without preconcert. We think it is to be much regretted that the sick poor of Worcester are to be deprived of the services of Dr. Woodward, and notably as it is evident that a very large proportion of the poor subscribers have great confidence in the professional skill and kindness of heart exhibited by him, as was stated by several gentlemen in succession; and, although an effort was made subsequently to explain his rejection, it was abundantly evident that personal pique and prejudice had largely tended to such result. It will be most unfortunate to the well working of these valuable institutions if a similar mode of election should be followed, for nothing tends so readily to break down the confidence of the poorer classes, for whose benefit they are established, as the reason to believe that those who undertake their management permit personal feeling to operate in the election or rejection of the medical officers, with whom, after all, mainly rests their ultimate success.

#### STRYCHNIA LOZENGES.

AN inquest was held this week before the Manchester coroner on the body of John M. Guinness, three years of age. The child was troubled with worms, and his mother went to a druggist for some worm-lozenges. The lozenges were given to the child, who died in half an hour. The deceased had a powder as well as a lozenge. This powder consisted of santonine and a grain of calomel. The medical evidence showed that the child died from the administration of strychnine. The jury found a verdict of "Accidental poisoning".

#### QUACKS IN PARIS.

AT a meeting of the Society of Surgery of Paris on January 31st, M. Le Fort presented a patient with cancer of the right breast, who had suffered considerably under the treatment of a Count Charles De Bruc, described as "Doctor of the Faculties of Paris, London, Geneva, and Modena; Member of the Medical Institute of Paris; and Director for ten years of the *Gazette Médicale des Familles*, a journal for patients affected with rebellious and incurable diseases; inventor of an elixir curative of cancer". Count De Bruc had passed no examination at Paris, but had been authorised by Napoleon the Third to practise medicine there. M. Le Fort profited by this occasion to point out the dangers of the existing law, which permits a minister to give such authorisations, and to invest a foreign physician with the right of life and death over patients. The Society voted that this communication should be separately printed and sent to the members of the Legislative Assembly. Count De Bruc is not, however, so far as we can find, a member of any English faculty, any more than he is of the French; and the error here appears to consist in the fact that the minister did not consult his Medical Council, which includes representatives of the French faculties, before granting the permission. They would have known how to investigate the credentials of the Count, and their intervention would always suffice to prevent irregularities.

### SCOTLAND.

DR. CLARK, Public Analyst for Paisley, reported to the police commissioners at their last meeting, that no foods or drugs had been sent to him for inspection during the past year.

THE weather in Scotland last week continued very wet: many of the rivers were in flood, as they have been more or less all the winter. The rainfall of the past two months at Dumfries exceeded sixteen inches, and the gauges at Greenock indicate a fall in January alone of

twelve inches and a half. Up to the end of the first week of this month, there had been only one entirely dry day (Christmas Day), at Greenock since November 28th.

#### GLASGOW LODGING-HOUSE ASSOCIATION.

THE members of the Glasgow Lodging-house Association have done a good work, and are crowning it with an act of great generosity. They have agreed to dissolve the Society, as the work which it had undertaken and proceeded with, namely, that of providing lodging-houses for the working classes, is now carried on by the City Improvement Trust. After repaying the debenture-holders their contributions, the surplus funds left in the Society's hands amount to nearly £10,000, and this sum they have determined to hand over to the managers of the Glasgow Royal Infirmary.

#### CHARGE OF MURDER AGAINST A LUNATIC.

AT the Edinburgh High Court of Justiciary last week, Robert Fortune, lately a patient in the Haddingtonshire District Asylum, was charged with the crime of murder. The indictment set forth that on January 10th, in an outhouse of the Asylum, the prisoner attacked another patient of the Asylum, and struck him with a hedge-knife on the head, fracturing his skull and lacerating the brain, in consequence of which he died immediately afterwards. The prisoner had been for three years an inmate of the Asylum: when first taken there, he was considered a dangerous lunatic, but for the last two years and a half he had been most peaceably conducted, and was in the habit of going out to work with the other patients. The medical superintendent, Dr. Howden, deposed that he had known the prisoner for some years, and that he was quite unfit to instruct counsel for his defence; his whole mind was weakened, and he was looked upon as a confirmed lunatic. He was not able to understand the nature of the charge against him, so as to give any rational instructions for his defence; anything he might say in reply to questions could not be relied upon. Witness was satisfied that there was no pretence on the part of the prisoner. The prisoner had never shown himself violent with the officials of the Asylum. Dr. Arthur Mitchell, Commissioner in Lunacy, gave similar evidence, and the prisoner was ordered to be kept in the general prison at Perth until Her Majesty's pleasure be known.

#### THE HEALTH OF GLASGOW.

THE last fortnightly report of the Medical Officer for Glasgow, Dr. Russell, shows that during that period there had been 569 deaths registered, or at the rate of 27 per 1,000 *per annum*. The deaths from pulmonary disease alone numbered 260, or 46 per cent. of the whole mortality. This was the highest death-rate from pulmonary disease since the spring of 1876. A case of small-pox had been removed from the medical wards of the Royal Infirmary. The patient had been five weeks under treatment, so that the poison must have reached him there, though how did not appear. He was a Highlandman, and imperfectly vaccinated. Dr. Russell proposed that he should be instructed to communicate to inspectors of the poor and others in charge of large institutions an expression of the important assistance they would afford by a systematic inspection and vaccination of the inmates under their care.

#### REGISTRAR-GENERAL'S REPORT FOR SCOTLAND.

THE Registrar-General's returns showing the births, deaths, and marriages registered in Scotland during the last quarter of 1876 have just appeared. In them it is shown that during the period named there were registered 30,538 births, 17,093 deaths, and 7,546 marriages, figures from which it may be gathered that the births during the quarter were unusually numerous, the death-rate was far lower than that experienced in any one of the last ten years, and the marriage-rate was a little higher than usual. We observe that the illegitimate births amount to 8.52 per cent. of the whole number, and that, as usual, the rates of different counties differ very much from one another. Thus, Wigtonshire, which is usually very high up, again heads the list with a



percentage of 17.7; Elgin comes next with 16.5; Banff with 15.5; and Berwick with 15 per cent. At the other end of the list, the lowest number is found in Orkney, where only one per cent. of the births are illegitimate; the next lowest being Ross and Cromarty with 3.8, Bute with 4.2, and Shetland with 4.6 per cent. The remaining counties are all over 5. The average death-rate of the whole of Scotland was 19.4 per 1,000; that of the fourth quarter of the ten years immediately preceding being 22.25 per 1,000, the salubrity of the latter end of 1876 being thus brought out in a very striking manner. In England, the death-rate for these months was 20.1, where there is also a considerable fall, the mean rate being 22.1.

## IRELAND.

DURING the week ending February 3rd, there were registered in Dublin two deaths from small-pox, one of which took place in the Mater Misericordiæ Hospital, and the other in Cork Street Fever Hospital. In the former, the patient had not been vaccinated.

THE fifth of the series of scientific lectures at present being delivered at the King and Queen's College of Physicians, will be given next Monday the 19th instant, by Dr. Foot, who has chosen for his subject "Tuberculosis".

MR. GIBSON, having been appointed Attorney-General for Ireland, of necessity resigned his seat as representative of the University of Dublin in Parliament, and has been re-elected without opposition.

AT the monthly examination of the licenses in Medicine and Midwifery, held this week at the King and Queen's College of Physicians, among the candidates was Mrs. Hoggan, M.D. of Zürich (1870). We hear that another lady will be examined next month for the license in Medicine of the College.

### PHARMACEUTICAL SOCIETY OF IRELAND.

AT the February monthly meeting of the Council of this Society, held at the College of Physicians, it was resolved that special examinations be held in March and September for candidates who have been previously rejected, and who are entitled to be re-examined up to October 1st, 1877. March 28th and September 26th are the days fixed for the examinations.

### NORTH DUBLIN UNION.

AT a meeting of the guardians of this Union, held on the 7th instant, the question of increasing the salaries of the medical officers by £20 each yearly, as recommended by a committee lately appointed to report on the matter, was under consideration, when it was determined that they should receive the amount recommended. This resolution was carried by a majority of two votes.

### DR. MARION SIMS.

AT a meeting of the Obstetrical Society of Dublin, Dr. Marion Sims was elected an honorary member of the Society. Dr. Sims was proposed in very complimentary terms by Dr. Kidd, President of the Royal College of Surgeons, and seconded by Dr. Lombe Atthill, Master of the Rotunda Lying-in Hospital.

### ROYAL COLLEGE OF SURGEONS.

THE question of doubling the tenure of office of the president, allowing him to retain office for two years instead of one, as at present, has lately been mooted, and it is stated that a meeting of the fellows of the College will shortly be held to discuss the matter. We believe, however, that the agitation which has arisen cannot succeed, that there is nothing to be gained by substituting two years instead of one for the president's term of office, and lastly, that it is contrary to the by-laws and charter of the College.

## THE LATE SIR WM. FERGUSSON, BART.

THE news of the death of Sir William Fergusson has been received throughout the profession with deep and universal regret. It was not unexpected, since the serious nature of his illness has for some time precluded any hope of other than a speedily fatal result. As the President of this Association on the occasion of its last great meeting in London, as a surgeon of the highest eminence and of representative character, and as a man who possessed in an unusual degree the charm of goodness and of gentleness, Sir William Fergusson was peculiarly endeared to all the members of the British Medical Association.

We shall next week present our readers with a notice of his life and works, accompanied with a portrait of the great surgeon.

The remains of Sir William Fergusson were removed to Scotland for the purpose of interment on Wednesday evening last. The hearse was followed by a long string of carriages of the leading members of the profession and of personal friends. There were present at the Euston Station, to do honour to his memory, a great concourse of medical men, including nearly all his colleagues at King's College, a large number of the students of the College, and many well known members of the profession.

## HER MAJESTY THE QUEEN.

THE reappearance of Her Majesty the Queen in public life at the opening of Parliament has been hailed with great satisfaction by all classes. It must, however, we fear, be accepted as inevitable that, however much the Queen may desire to gratify the loyal wish of her subjects by taking part in State ceremonials and discharging the social duties of her exalted position, the physical conditions of Her Majesty's health are such as to preclude the possibility of her enduring the heated atmosphere of crowded rooms or the fatigue of prolonged ceremonials. The prostration which they induce is such as many persons suffer on sea-voyages; and the discharge of her onerous political and official duties taxes Her Majesty's strength to the utmost.

## THE VACANT CHAIR AT KING'S COLLEGE.

WITH the death of Sir William Fergusson, King's College loses the influence of his great *prestige* and far-reaching reputation as an operator and a teacher of operative surgery. This is a loss that at the present time, with the severe and successful competition of the great schools and colleges of the metropolis, it can ill afford to bear, without making some unusual effort to give to its surgical staff that brilliancy and fame which only a reputation of the foremost class can bestow, and which Liston brought to its sister college, and Fergusson to King's. It is understood to be the desire of some of the most influential persons at the College and Hospital to offer the post vacated by the death of Sir William Fergusson to Mr. Lister, the great surgeon of the northern metropolis. No doubt such a nomination, if Mr. Lister would accept it, would once more revive the old glories of King's, and make it again a centre to which the world would look for the most modern and progressive developments of the art and science of modern surgery, and an attraction to the students of this and of all other European and Transatlantic Schools; for Mr. Lister's science and practice is now the most notable circumstance in British, or indeed in European, surgery, and forms the theme of lecture, discussion, and experiment in every great hospital and school throughout the world. There could be no doubt of the enthusiastic reception which this accomplished master, trained in the London schools, would receive from the profession in this country, in bringing to the metropolis the well won fame which he has achieved to his own honour, and the great fame of British surgery. No doubt, however, some of the friends of the existing able members of the King's College Hospital staff would not willingly see them lose an opportunity of promotion; and it is far from certain that Mr. Lister would be willing to relinquish his great position in Edinburgh, even for the fame and fortune, and large field of labour which would be open to

him in London. The successor to Sir William Fergusson in due order of seniority would be Mr. John Wood, of whose accomplishments as a surgeon our readers are well aware.

### ARMY MEDICAL SCHOOL, NETLEY.

THE thirty-third Session of the Army Medical School at Netley was brought to a close on Monday, February 5th. It had been attended by sixty-six candidates for the three services; namely, thirty-three for the army, twenty for the navy, and thirteen for the Indian service. After a severe and well-sustained competitive examination, extending over six days, on the several subjects taught at the school, the Herbert prize was gained by Dr. James Moorhead, and the Sir Ranald Martin memorial medal was won by the same gentleman.

This is the first time that this medal has been the subject of competition; and the Secretary of State for War had signified his intention of being present on this occasion, but so much business required his presence in London just before the opening of Parliament, that Mr. Hardy regretted he could not find time to come to Netley. Under these circumstances, it was finally arranged that Major-General Sir Garnet Wolseley, G.C., M.G., K.C.B., a member of the Council of India, should attend the meeting as the representative of Lord Salisbury, and give away the medal to the successful competitor. He was accompanied to Netley by Sir William Muir, K.C.B., Director-General of the Army Medical Department; Sir Joseph Fayrer, K.C.S.I., Physician to the Secretary of State for India in Council, and the successor of the late Sir R. Martin as a member of the senate of the school. The two sons of the late Sir Ranald Martin were also present, as well as an unusual number of officers, both military and medical, in addition to the professors and staff of the school and hospital.

Before giving the medal to Dr. Moorhead, Sir Garnet Wolseley delivered an exhaustive and well considered address to the candidates, the main object of which was to show that much of the success of a man in life and in his profession really depended on his own individual exertions; that it was necessary to work hard to ensure success, and to determine courageously to do one's duty, however irksome and distasteful that duty might be. He had attributed his own success in life to the carrying out of these principles; and he had no hesitation in attributing the failures in life, alike in civil and in military life, to an absence of this individual exertion, of this courageous determination and firm resolution to succeed. Finally, he especially recognised how much the sanitary sciences were now being studied. In civil and in military life, these sciences had become an essential subject of study; and in the medical training for each of the three services, the subject of hygiene and the practical application of sanitary science to prevention of diseases in armies and fleets, was one of the most important subjects taught at this school. He then especially noted the active part which the late Sir Ranald Martin took in advancing the science of tropical medicine, and promoting sanitary reform in India and at home, with the great result of improving the health and diminishing the death-rate in the army of India. The medical officers, also, of all the services owe to his memory a debt of gratitude for the disinterested manner in which he devoted his time and energies to promote their interests, inasmuch as it was mainly through his efforts that the question of admitting medical officers of the three services to the honours of the Bath was brought before Parliament. He then presented the medal to Dr. Moorhead, who had won it with 1,075 marks out of a possible number of 1,100.

There are now two prizes awarded each Session at the Army Medical School, namely (1), the Herbert Prize, and (2) the Martin Memorial Medal; and it may be of interest to mention the origin of these prizes.

(1). The Herbert Prize has now been the subject of competition at the end of every Session since August 1858, when the first competition took place. The prize had its origin in a residue of the Herbert Memorial Fund, raised by the nation to commemorate that great statesman, Lord Herbert of Lea. This residue was invested by the Committee of that fund in consols, and so produces a sum half yearly amounting nearly to twenty pounds; and it was decided, with the sanction of the Secretary of State for War, to give this as a single prize to the gentleman who should prove himself the best man in the conjoint examinations at London and Netley belonging to either of the three services, on condition that the general conduct and character of the candidate obtaining the greatest number of marks should be satisfactory. At the conclusion of the Session in August 1868, the first award of the Herbert Prize was made, and the following table shows—(1) the names, (2) the places of education, and (3) the branch of the

public service of the several successful competitors for the Herbert Prize since that date.

Name.	Place of Education.	Service.
Cunningham, D. D.	Edinburgh University .. ..	Indian
Downie, K. Mackenzie	.. ..	..
Calthrop, Christopher W.	Charing Cross Hospital, London ..	..
Duke, Oliver T.	Guy's Hospital, London .. ..	..
McConnell, J. E. P.	St. George's Hospital, London ..	..
Crombie, Alex.	Edinburgh University .. ..	Army
Cottle, E. W.	Oxford, and St. George's, London ..	..
Murphy, W.	Royal College of Surgeons, Dublin ..	Indian
Breton, S.	Dublin, London, and Paris .. ..	..
Lanbridge, G. T.	Bath, and St. Bartholomew's, London ..	Army
Leckler, H. M.	Aberdeen and London .. ..	Indian
Harrison, C. E.	St. Bartholomew's, London .. ..	Army (Guards)
Ranking, G. S. A.	Cambridge and London .. ..	Indian
Weir, P. A.	Aberdeen, & Guy's Hospital, London ..	..
Tomes, A.	Middlesex Hospital, London .. ..	..
Moorhead, James	Glasgow .. ..	..

(2). The Martin Memorial Medal had its origin in the desire to commemorate the late Sir Ranald Martin, C.B., F.R.S., a member of the Senate of the Army Medical School, who died on November 27th, 1874. For this purpose, a public meeting was held in Willis's Rooms, London, on May 25th, of the same year, to take into consideration the best means of perpetuating his memory, and the great services he rendered to his country. A full report of this meeting, and of the resolutions there adopted, appeared at the time in the pages of this JOURNAL; and the Ranald Martin Memorial Prize had its origin in the following resolution, there and then unanimously adopted, at the instance of Sir William Muir and Sir William Fergusson—"That this meeting is of opinion, that the most fitting memorial of the services of one so long associated with the advancement of military medicine, will be the foundation of a prize, to be called 'The Ranald Martin Memorial Prize', to be competed for in the Army Medical School by the candidates for commissions in the medical services of the British and Indian Armies and the Royal Navy".

## HOSPITAL AND DISPENSARY MANAGEMENT.

### THE SOUTHAMPTON DISPENSARY.

UNUSUAL importance attached to the annual meeting of the Southampton Dispensary, which was held on the 25th ultimo, in consequence of the proposal to open a Provident Branch in connection with the institution. It appears that some months ago the Committee determined to adopt this course, and at the annual meeting the rules had to be altered so as to admit of the establishment of this new Branch. The Chairman, on behalf of the Committee, proposed the following rule: "The Committee shall have power to refuse admission to any patient whom they may deem unsuitable. In every such case the recommending governor or subscriber shall be informed of the circumstance, and shall have another letter of recommendation in lieu of the one cancelled." But it is obvious to all who are acquainted with the subject, that such a mild measure as this would not suffice to exclude any unsuitable applicants who are now getting the benefit of the charity.

A Provident Branch cannot compete with a Free Branch, unless the charitable relief be placed under some strict limitation. This view was ably advocated by Dr. Griffin, and the insufficiency of the proposal which had been made by the Committee clearly pointed out. "The resolution," he said, "encouraged an indiscriminate granting of free letters, for it not only took the responsibility of giving letters only to deserving objects from the shoulders of the governors and threw it upon the Committee, but it actually rewarded a governor who bestowed one on an unworthy object with a fresh letter. Next, to allow the decision to rest with the Committee was simply a farce, for, first, they only met once a quarter; secondly, it was impossible for them to investigate the five hundred or six hundred cases that occurred each quarter; and thirdly, they would not inquire about one of them unless a complaint were made by some one, and who was to make it except the medical officers, who certainly would not undertake so invidious a task? Supposing it was left to the weekly committee, it would have fifty cases each week to investigate, which would be impossible for the members of it properly to accomplish with their ordinary work. But, supposing they were to undertake the investigation, the Committee would have to draw a line as a standard, and thus it would be doing in secret a gigantic work which the governors had not the honesty to do publicly. But, on the other hand, if a limit were fixed with exceptions to meet deserving cases, then the public at once knew that, as a rule, they would not be able to obtain letters if their wages



were above this, and consequently would not apply, although schemers doubtless would still try and get letters." Dr. Griffin then proceeded to compare the reforms which have been introduced at Shrewsbury with those which it is proposed to adopt at Southampton, and showed how much benefit might be anticipated from them. After reading his address, we are glad to find that the meeting went along with him, and carried the amendment which he proposed. It was to the following effect: "That no governor's letter shall be given to a patient the head of whose family is at the time in receipt of more than twenty-one shillings a week, unless the head shall have more than three children under fourteen years of age, or more than four persons entirely dependent upon him; then the limit shall be twenty-five shillings, but the weekly Provident Committee shall have power to admit any case they may deem to be deserving." As a matter of fact, the attempts that have been made to combine a Free and a Provident Dispensary in one institution have not been very successful; and to have opened the Provident Branch of the Southampton Dispensary, under such a rule as the Committee proposed, would have been to condemn it to certain failure. The Committee appear to be sincerely desirous of promoting the Provident system, but they feel a difficulty in dealing with the legacies and benefactions for which they are in a manner trustees. This difficulty has been felt elsewhere. But we believe that, at some of those dispensaries which have been converted from the free to the provident principle, similar trust-funds have been employed to promote the new order of things. As in the case of educational endowments, it seems only reasonable that the pious purposes of benefactors to hospitals and dispensaries should be reviewed from time to time, and, after careful deliberation, adapted to the altered state of society.

**THE ROYAL PORTSMOUTH, PORTSEA, AND GOSPORT HOSPITAL.**  
This institution appears to be feeling its way towards some of those reforms which are now being made at so many hospitals throughout the country. At the annual meeting, which was held on the 16th ultimo, Dr. Axford made some remarks on the desirability of reducing the number of letters of recommendation that are issued to each subscriber, of exercising some check upon the out-patients, as well as discontinuing the home visitation of patients—a practice which some even of the London hospitals carried on until lately, but which they have now all abandoned. "He could not," he said, "regard it as any breach of faith to make a change in the number of tickets given for a guinea subscription. It was not charity for a man to subscribe that he might save expense by doctoring his servants at the institution. The payment of £60 to a medical man for visiting patients at their homes was to him a most singular item. Parish doctors were not paid half enough, but he did not see why a hospital should do their work. Promiscuous charity rendered people improvident. He rejoiced thoroughly in an increase of the in-patient, but not in an increase in the out-patient, department. He illustrated the abuse that was continually being made of the out-patient system, and advocated the adoption of some means, as in London and large provincial towns, of weeding out patients who had no right to claim the advantages of the hospital." Dr. Kealy also gave notice of his intention to propose that the medical staff should be divided into physicians and surgeons, each to have their own special department. It is strange that at such an important institution this has not been done ere now.

#### THE CHARITY ORGANISATION SOCIETY.

THE following are extracts from reports of the local Branches of the Charity Organisation Society.

**Southampton.**—"The Committee having a firm belief in the lasting harm which results to the poor from the lax administration of out-door medical relief, both by the Poor-law authorities and the governors of medical charities, gladly took part in a conference with deputies from local medical charities and the Medical Society. They have the gratification to add, that they believe shortly the governors of some of these institutions will be asked to add the provident system to the existing one. They trust the general public will cordially support any well considered step in this direction."

**Shrewsbury.**—"Each year's experience affords your Committee fresh encouragement not to relax their efforts to accomplish the two main objects of the Society—'the development of self-dependence and the suppression of mendicity'. It is now two years since the most important scheme yet originated by the Society for the benefit of the working classes was suggested; viz., that the subscribers of the dispensary should substitute benefit members' payments for free recommendations. Objections were immediately raised that it was harsh and unfair to make those whose scanty earnings could barely support their families pay for what others would or were willing to bestow on them. The working of the scheme, which has been in operation just six months, has set all

these objections at rest, and proves that the working classes do appreciate all efforts made for their advantage, and respond to them in a spirit of self-dependence, cheerfully and regularly making whatever payments may be required of them."

#### BATTERSEA PROVIDENT DISPENSARY.

In their report for 1875, the Battersea Committee expressed their satisfaction at learning "that it is proposed to establish a provident dispensary in Battersea, which will have its head-quarters under the same roof as the Charity Organisation Office, though its affairs will be managed by a different committee".

The first report has lately been issued, and shows very gratifying results. After twenty-three years as a charitable institution, the Battersea Dispensary was reorganised and entered on its work as a provident dispensary in January 1876. "At the end of June, 2,479 benefit members had been entered upon the books, and, at the end of December, the number had increased to 3,634; but it may be concluded that a considerable proportion of these entries is not to be regarded as permanent. Many persons have, doubtless, joined in time of sickness, who with returning health have allowed their membership to lapse." "During the year, nearly 2,000 cases of illness have received help from the medical officers. About 7,400 attendances have been made by the sick at the dispensary, and nearly 2,700 visits have been paid to the houses of patients who were unable to quit their homes." Figures are then quoted to show that the provident dispensary has "afforded more relief to the suffering, and has also given a more appropriate acknowledgment to the medical officers than the old dispensary had done".

## ASSOCIATION INTELLIGENCE.

### STAFFORDSHIRE BRANCH.

THE second ordinary meeting of the Session will be held at the London and North Western Hotel, Stafford, on Thursday, February 22nd, 1877, at 2.30 P.M.

VINCENT JACKSON, Wolverhampton. } *Honorary Secretaries.*  
RALPH GOODALL, Silverdale. }  
Wolverhampton, February 6th, 1877.

### NORTH WALES BRANCH.

THE intermediate meeting of this Branch will be held at the Wynnstay Arms Hotel, Wrexham, on Tuesday, February 27th, at 1 P.M.: JOHN RICHARDS, Esq., Bangor, President.

Mr. R. W. J. Evans will read a paper on the Use and Abuse of Stimulants in the Treatment of Disease.

Dinner at 3.30 P.M. Tickets, 5s., exclusive of wine.

T. EYTON JONES, M.D., *Honorary Secretary.*

Wrexham, February 9th, 1877.

### BATH AND BRISTOL BRANCH.

THE fourth ordinary meeting of the Session will be held at the York House, Bath, on Thursday evening, March 1st: H. F. A. GOODRIDGE, M.D., President.

R. S. FOWLER, Bath. } *Honorary Secretaries.*  
E. C. BOARD, Clifton. }

Bath, February 7th, 1877.

### SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT MEETINGS.

THE next meeting will be held at the Crystal Palace Hotel, Upper Norwood, on March 8th, 1877, at 4 P.M.; Dr. JEAFFRESON in the Chair.

Dinner will be provided at 6 P.M. precisely. Charge, 6s. 6d., exclusive of wine.

The following communications are promised.

1. Dr. Moxon: Observations on the Use of Alcohol.
2. Mr. Maunder will Demonstrate Roussel's Transfusion on a Living Subject.
3. Dr. Dalton: Notes of a Case of Acute Mania following Scarlet Fever.
4. Dr. Miller: On a Case of Ulceration of the Œsophagus.
5. Mr. H. Taylor (Guildford): A Case of Subcutaneous Osteotomy.
6. Mr. Sidney Turner will exhibit an Apparatus for Contracted Tendon.

JOHN H. GALTON, M.D. Lond., *Honorary Secretary.*  
Woodside, Anerley Road, S.E., February 12th, 1877.

## CORRESPONDENCE.

## THE CASE OF FREDERICK TREADAWAY.

SIR,—I have been led, by the perusal of some papers which have been submitted to me, to consider the medical evidence which was given at the trial of Frederick Treadaway for the murder of Mr. John Collins (the Pimlico Murder, as it has been called), and which seems to be well worthy of a little criticism.

The defence set up by Mr. Besley was "that of a person admittedly sane before the act and admittedly sane after committing it"..... "He was not founding the defence on the ground of epileptic fits, but he did put it on the ground of what he called epileptic seizure, or, as it was called, epileptic vertigo, an expression distinguished from epileptic fits".

The great aunt of the prisoner gave evidence of some mental and nervous disease having displayed itself in the family, the nearest of which was that of an aunt who had epileptic fits.

The father of the prisoner gave evidence that, in the summer of 1875, while walking with his son, "I felt him stagger against me. I asked him what was the matter. He said something which I did not understand, and I noticed his eyes appearing as if the sight was gone. He fainted and lost all muscular power. I dragged him into a doorway, and rubbed his back and opened and rubbed his hands. He seemed quite unconscious of what I was doing, but did not seem to speak. He remained in that state nearly twenty minutes, trembled very much and shook violently, turned quite pale, and then afterwards gradually recovered".

This is the only fit of which there was evidence previous to the murder, although, in 1873, "he once came home saying he had had a fit in a doctor's shop".

The fit described by the father seems more like syncope than an epileptic attack; and if, notwithstanding the father's imperfect description, it had been an epileptic attack, it certainly is remarkable that there was no repetition of it.

In the dock, during the trial, the prisoner had a convulsive attack, excited by an emotional incident; but it is impossible to form any definite judgment of the nature of this attack from the medical descriptions given of it. "There was nothing in the circumstances inconsistent with an ordinary fainting fit", says Dr. Hughes Bennett. "A fit of an epileptic character, combined with symptoms which belong to hysteria", says Dr. Rhys Williams. "The chief symptoms of yesterday's attack were those referring to an hysterical condition, the graver of those symptoms having an epileptic character", says Mr. Gibson, the surgeon of Newgate. Strange, that none of these doctors who saw this fit in the dock could give precise evidence as to whether it was or was not an epileptic fit; being the first ever medically observed, if it were one. If it were an attack of hysterics, caused by the distress of some one whom the prisoner loved, that would be a matter of very different significance to a real epileptic fit; for the defence, founded upon the theory that the prisoner committed the murder in the unconsciousness of epileptic vertigo, was defective in any trustworthy evidence that the prisoner had ever had a single epileptic seizure, either in the form of a fit or of vertigo. The evidence of Dr. Smiles, the surgeon of Clerkenwell House of Detention, more clearly indicates hysteria, that is to say, a state of nervous disturbance, which will not fit in with the theory of the defence.

Dr. Smiles said that the prisoner had been under his observation from the 18th December to the 15th of January last: "He was in good health, talked rationally, and witness did not see in him any signs of an epileptic form, nor did he hear of anything of the kind. He saw nothing about him indicating insanity, though there was a good deal of hysteria."

It seems to have been somewhat lost sight of that epilepsy is a recurring disease; and that, if the prisoner had had a real fit of it eighteen months ago, the probability is that he would have been known to have had many other fits since that time; and that one doubtful fit in July 1875, another fit propounded as the occasion of the murder in December 1876, and a third occurring in the dock in February 1877, as the only supposed attacks, do not in any way accord with the known history of this disease.

But allow, for the sake of argument, and even as an admissible supposition for the defence, that the prisoner might have had attacks of epileptic vertigo which had not been observed, let us endeavour to discover what relation the facts of the murder bear to the theory of the defence.

Dr. Hughes Bennett "had seen the prisoner on five occasions, and during those visits he did not discover any unhealthy condition". He said that "since his fainting fit in the chemist's shop, he had had six or

eight seizures of a similar kind, with frequent and violent headaches and nervous pains". "He was very depressed and melancholy"; "brooding over his troubles, he conceived the idea of committing suicide". "He spoke, on the morning in question, of a giddiness in his head, and a black cloud coming over him". This was the account which the prisoner gave of himself to Dr. Bennett after the murder. "The result of all those symptoms suggested to witness the existence of epileptic vertigo". They might have suggested several other things. But epileptic vertigo being the disease which really was suggested, we find Dr. Rhys Williams of Bethlehem Hospital testifying that "the medical profession certainly recognised epileptic vertigo as a form of mental disease", which we venture to doubt. "He had seen persons attacked with epileptic vertigo, and unconscious of what they were doing. All that such persons did was automatically: they were mere machines for the time, and, after the attack, there was an impression of their minds as to something they had done, but they could not tell what. The circumstances in this case corresponded with cases in his practice, and it was undoubtedly one of epileptic vertigo."

Mr. Richards of Hanwell "agreed with Dr. Rhys Williams, that a person afflicted with epileptic vertigo, alternating with epilepsy, was unconscious of what he did". This alternation was not suggested.

The defence, therefore, in plain words, is that the prisoner killed John Collins during a seizure of epileptic vertigo, which caused him to act automatically or as a mere machine, not knowing what he did. But the prisoner had killed John Collins in the following manner. He had shot him dead with a revolver, after a long interview, in which his conversation and behaviour had been rational and tranquil. When asked immediately afterwards by the wife, what the report of the pistol meant, he said he did not know. Then he shot the wife, not killing her. She screamed murder, and he tried to stop her mouth with one hand and strangle her with the other. Then he beat her head on the pavement several times. Then he escaped from her, opening the door himself, and running quickly, holding his hat on with one hand and with the pistol concealed under his coat in the other hand. If this be automatic action, like that of a mere machine, Dr. Rhys Williams's evidence in the witness-box must have been automatic, and the composition of this criticism is automatic likewise.

As for not knowing what he had done, the prisoner disguised himself by shaving off his whiskers and putting on spectacles; bought a newspaper "to read about the affair, but it was all wrong, and he explained how wrong"; and his unconsciousness of what he had done appears to have been on a par with his automatic action in doing it.

There really was no testimony worth the name of evidence that the prisoner at any time had suffered from the disease which was suggested to the mind of Dr. Bennett to explain and excuse the murder; and if this disease had existed, the circumstances of the murder were such as to exclude the possibility that the disease was the cause or the occasion of the murder.

The case is entirely different from that of Drant, who was not only proved to have been an epileptic, but in whom the homicide was proved to have taken place in a paroxysm of epileptic mania.

But, notwithstanding what Dr. Rhys Williams is reported to have said, neither epilepsy nor epileptic vertigo is a form of mental disease. They are bodily diseases with which mental symptoms are very frequently associated; and, in order to confer irresponsibility for crime, this association must be distinctly proved. It would be a very cruel and unjust judgment upon a vast number of epileptics who are not insane to deny and refuse to them, during the intervals of their malady, the full validity and responsibility of their actions; and to excuse epileptic criminals who have shown no symptoms of insanity, and whose crimes have no apparent connection with this disease, would be one method of passing such a judgment.—I am, sir, your obedient servant,

39, Wimpole Street, Feb. 1877. JOHN CHARLES BUCKNILL.

## THE CLINICAL SOCIETY: OSTEOTOMY.

SIR,—I am sorry that Mr. Adams should feel aggrieved by any statement at the Clinical Society attributed to me; but I cannot charge myself with having said that three out of the twenty-two cases collated by him proved fatal; the number I mentioned was two. Mr. Adams may easily convince himself of this fact by considering the percentage which I also gave, and which is correctly reported as 9.9; whereas, had I put the number of fatal cases at three, I must have estimated the mortality at 13.7 per cent.

I made the statement above epitomised from a perfectly distinct recollection of Mr. Adams's interesting paper at the Royal Medical and Chirurgical Society; nor do I see any reason to modify it. "The death accelerated by chronic suppuration following the operation in



another case in which the patient died eight months afterwards with symptoms of kidney-disease, with albuminuria as well as tubercular deposit in the lungs" must be attributed to the operation. Mr. Adams is, I am sure, too good a surgeon to perform osteotomy on a patient suffering from both kidney-disease and pulmonary tuberculosis; therefore, these maladies must be considered, in this case as they are in many others, the natural result and termination of "chronic suppuration following the operation".

In saying this, I beg to assure Mr. Adams that it is by no means my desire to throw any doubt on the value of osteotomy, an operation whose adoption in England he has done much to promote, and which I myself have performed antiseptically with perfect success. Every novel method and procedure must for a time remain *sub judice*; hence, it is necessary that statistics of mortality should be carefully tested.

RICHARD BARWELL.

32, George Street, Hanover Square, 13th February, 1877.

### ANIMAL VACCINATION.

SIR,—I am glad to see that the question of animal vaccination is again engaging the attention of the medical profession. It is a subject of vital importance to the country if the vaccination laws are to be rigidly enforced, and one which will reward the most full and ample discussion.

In the Privy Council Report for 1869, a report by Dr. Seaton appeared in which the adoption of calf-lymph was condemned on the grounds:

1. That apparently even able and painstaking operators may find it impossible to transmit successive vaccination from calf to calf without very frequent recurrence of failures and interruptions;

2. That the transference of infection from the calf to the human subject, even under the most favourable circumstances, *i.e.*, by experienced operators, and with lancet direct from calf to arm, has in it such risks of failure that, for instance, at Rotterdam, the proportion of unsuccess was nearly twenty times as great as in the ordinary arm-to-arm vaccination;

3. That the calf-lymph, as compared with ordinary lymph, is peculiarly apt to spoil with keeping, and in the form of tube preserved lymph can so little be relied upon that the Rotterdam establishment, in distributing supplies of lymph, now uses only lymph from the human subject.

Now, I have endeavoured to show in a paper (Questions connected with Vaccination), published in the *St. George's Hospital Reports* for the year 1875, that these reasons of Dr. Seaton's were, even at that time, no longer valid; and the evidence which has since been accumulated by Dr. Warlomont of Brussels, and others, only confirms the conclusions at which I had arrived during a short visit to the hospitals of St. Petersburg. In the large Foundling Hospital of that city, with its infant population of eight hundred inmates and a daily average of two hundred vaccinations, lymph has been transmitted from calf to calf through a series of years without much difficulty, and has been used side by side with Jennerian lymph with at least equal success—the unsuccessful cases of primary vaccination having, according to Dr. Frobelius, been reduced to 2 per cent.

The storing and transmitting of animal lymph presents greater difficulties, but they seem to have been successfully overcome by Dr. Warlomont.

I cannot help feeling, therefore, that the question of using calf-lymph lies unfairly under the ban of official condemnation.

The whole matter is ripe for reconsideration, and the Government should take it up. I most fully agree with the remarks of Dr. Greene in his very interesting paper, that it should not be left to individual effort, and that much mischief may arise if it be so left.

The ordinary demands for primary vaccination could readily be met by Jennerian lymph; it is only in revaccination panics, such as now exist, that the difficulty and danger arise. Why should not this risk be met by the unlimited lymph-supply which animal vaccination would afford? Dr. Blanc estimated that five hundred persons could be vaccinated from a single heifer; but it is certainly understated, for Dr. Frobelius mentions having made one hundred insertions, all successful, from five vesicles, and it is not uncommon to find from sixty to one hundred and twenty vesicles on a single calf.

Of the advantages of having a lymph-supply free from all suspicion of taint, I will say nothing now, though these would be incalculable at a time when the growing distrust of human lymph threatens to place many difficulties in the way of the sanitarian, and to interfere very seriously with the proper enforcement of the vaccination laws. I think, however, that the present is a fitting time to press the consideration of the question on the Government; and, if it were taken up by

the different Branches throughout the country, a mass of evidence would soon be accumulated on the subject. Animal vaccination would receive the attention which it undoubtedly merits, and England would assume her proper place in the race of sanitary progress.—I am, etc.,

EDWARD T. WILSON, M.B., F.R.C.P.,  
Physician to the Cheltenham General Hospital.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE Festiniog Guardians have resolved to apply to the Local Government Board for urban powers in respect to the parishes of Festiniog, Llanfihangel-y-traethau, and Llandwnog.

AT Market Harborough, a resolution has been passed that it is expedient that it and part of Great Bowden and Little Bowden should be constituted a Local Government District. A local inquiry has been held, at which evidence was given both for and against it; but the decision of the Local Government Board will not, of course, be known for some little time.

### METROPOLITAN EVICTIONS.

ON the twenty-third of last month, the Honorary Secretary of the St. Luke's Watch Committee sent a memorial to the Home Secretary respecting the small number of single rooms in the Whitecross Street scheme of the Metropolitan Board of Works, which, in the opinion of the Committee, is utterly inadequate for the number of costermongers and others who will be evicted when it is carried out. A letter in reply has been received, stating that the scheme referred to had not as yet been forwarded by the Metropolitan Board of Works, but Mr. Cross would be glad to receive a written statement of the views of the Committee before making any appointment for the prepared deputation. A document has consequently been proposed, in which the memorialists point out that, considering the extensive area embraced by the scheme and the dense population, it is advisable that only a small portion of the work should be done at one time, so as to afford dwellings for those who are displaced, without driving more than a small proportion of the poorer inhabitants to other already overcrowded districts. The memorialists also state that there are thousands of residents upon the area who do not earn more than ten shillings a week, and cannot afford more than two shillings or two shillings and sixpence per week for lodgings; that, according to the scheme, provision has been made for 4,000 inhabitants only, whilst it is well known that at least 9,000 will be displaced. This difficulty of ascertaining the number of inhabitants was mentioned by the Metropolitan Board, as their officers were supposed to have come from the London School Board; so that it is probable that, whilst the real number is less than that stated by the Committee, it is much larger than that mentioned in the scheme. There is another point of considerable moment, namely, that in this area there are above three hundred costermongers and street-sellers to whom the ordinary improved dwellings or model lodging-houses would be useless, as there would not be any place to keep the articles which they sell, their donkeys, and trucks. The Committee, therefore, propose that, in addition to dwelling-rooms, there should be provided for those purveyors of perishable articles of food a fair proportion of well ventilated store-rooms in every block of the approved dwellings. They conclude by saying, that "if the improved dwellings are too expensive for the labourer, and without accommodation for the street-seller, such so-called improvements will be ruin to thousands who, by a great struggle, can scarcely keep themselves from the parish or poor-house." These are weighty arguments, and well worthy of full consideration both by Mr. Cross and the Metropolitan Board of Works. The scheme appeared inadequate before these representations were made, as the Board had cut down to a very large extent the plan originally proposed by their officers; and if it should turn out to be true that the census obtained by them includes only one half of the residents in the area, new and different plans must be made to meet the exigencies of the case. The proposal that only a certain proportion of the houses should be pulled down at one time is also most certainly worthy of full consideration, otherwise great hardships must be endured by many of those who will be evicted.

### POOR-LAW MEDICAL APPOINTMENTS.

HARPER, Robert Russell, M.R.C.S.E., appointed Medical Officer to the Holbeach Union Workhouse and the North District of the same Union.



## OBITUARY.

ROBERT LEE, M.D., F.R.S.

THE early years of Robert Lee were spent at Galashiels, his native place, in the simple manner which is still observed amongst the Scotch farmers, whose care for the education of their children is one of their characteristics.

In 1806, when thirteen years of age, he was sent to the University of Edinburgh to prepare for the ministry; but the doubt that he entertained of being able to speak *extempore* induced him to alter his plans of entering the church.

In 1814, he graduated as M.D., and left Edinburgh for awhile, but returned to an office in the infirmary, where he stayed till 1817, when he went to attend upon the family of the Hon. W. Lamb, afterwards Lord Melbourne. The winters of 1821 and 1822 were spent in Paris in general professional study, and particularly of that department to which he later devoted himself. After this, Dr. Lee commenced practice in London, but, in consequence of illness, he accepted the offer of an appointment as physician to Prince Woronzow, and left England for Odessa; and, while travelling about Russia, collected much interesting information relative to the social and political condition of the country, extracts of which he published at the time of the Crimean War, under the title of the *Last Days of the Emperor Alexander and the First of Nicholas*.

In 1827, Dr. Lee began the series of original observations and publications which are to be found in the *Transactions* of the Royal and Royal Medical and Chirurgical Societies. The earliest of these was an inquiry into the singular fact that the functions of the liver and intestines in foetal life are as active as in the adult state: a subject still open to much investigation. Then followed researches into the pathology of phlegmasia dolens, and the structure of the human placenta; and the carefully collected cases which formed the chief part of his work on *The Pathology and Treatment of the most important Diseases of Women*.

A biographical notice of Dr. Lee in the *Lancet* of 1850 contains a list of his works and monographs, with a brief allusion to the discussion which took place on the subject in which he was most deeply interested, the nerves of the uterus. He was accustomed to say that it was the opposition that he met with that led him to examine the nervous system of the heart, lungs, and abdominal viscera. The latter he made the subject of the Lumleian Lectures in 1856 and 1857.

The early habit acquired by Dr. Lee of writing short hand, enabled him to take fuller notes of his cases than is usually done by others, and was particularly useful to him in collecting the materials for the most valuable of his publications, the *Clinical Midwifery*, and the *Consultations in Midwifery*.

In 1822, he delivered the Croonian Lectures at the Royal College of Physicians, and, in 1864, the Harveian Oration, the last time that this was done in Latin; and, we believe, the change to its delivery in our language was first suggested by Dr. Lee.

The museum, which was kept for many years at St. George's Hospital, and the value of which it is difficult to estimate, was removed to Dr. Lee's house in Savile Row about ten years ago, and is now on exhibition at Cambridge.

As it is probable that some memoir will be published of Dr. Lee's life, we may omit any detailed account of his scientific and practical observations. In regard to his personal character, there are many left amongst his old friends and pupils who knew well how to estimate its real worth, and all will respect his memory as that of an earnest, impetuous, but able worker, who placed his art and science above all personal consideration, and was loyal, almost passionate, in his devotion to the work to which his profession called him.

## UNIVERSITY INTELLIGENCE.

### UNIVERSITY OF CAMBRIDGE.

SCHOLARSHIPS AND EXHIBITIONS FOR NATURAL SCIENCE, 1877.—The following Scholarships and Exhibitions for proficiency in Natural Science will be offered at the several Colleges and for Non-Collegiate Students in Cambridge during the present year.

*Trinity College*.—One or more Foundation Scholarships of £100, and one Exhibition of £50. The examination for these will commence in

the first week of April. The Scholarships are open to undergraduates of Cambridge who have passed the Previous Examination, including that in the Additional Subjects. The Exhibition is open to persons under twenty, who have not yet commenced residence at the University.

*St. John's College*.—One of the value of £50 *per annum*. The Examination (in Chemistry, Physics and Physiology, with Geology, Comparative Anatomy or Botany) will commence on April 7th, and will be open to all persons who have not commenced residence at the University as well as to all who have entered and not completed one term of residence. No candidate will be examined in more than three of the subjects. There is a separate examination in Natural Science at the time of the annual College examination at the end of the academical year, in May; and Exhibitions and Foundation Scholarships, ranging in value up to £100, will be awarded to Students who show an amount of knowledge equivalent to that which in Classics or Mathematics usually gains an Exhibition or Scholarship in the College.

*King's College*.—On Wednesday, April 4th, and following days, an Exhibition in Natural Science will be offered for competition to all persons, being British subjects, under twenty years of age, who bring a satisfactory certificate of character, as well as to undergraduates of the College in their first or second year. The Exhibition is worth about £90 a year, and is tenable for three years, but not with any other Exhibition or Scholarship of the College. The examination will consist of Physics, Physiology, and Chemistry, together with Elementary Classics and Mathematics. Exhibitioners are eligible for the Undergraduate Scholarships given annually by the College.

*Christ's College*.—One or more, in value from £30 to £70, according to the number and merits of the candidates, tenable for three-and-a-half years, and for three years longer by those who reside during that period at the College. The examination will be on March 20th, in Chemistry, Chemical Physics, Geology and Mineralogy, Botany, Comparative Anatomy and Zoology, Physiology, and will be open to anyone, whether a member of the College or not—provided his name is not on the boards of any other College in the University—who is not of sufficient standing to be admitted *ad titulum Baccalauri in Artibus*. The candidates may select their own subjects for examination. There are other Exhibitions which are distributed annually among the most deserving Students of the College.

*Gonville and Caius College*.—One of the value of £60 *per annum*. The examination begins on the last Tuesday in the Lent Term, and is open, without restriction as to age, to Candidates who intend to commence residence in October. Subjects: Chemistry and Physics, Zoology with Comparative Anatomy and Physiology, and other branches of Natural Science. College Examinations are held annually in the Easter Term, for Medical and Natural Science Students who have passed the University Previous Examination, in Anatomy, Physiology, Physics, Chemistry, etc., at which Prizes, and Scholarships of the value of from £60 to £20, are awarded to members of the College of the first, second, and third year, on precisely the same conditions as those for other branches of learning. Scholarships are in general tenable till the Student is of standing to take the B.A. degree; and in cases of sufficient merit the tenure is prolonged till the holder is of standing to take the M.A. degree. Examinations are also held, as vacancies occur, in Botany and Comparative Anatomy in its most general sense (including Zootomy and Comparative Physiology), for two *Shuttleworth Scholarships*, each of the value of £60 *per annum*, and tenable for three years. The Candidates must be registered Medical Students of the University who have kept eight terms, have passed the Additional Examination required for Candidates for Honours, and produce satisfactory testimonials of good conduct. A successful Candidate, if not a member of Gonville and Caius College, must become a member of the same. They are tenable with any other Scholarship at the College. The successful Candidates for the *Tancred Medical Studentships* are required to enter at this College; these Studentships are five in number, and the annual value of each is £100. Information respecting these may be obtained from B. J. L. Frere, Esq., 28, Lincoln's Inn Fields, London.

*Clare College*.—One of the value of £60 *per annum*, tenable for two years at least. The Examination (in Chemistry, Chemical Physics, including Light, Heat, and Electricity, Zoology with Comparative Anatomy and Physiology, Botany with Vegetable Anatomy and Physiology, and Geology) will be held on March 20th, and will be open to Students intending to begin residence in October.

*Downing College*.—One or more of the value of £60 *per annum*. The Examination (in Chemistry, Physics, Comparative Anatomy and Physiology) will be on, or about, April 9th, and will be open to all Students not members of the University, as well as to all Undergraduates in their first term.



**Sidney College.**—One of the value of £60. The Examination will be on March 20th, and will be open to all Students who intend to commence residence in October. The subjects will be Chemistry, Chemical Physics, Geology, Zoology and Physiology, Botany.

**Emmanuel College.**—One Foundation Scholarship of £70, tenable till the holder is of standing for the degree of B.A., and four Minor Scholarships (two of £70 and two of £50), tenable for two years, will be awarded for proficiency in Classics, or Mathematics, or Natural Science (Botany, Chemistry, Chemical Physics, Geology and Mineralogy, Zoology, Comparative Anatomy and Physiology). The Examination will take place on March 20th.

**Non-Collegiate Students.**—An Exhibition each year is given by the Clothworkers' Company, value £50 *per annum*, tenable for three years. Examination about Christmas, open to Non-Collegiate Students who have commenced residence in the October term, and to any who have not commenced residence. Information to be obtained from the Rev. R. B. Somerset, Cambridge.

Further information must be obtained from the Tutors of the respective Colleges; and the names, with certificates of character, date of birth, etc., must be sent to the Tutor of the College, in each case, several days before the examination.

Although several subjects for examination are in each instance given, this is rather to afford the option of one or more to the Candidates than to induce them to present a superficial knowledge of several. Indeed, it is expressly stated by some of the Colleges that good clear knowledge of one or two subjects will be more esteemed than a general knowledge of several. In some instances, as at Caius College, each Candidate is required to furnish beforehand a list of the subjects in which he desires to be examined.

Candidates, especially those who are not members of the University, will, in most instances, be required to show a fair knowledge of Classics and Mathematics, such, for example, as would enable them to pass the Previous Examination.

There is no restriction on the ground of religious denominations.

In several instances the time of the Examination is the same, certain of the Colleges having combined together so as to hold one or two examinations instead of each College holding a separate examination; and the arrangements are such that a student who is a candidate for a Scholarship at one College may be eligible without further examination to a Scholarship at another College in default of properly qualified Candidates at that College.

Some of the Colleges do not restrict themselves to the number of Scholarships here mentioned, but will give additional Scholarships if Candidates of superior merit present themselves; and other Colleges than those here mentioned, though they do not offer Scholarships, are in the habit of rewarding deserving students of Natural Science.

Trinity College will give a Fellowship for Natural Science, once, at least, in three years, and such a Fellowship will be given in the present year. The Examination will take place at the end of September, and will be open to all Bachelors of Arts, Law, and Medicine of the University, of not more than three years' standing from their first degree. Application should be made to the Rev. Coutts Trotter, Tutor of Trinity. Most of the Colleges are understood to be willing to award Fellowships for merit in Natural Science equivalent to that for which they are in the habit of giving them for Classics and Mathematics.

## MEDICAL NEWS.

**APOTHECARIES' HALL.**—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 8th, 1877.

Goodworth, Edward Portington, Hatfield, Doncaster  
Hawkins, Cesar Frederick, Bristol  
Watson, James Henry, Benyon Road, N.

The following gentlemen also on the same day passed their primary professional examination.

Collier, Thomas, Sheffield Medical School  
Harran, James, Charing Cross Hospital  
Todd, William, London Hospital

### MEDICAL VACANCIES.

The following vacancies are announced:—

**BIRMINGHAM GENERAL DISPENSARY**—Resident Surgeon. Salary to commence at £130 *per annum*, with allowance for cab-hire, and furnished apartments, lights, and attendance.

**COVENTRY and WARWICKSHIRE HOSPITAL**—House-Surgeon. Salary, £100 *per annum*, with board, lodging, and attendance. Applications to be sent in on or before the 24th instant.

**DENBIGHSHIRE INFIRMARY**—House-Surgeon. Salary to commence at £85 *per annum*, with board, washing, and residence.

**DORSET COUNTY HOSPITAL**—House-Surgeon. Salary, £70 *per annum*, with £10 as Secretary, together with apartments and board. Applications to be sent in on or before the 21st instant.

**FAVERSHAM UNION**—Medical Officer for the Fifth District and Workhouse.  
**HALIFAX INFIRMARY and DISPENSARY**—Assistant House-Surgeon. Salary, £50 *per annum*, with board, lodging, and washing. Applications to be sent in on or before the 18th instant.

**HAMPSTEAD DISPENSARY**—Medical Officer.  
**HOSPITAL FOR EPILEPSY and PARALYSIS**, Portland Place, W.—Two Assistant Physicians. Applications to be sent in on or before the 28th instant.

**HOSPITAL FOR WOMEN**, Soho Square—House-Physician. Applications to be made to David Cannon, Esq., Secretary.

**LEEK UNION**—Medical Officer for the Loughor District.  
**NATIONAL HOSPITAL FOR THE PARALYSED and EPILEPTIC**—Resident Medical Officer and Registrar. Salary, £100 *per annum*, with board and lodging.

**NEWPORT INFIRMARY and DISPENSARY**, Monmouthshire—Resident Medical Officer. Salary, £100 *per annum*, with board, attendance, furnished apartments, etc. Applications to be sent in on or before the 28th instant.

**ROYAL FREE HOSPITAL**, Gray's Inn Road—Junior Resident Medical Officer. Applications to be sent in on or before the 28th instant.

**ST. GEORGE'S and ST. JAMES'S DISPENSARY**—Physician. Applications to be sent in on or before the 22nd instant.

**STOW-ON-THE-WOLD UNION**—Medical Officer for the Loughborough District and Workhouse.

**SUSSEX LUNATIC ASYLUM**, Hayward's Heath—Senior Assistant Medical Officer. Salary, £175 *per annum*, with board, lodging, and washing. Applications to be sent in on or before the 27th instant.

**WESTBOURNE PROVIDENT DISPENSARY and MATERNITY**—Resident Medical Officer. Salary, £100 *per annum*, and unfurnished apartments, coals, gas, and attendance. Applications to be sent in on or before the 17th instant.

**WHITEHAVEN UNION**—Medical Officer for the Gosford District.  
**WOLVERHAMPTON and STAFFORDSHIRE GENERAL HOSPITAL**—Physician's Assistant and Pathologist. Salary, £50 *per annum*, with board, washing, and furnished apartments. Applications to be sent in on or before March 6th.

### MEDICAL APPOINTMENTS.

*Names marked with an asterisk are those of Members of the Association.*

**STRUGNELL**, F. W., L.R.C.P., appointed Resident Surgeon to the Small-pox and Vaccination Hospital, Highgate Hill, *vice* James F. Marson, F.R.C.S. Eng., resigned.

### BIRTHS, MARRIAGES, AND DEATHS.

*The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.*

#### DEATHS.

**POWER**, William Henry, M.D., of Ladywell, S.E., and 8, Red Lion Square, aged 65, on February 7th.

**THORP**, Gabriel, M.B.T.C.D., L.R.C.S.I., on January 28th, at his residence, Listowel, co. Kerry, Ireland, aged 69.

**THE MAGISTRACY.**—The Lord Chancellor has, on the recommendation of the Lord Lieutenant of the county of Lincoln, placed the name of Mr. Harper of Holbeach on the Commission of the Peace.

**A CENTENARIAN.**—Lady Smith, widow of Sir James E. Smith, the founder and first president of the Linnæan Society, died at Lowestoft on February 3rd. She was born in that town on May 11th, 1773—according to the register in the parish church, and was consequently in her 104th year. Upon the occasion of her attending the centenary anniversary of her birth, she gave a dinner to all the aged poor of the neighbourhood, and at the same time received from the Queen a copy of *Our Life in the Highlands*, with the following inscription in her Majesty's own writing, "From Victoria R. to her friend Lady Smith, on her birthday". The deceased had long been accustomed to take an interest in literary and scientific pursuits.

**MEDICAL DEFENCE ASSOCIATION.**—A meeting of the Council of the Medical Defence Association was held recently, when twenty-one new members were elected, of whom nineteen were members of a branch which has been recently formed at Accrington. It was resolved to take offices for transacting the business of the Association at 6, John Street, Bedford Row. Hitherto the meetings of the Association have generally been held at the residence of the President, Dr. Richardson. A Committee, consisting of Drs. Stevenson, Thomas, Maclean, Drew, Brooks, and Carpenter, Messrs. Spencer Watson, Aubin, Mason, and Brown, was appointed to consider what steps are necessary to be taken by the Association with a view to the amendment of the Medical Act.

**PRESENTATION TO MR. E. E. HOOPER.**—On February 7th, a very handsome tea and coffee service, together with a highly illuminated address, was presented to Mr. E. E. Hooper, M.R.C.S., of Caterham Valley, on the occasion of his leaving the neighbourhood. The presentation was made by the Rev. William Tebbs, the clergyman of the district church.

## TWO HARVEIAN LECTURES

ON

## BRIGHT'S DISEASE AND ITS TREATMENT:

CONSIDERED MAINLY IN RELATION WITH ARTERIAL  
TENSION FROM BLOOD-CONTAMINATION.*Delivered before the Harveian Society of London, November 1875.*

BY

THE LATE FRANCIS SIBSON, M.D., D.C.L., F.R.C.P., F.R.S.,

Consulting Physician to St. Mary's Hospital; Vice-President  
of the British Medical Association; etc.LECTURE II.—*Concluded.*

THE employment of narcotics in any form in cases of Bright's disease directly adds poison to poison of the like kind, and narcotics are therefore to be strenuously forbidden in every case of Bright's disease. This axiom does not rest upon physiological considerations only, which, if rightly interpreted, never can lead us wrong, and are therefore the true peculiar guide in the treatment of disease; for we have also direct evidence of the deadly effect of narcotics in Bright's disease. Death has occurred again and again from the subcutaneous injection of moderate doses of morphia in those affected with Bright's disease. I have not actually seen such a case, but I became painfully familiar with one of them in which death followed the injection of a moderate dose of morphia, and in which very disagreeable reproaches on the medical man were the result of its fatal employment. The poison of Bright's disease, *plus* a very small dose of the poison of morphia, was sufficient to cause death. Here a small dose of the secondary narcotic poison exercised a multiplying influence on the effect of the primary narcotic poison of Bright's disease, already circulating in the blood. These cases test the depth and diffusion of the poison of Bright's disease even when that poison fails to show itself, the patient having become acclimated to it and tolerant of its presence. There is another series of deadly cases in which the employment of opium has again and again produced death in those with undiscovered Bright's disease. I allude to the numerous instances of delirium tremens that have died from opium, many of which cases had unknown Bright's disease. It is a question whether opium ought ever to be employed in delirium tremens, although it has often, as we all of us have seen, charmed away that disease. It ought, however, never to be employed when delirium tremens is associated with Bright's disease, and before the drug is given in such cases the absence of Bright's disease ought to be made certain.

Opium or morphia then, in even the smallest doses, ought never to be given in Bright's disease, whatever the form, acute or chronic, fatty or granular. The serious question, however, arises, ought every form of narcotic to be forbidden in Bright's disease? I unhesitatingly say, Yes; they ought all to be forbidden, including chloral and chloroform. The least dangerous of them is perhaps the henbane, belladonna, and stramonium series, but even those I would forbid. Conium scarcely is a narcotic in the sense of disturbing the intellect and suspending consciousness, which the pure narcotics do. Chloral is often employed in those distressing cases of Bright's disease with restlessness, in which the physician is too apt to feel compelled to *do something*. That is, in those cases, a perilous, often a fatal motive, and we cannot too strongly exercise our powers of control, self-discipline, and resistance to entreaty, so that our knowledge and reason may stand firm and untrammelled in the midst of clamour. Giving way under these circumstances is almost, perhaps quite, a criminal act of weakness; and, if death result from it, those very persons who have overpowered the judgment of the physician by their demands for the relief of their friends are the first to complain.

Chloral is a very tempting narcotic in these cases, for it suspends consciousness and suffering, and, after a time, the patient awakes refreshed and thankful. He does not, however, always do so, and I have seen the fatal accumulation of uræmic poisoning follow the use of this powerful drug. Chloral, in a dose that can prove efficient and produce unconsciousness, is far too near upon actual death for me to like its frequent employment. Well tested, its use is often invaluable, and we are to measure the power of the drug with a knowledge of its inner circle of safety with scientific confidence. We must not, however, push it too near to the margin of possible death, and that margin is very close indeed upon the doses of this drug often given

with resulting safety. One death from its use is not, however, repaid by the one hundred recoveries that may follow its employment.

Chlorodyne, which is a nostrum, ought never to have been employed by our profession, which honourably forbids the use of secret drugs, but does not perhaps, in these days, too honourably adhere to this golden rule. This question, however, ought to be answered: What are we to give in case of extreme restlessness in Bright's disease? We must not forget that these cases of restlessness are on the verge of sopor and coma, of which it is often the premonitory symptom. The bromides of ammonium and potassium, and Hofmann's anodyne ether, and a few drops of ether, may safely be inhaled in these cases, as well as in the cases with excessive distress of breathing. The bromide may be pushed to large and extreme doses, and their effect ought to be carefully watched; so that if drowsiness be induced by it, in addition to the poison of the disease, iodide of potassium, coffee, and rousing and antinarcotic means may be freely resorted to.

I now come, Mr. President, to the last points in the treatment of Bright's disease that it falls to me to bring before you. These points are (1) the lifting the patient above his disease by the healthy and health-seeking exercises of every-day life, and by means that, without expelling the poison, arouse the nervous system to resist the narcotic action of the poison; (2) the treatment of the distressing respiration, alternately suspended and violently accelerated in renewed cycles of a minute each; and (3) the treatment of the drowsiness, sopor, coma, and convulsions that come into play towards the ripening period, often the fatal close of the disease.

In acute Bright's disease, especially during its early period, bed is often needful, with its rest, its comfort, its sudorific treatment, and care. In its later stages, and during the transition period from the acute to the fatty kidney, the bed is often softening, depressing, and injurious; and dress, movement in a warm room, and the pleasant intercourse of social life, often produce the best effects on the general condition of the patient. I recollect a sagacious passage of Dr. Wilks in one of his valuable writings, in which he speaks of the mischief done in these cases by remaining too long in bed. When the patient lies there, resting, so to speak, in every part of him, his muscles are unused, his tissues take in an unrenewed dropsical serum, his circulation is entirely confided to the heart, that receives no help from the muscular locomotion, varied posture, activity, and quickened breathing, that necessarily come into play when the patient leaves the monotonous apathy of bed. In that prone state of listless half-life, the muscles and all the structures degenerate; the brain and mind relapse into weariness and disuse; the nerves cease to be channels of the will, and so the ready transmission of the currents becomes clogged; the red blood, like the muscle, not being in demand, is not replaced, demand and supply, as in commercial life, waiting upon each other; every internal organ becomes indifferent to, and inefficient in, its work; and the skin, with its vast meshes of secreting, reflex, and warmth-giving means, becomes flaccid, pallid, waxy, watery, and lifeless. Intelligence is blunted, the eye and ear become dull, and all the faculties of life dwindle. These ill effects must follow if a patient rest in the horizontal disuse and decay of all his faculties. Place him in his chair, and on his feet, clothed, and in his right mind, interested in all that is going on, with an awakening activity in all his limbs, and with fresh demands of life rousing up every organ to a higher life, the diseased organ itself begins to enjoy more of its proper functions, and the uninjured parts of these organs resume the exercise of their powers and regain their health.

When treating cases of Bright's disease, we have to bear in mind that, besides taking steps to expel the poison and care not to add any fresh poison similar in character or effect, we have to treat a patient whose blood-tissues and whole frame are charged with a narcotic poison. This poison varies from day to day in quantity, but it is always present. In treating these cases, whether the amount and effect of the poison be so great as to cause coma, or so slight as to show no symptoms of illness, we have to treat the case so that the nervous system and whole body are trained to rise superior to the poison, just as in treating poison from opium we rouse the patients by every means in our power, so that they thus become conscious, and exercise their mind and body in spite of the poison. We duck them with water, spur them with electricity, call up their attention, walk them about, give them coffee, vary the stimulants, applying one after another, and rouse them so that, in spite of the poison circulating in their blood, their nervous system and all the power of their body rise above the poison, so as to resist its immediate effect and to give time for its elimination. Leave those patients inanimate and unconscious to themselves, and their fate is sealed; rouse them, and they generally recover, even if no part of the poison have been removed, though the removal of the poison is an essential part of the treatment. We ought to treat all cases



TABLE I.—Cases of Post-Scarlatinal Bright's Disease.

Age.	Sex.	K. in weight.	HEART.			Aorta.	Arteries.	Pericardium.	Duration of Disease before Death.
			Weight.	Size and hypertrophy of left ventricle.	Condition of Valves. Aortic.      Mitral.				
8	F.	12½ oz.	6 oz.	Healthy	Healthy      Healthy	....	....	Slight pericarditis.	16 weeks (scarlet fever)
9	F.	11½ oz.	4½ oz.	Left ventricle 1½ in. thick	Thickened as in senile condition	Thickened with a small vegetation	Some atheroma just above valves.	Thickening and rigidity of left middle cerebral artery	Dropsy (2 weeks)
9	F.	10½ oz.	7½ oz.	Heart small; no hypertrophy	....	....	....	....	21 weeks (scar. fever); great anasarca; convulsions
22	M.	16 oz.	13½ oz.	All walls thick; not left ventricle in excess.	Healthy	Healthy	....	Healthy	11 weeks (scarlet fever); lobular pneumonia
23	F.	..	..	Moderate size.	Commencing atheroma	Opacity of flaps	....	....	....
3	F.	11 oz.	2 oz.	Natural	....	....	....	....	....

TABLE II.—Cases of Acute Bright's Disease (not Scarlatinal).

No.	Age.	Sex.	Weight of Kidneys.	Weight of Heart.	Size and Hypertrophy of Left Ventricle.	Condition of Valves.		Aorta.	Arteries.	Pericardium.	Other Complications.
						Aortic.	Mitral.				
1	30	M.	..	12 oz.	Left ventricle 1½ to 2 in. thick.	Healthy	Healthy	..	..	..	Ascites
2	35	M.	17 oz.	19 oz.	Walls thick.	Healthy	Healthy	Healthy	Healthy	Acute pericarditis	Pleurisy and lobular pneumonia; Convulsions
3	41	M.	14 oz.	Not noted	Left ventricle thick	Healthy	Healthy	..	..	..	Broncho-pneumonia; post-scarlatinal
4	19	M.	11 oz.	13½ oz.	Hypertrophy of left ventricle wall 1 in. thick.	Healthy	Healthy	..	Healthy	..	Convulsions
5	50	M.	19 oz.	20 oz.	Cavities dilated; left ventricle thick	Healthy	Healthy	..	..	..	Pleurisy (left)
6	14	F.	..	15½ oz.	Left ventricle hypertrophied.	Very thick with vegetations; regurgitation	Healthy	Healthy	..	..	Pneumonia
7	43	F.	18 oz.	27 oz.	..	..	..	..	..	Acute pericarditis	Pleural hæmorrhage; much ascites
8	24	F.	..	11 oz.	Left ventricle hypertrophied, 1 in. thick	Healthy	Healthy	Slight atheroma at commencement	..	..	Acute peritonitis
9	40	F.	15 oz.	12 oz.	..	..	..	..	..	..	Double pleurisy—pulmonary apoplexy
10	33	F.	12½ oz.	25 oz.	Hypertrophy of left ventricle; fatty degeneration	Healthy	Healthy	..	..	..	..

NOTE.—Cases Nos. 6 and 10 are a little doubtful; should probably be classed as acute passing into the fatty stage.

TABLE III.—Cases of Bright's Disease Examined after Death in St. Mary's Hospital during the Years 1851-1869.

Column. Percent. a. Cases in which the size of the heart was noted. b. Cases of Wasting Disease or Emaciation. c. Cases with Valvular or other Disease of Heart. d. Cases with Atheroma of Valves of Aorta. Valves Competent.

	TOTAL NO. OF CASES.					ACUTE BRIGHT'S DISEASE.										WITH FATTY KIDNEY.					CASES WITH LARDACEOUS KIDNEY.				
						Not from Scarlet Fever.					From Scarlet Fever.					Large White Kidney.									
	No.	a.	b.	c.	d.	No.	a.	b.	c.	d.	No.	a.	b.	c.	d.	No.	a.	b.	c.	d.	No.	a.	b.	c.	d.
Heart small	27	12	23	(?)	(?)	0	..	..	..	..	0	..	..	..	..	15	23	13	0	11	3	21	3	1	1
Heart of natural size	67	29	45	..	..	2	22	1	..	2	2	40	..	..	..	17	31	12	..	1	7	59	7	..	1
Heart rather large	47	18	11	..	..	3	33	..	..	..	3	60	..	..	..	8	15	1	2	2	1	7	1	..	..
Heart large, or very large, the left ventricle being generally hypertrophied	107	41	23	..	..	4	44	..	..	..	0	..	..	..	..	14	26	0	7	4	3	21	0	1	1
Total cases in which size of heart was noted	247	..	..	..	..	9	..	..	..	..	5	..	..	..	..	54	..	..	..	..	14	..	..	..	..
Size of the heart not noted	29	..	..	..	..	2	..	..	..	..	..	..	..	..	..	4	..	..	..	..	1	..	..	..	..
Total number of cases	277	..	..	..	..	11	..	..	..	..	5	..	..	..	..	58	..	..	..	..	15	..	..	..	..

	CONTRACTED GRANULAR KIDNEY.					GRANULAR KIDNEY.					DISEASE OF KIDNEY.					CALCULUS IN KIDNEY, PELVIS, OR URETER.				
						Of natural and large size.					Chiefly suppurative, from affection of Bladder, Prostate, or Urethra.					Affection of Kidney not suppurative.				
	No.	a.	b.	c.	d.	No.	a.	b.	c.	d.	No.	a.	b.	c.	d.	No.	a.	b.	c.	d.
Heart small	4	1	4	0	0	4	3	4	0	0	3	23.0	3	(?)	(?)	2	25	2	(?)	(?)
Heart of natural size	25	21	18	3	8	29	22	22	3	8	7	54.0	4	..	..	1	12.5	..	..	..
Heart rather large	20	19	6	4	4	23	13	8	4	6	2	15.6	1	..	..	5	62.5	..	..	..
Heart large, or very large, the left ventricle being generally hypertrophied	60	56	21	13	20	75	57	23	24	26	1	8.0	..	..	..	0	..	..	..	..
Total cases in which size of heart was noted	106	..	..	..	..	111	..	..	..	..	13	..	..	..	..	8	..	..	..	..
Size of the heart not noted	11	..	..	..	..	14	..	..	..	..	1	..	..	..	..	1	..	..	..	..
Total number of cases	129	..	..	..	..	145	..	..	..	..	14	..	..	..	..	9	..	..	..	..

of Bright's disease in that spirit, though the measures must be graduated according to the depth and amount of the poison. Following out this principle, these patients ought to be roused by means of strong coffee or tea; interested by the society of friends and the business of everyday life; directed to take exercise briskly, and, so as to stir their circulation, keep themselves warm and earn their digestion, at the same time, that they avoid fatigue and exhaustion. They ought, indeed, to live, so to speak, within the income of their organs; but they ought, at the same time, to live almost up to that income. The many exercises of life increase the powers of life, just as the oarsman or the mountaineer, by steady training, from being out of condition, weak, and capable only of a spurt, and incapable of long-sustained exertion, acquires, in a very few days, such powers of exertion and endurance that he can last through the race, walk, and climb and descend for eighteen hours, and have strength to spare at the end of the day; so the patient, with chronic Bright's disease, by steadily increasing his exercise in the varied pursuits of life, daily gains power and rises above his disease. Although these very exercises lessen the poison, by stimulating all the organs of excretion, yet the poison is still there; but, just as the patient poisoned with opium is roused to resist its effects, so the patient poisoned under influence of Bright's disease is roused to resist its effects. In the same way that the muscles and chest and heart are enlarged by steady exercise, so the healthy portions of the diseased kidney are enlarged so as to increase and bring into play the powers latent and otherwise of this organ. Every organ has within it a reserved force very much greater than the force used in the ordinary quiet doings of still life. Thus I found, by exact experiments twenty-six years ago, that I breathed sixteen times as much air when I ran at the top of my speed, or rather just after it, as when I lay still in my bed. This experiment, published by me, is quoted and confirmed by Dr. Edward Smith. My lungs thus had a reserved force that was sixteen times as great during their maximum as during their minimum labours. Every organ has a like reserved force, the kidneys included, though the extent of such force is unknown. When these organs are diseased in part, they are still healthy in part, unless the destruction of the surrounding structure is complete. When the exercises of life increase and the general health improves, the kidneys improve under the effect of the general improvement. Thus cases of Bright's disease may improve indefinitely, and, leading a healthy life, be practically healthy, though these kidneys are crippled and have lost much of their reserved force; just as the one lung of many a patient with empyema is crippled, even after health is restored. When the other lung plays freely, it is developed to compensate somewhat for the loss. The reserved force, however, of the lung is lessened, and all the organs of the body and the heart in particular moderate their exertion; and all the members of the body balance themselves in harmony with the crippled organ, which becomes the lowered key-note of the whole frame. I once, when in Switzerland, with my whole thoughts and work centred on the country and free from the medical mind, awoke with this axiom in my mind and almost on my tongue: "Health is not the mere soundness of any one organ, but the healthy balance of the whole"; and so the balance of the general health is in keeping with the lower or higher power of the kidney. When the respiration is greatly distressed and suspended by turns in Bright's disease, the proper treatment is steadily to eliminate the poison, and, at the same time, to rouse the powers, either by a small quantity of tea, strong coffee, or whisky; by stimulants externally; and by maintaining the power by means of iron and food; by practising, indeed, in a conciliatory manner, the plans that experience and physiological reasoning have pointed out to be the best and soundest for the general treatment of the disease, supplemented by such means as the nature of the case may expressly suggest. These cases are very formidable, and generally die; but not unfrequently, as in the cases I named to you, the patients recover from the emergency, and even live for years. When coma and sopor are present, the hot-air bath and external stimulants, the strongest coffee, and a treatment analogous to that of deep opium-poisoning, but differing according to the necessities of the case, must be pursued; and this sometimes succeeds.

THE St. Alban's Rural Sanitary Authority propose to appoint Dr. Saunders, the Medical Officer of Health for the adjoining combined districts, as Medical Officer of Health (and Public Analyst) for their district also, instead of the union medical officers, as at present.

AT Cannock, a letter has been received by the summoning officer from the Local Government Board, stating that they are willing to issue an order forming the parish into a Local Government District of three wards, viz., Hednesford, Chadsmoor, and Cannock; the Board to consist of twelve members, four from each ward.

## SOME REMARKS ON THE AFTER-TREATMENT OF EXCISION OF THE HIP-JOINT.

By SURGEON-MAJOR J. H. PORTER,  
Assistant-Professor of Military Surgery, Army Medical School, Netley.

GUNSHOT-WOUNDS and diseases of the hip-joint, for which the operation of excision has been performed, present to the surgeon difficulties in the after-treatment which are seldom met with in other surgical operations.

The patient is utterly helpless; he is very likely prostrated with disease or by the wound, or the operation itself may have produced great exhaustion; he may be bound by splints or appliances considered necessary for promoting extension or counterextension; and the fact of his lying in this helpless condition is apt to bring about a series of complications, owing to the formation of bedsores, which in many instances are stated to have been the cause of patients succumbing; besides these, the surgeon has to contend with the copious discharge from the seat of wound, or that made by the operation, saturating the dressings, which, if not promptly removed, will become offensive, and may give rise to the formation of extensive abscesses or other complications. There is also the necessity for rearranging the sheeting and bedding, and for removing excreta by suitable utensils; and, at the same time, it is absolutely necessary to maintain the limb at perfect rest.

In investigating the experience of others with regard to how these arrangements have been carried out, we find that but little has been recorded; at the same time, nearly all recognise the importance of strict attention to the after-treatment, but lay greater stress on the formation and application of splints for keeping the limb in a proper position. Professor Volkmann of Halle observes that, if a mattress or something could be invented by which the cleansing of the wound in these cases, the defecation of the patient, and, at the same time, his utter immobility, could be maintained, it would be a great boon. The same authority remarks: "With regard to the great mortality after the operation of excision of the hip-joint, much has depended upon the want of care in the after-treatment. Three times I resorted to excision; twice after the battles of Beaumont and Sedan, once in Dijon; all these patients died; two, as I believe, principally in consequence of bedsores." And, as a reason for the fatal issue of most of the cases which had submitted to excision of the hip-joint during the late war, he notices the impossibility of bestowing upon the sufferers that care which is necessary after such an operation. "As long," he says, "as we are not able to put these patients on good beds, in order to place the limb in proper position, we dare not expect success." "No excision," he continues, "in fact, scarcely an operation exists which requires such care and unwearied patience in the after-treatment as excision of the hip-joint. The excised joint must be kept at rest, and the patient must be so laid that the wound at the hip is not pressed and the surgeon can have free access to it; that the dressing and cleansing of the same may be accomplished without moving the patient."

Dr. G. A. Otis, of the American army, in his valuable classical work on *Wounds of the Hip-Joint*, observes that, though the method of operating in excision is important, it is far less essential than the after-treatment.

Baron von Langenbeck, in remarking on the difficulties in the after-treatment in military surgery, says: "To preserve a comfortable position for the patient, to prevent the occurrence of decubitus, and to enable us to give proper attention to the wound, bedsteads and the best mattresses are necessary."

Keeping such observations in view, and bearing in mind that the results of exarticulation at the hip-joint for gunshot-wounds have been very unsatisfactory, and that the best prospects of saving life after such injuries rest between conservative treatment and the operation of excision, for the success of which much depends on the after-treatment, one feels bound, when an opportunity offers, to try to devise some method whereby more happy results may be brought about.

On a recent occasion, I had under my care a case of disease of the hip-joint, for which I performed excision, and for which I designed a stretcher and bed for the after-treatment, as represented in the illustrations 1, 2, and 3,\* which answered most satisfactorily, and which, with a little ingenuity, might be extemporised on service in the field.

\* Illustrations Nos. 1, 2, and 3, are from drawings kindly taken by Professor J. D. Macdonald, F.R.S., R.N.



The *stretcher* (Fig. 1) consists of a substantial beech or ash frame with handles, and of such a size that, when placed on the mattress, the woodwork falls over its sides, and does not come in the way of the patient's arms or hands of the attendants.

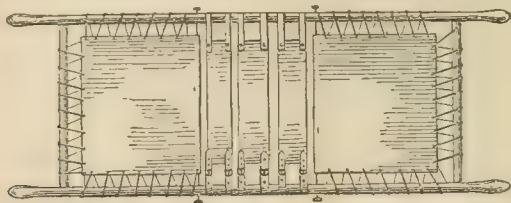


Fig. 1.

The canvas bottom is divided into five portions; the three centre are six or eight inches wide; these are attached to the framework on one side by means of straps and studs, and on the other by straps and buckles, by which they may be pulled tight. They are removable at will, and enable the surgeon or attendant to dress the wound when the stretcher has been raised. The canvas at the top and bottom of the stretcher may be secured by cords or straps and buckles, so as to admit of being removed for cleaning. Two movable tressels have to be made for the stretcher to be placed upon when necessary.

The advantages which this stretcher possesses are that, from the moment the patient is placed on it, he need not be disturbed, as by simply raising it, placing it on the tressels, and removing one of the strips of canvas, the wounds may be dressed and excreta removed. The patient may be carried from one room to another or into the open air without the least disturbance; and, in the event of there being a bed sore, the stretcher may be placed on tressels for a short time and the parts relieved from pressure.

The *Bed* speaks for itself, as represented in Fig. 2, the chief features

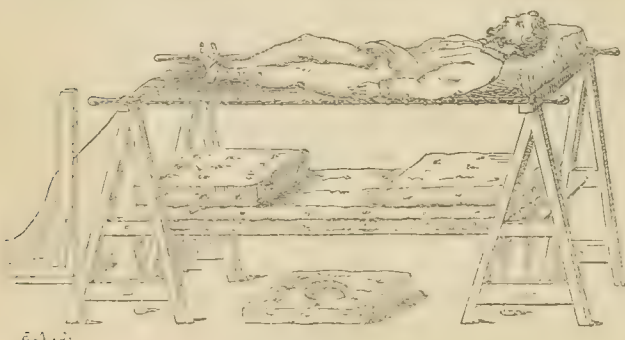


Fig. 2.

in it being the firm foundation for the mattresses by having the bedstead boarded. The top mattress is divided into three portions, the centre one of which has a round hole ten inches in diameter in its centre, into which the patient's nates fit. This centre piece may be removed to facilitate dressing, as represented in the illustration.

Fig. 3 represents a crossbar arranged with straps and buckles at each



Fig. 3.

end, intended to insert between the sides of the stretcher, so as to prevent their bowing inwards when the straps attached to the canvas are pulled tight. It may be brought into use by gently moving the head portion of the top mattress, so as to allow of its being inserted underneath the stretcher.

Great difficulty has always been experienced in lifting a patient with excision of the hip-joint, and numerous contrivances have been invented for that purpose, which, no doubt, in the hands of their respective inventors, were found to be efficient. In the late exhibition held at Brussels, there was a large collection of such contrivances; but, in some, I observed much complicated machinery; in others, the canvas bottoms, when lifted, resembled loosely suspended hammocks; some,

again, had no means for allowing the surgeon to dress the wound; while a few were fixtures or cumbersome, and only capable of being used in the patient's room. I also observed, in many instances, that the details with respect to the position and arrangements for straps and buckles would be found quite impracticable when brought into actual use.

To Mr. J. Croft the profession is indebted for a most useful stretcher (see *BRITISH MEDICAL JOURNAL* of September 19th, 1874, p. 383), which, in a case of excision under his own care, he found satisfactory, but which I have modified to a considerable extent to suit the general requirements.

Numerous splints for the after-treatment of excision of the hip-joint have been designed by some of the most distinguished, practical, and thoughtful surgeons; but, when one comes to consider them, and see them used, one cannot but think that, if any means could be designed to do away with such instruments of apparent restraint, it would be as great a boon as that of inventing a convenient mattress, as already referred to. Such ingenious splints only prove the difficulties surgeons have to contend with in endeavouring to bring their cases to successful issue. I allude to the wire breeches of Dr. L. Sayre, the counter-extension socket and side-splint of Sir W. Fergusson, Mr. Erichsen's bracket-splint (a modification of Fergusson's), Professor Esmarch's plaster of Paris bandage for slinging both legs, Dr. N. R. Smith's wire splints for suspending the limbs, Professor Volkmann's rack, and Mr. Croft's splint attached by a bracket to the opposite side.

The above remarks are made with all due deference to the inventors, whose appliances have been recognised as having many advantages; but is the restraint exercised by them necessary? Would it not be advisable to try to dispense with it, and adopt the same measures which the late Dr. Stromeyer recommended for the conservative treatment of gunshot fractures of the thigh, *i.e.*, "do not irritate the muscles by straining them by mechanical contrivances, keep the limb a little at rest, like the hand of an assistant, by means of a light suspension weight?" "Our first object," he says, "is to save a man's life, and the second is to make him comfortable, but not in the grave."

In the case I am about to detail, I was unable to apply a straight splint, and, by a very simple means as regards the arrangement of the top mattress, sand-bags, a weight and pulley, extension and counter-extension were kept up, and the limb maintained at rest in a proper position, with excellent results. It does not, however, follow that I should again be so fortunate; but it may be an inducement to others to try the same means which, in some respects, have been advocated by Dr. Buck and other American surgeons.

The subject of the case was an officer in the Royal Scots, aged 40. During the Crimean campaign, 1855, he suffered from great exposure, and, on one occasion, after sleeping on wet ground, incipient disease of the right hip-joint became apparent. From these symptoms he appears to have been relieved; but subsequently superficial necrosis of the upper third of the shaft of the femur set in, and a considerable portion of exfoliated bone was removed, leaving a large cicatrix on the outside of the thigh. He returned to his regiment, served in China, the Mediterranean, and India respectively, until 1875. When in the latter command, after great exertion, he became incapacitated for duty, on account of lameness and intense pain in the right hip-joint. He was then invalided to Netley Hospital, where he arrived in August.

Perfect rest was now enforced, under which he greatly improved; but, in March 1876, after a severe rigor, a large abscess formed in the neighbourhood of the joint; on this being evacuated and the finger passed into its cavity, the head of the femur was found denuded of cartilage and resting on the dorsum ilii.

Excision of the head of the bone being the only prospect of saving his life, I performed that operation on March 30th, by a vertical incision of about nine inches in length behind the great trochanter, the bone being sawn through immediately above the lesser trochanter. The portion of bone removed is shown in Fig. 4 (natural size). The operation having been completed, I applied to the opposite thigh the socket of Sir William Fergusson for counterextension; but, on attempting to arrange the bracket-splint of Mr. Erichsen, I found it impossible, as the knee had been so long flexed, that it had become fixed and a straight splint could not be applied. This method of extension and counterextension had, therefore, to be abandoned. The patient, already very weak, was now almost completely exhausted; in fact, but little vitality remained, and for several hours it was doubtful if he would ever rally. With a view, therefore, to as little disturbance as possible, and to try and restore animation, I placed the limb on McIntyre's double inclined plane well padded, in which it remained for two days. On the third day, he had fairly rallied, but expressed himself as feeling most uncomfortable, due to the arrangement of the bed, which consisted of two hair-mattresses, on the top of which was placed the stretcher. To relieve this discomfort, which, he said, con-



sisted in a feeling as if he rested on the back of his head, left nates, and heel, I raised the stretcher and replaced the top mattress by one having a round hole ten inches in diameter cut in its centre. The stretcher being replaced and the centre strip of canvas loosened, his nates



Fig. 4.

fitted into this hole, which removed all pressure from his sacrum, on which a large bed sore had formed during the two days of his great prostration. The comfort of this arrangement was indescribable; but then came the question of extension of the limb; this I effected by a four-pound weight attached to the foot and suspended over a pulley adapted to an upright fixed in the floor at the bottom of the bed. The limb was supported by sand-bags, and the nates fitting into the hole in the mattress formed, as it were, the point for counter-extension.

From this time forward, he steadily improved. By means of the stretcher, he was raised from the bed, the wound dressed as well as the bed sore, sheets rearranged, the necessary utensils made use of, mattresses removed and aired, and his position in the hospital or his room altered.

On May 1st, extension was discontinued and the limb simply supported by sand-bags. On the 21st, he was able to move the limb slightly. On July 10th, the stretcher was shifted from under him for the first time, and, with a little help, he turned both legs out of bed. On the 26th, he commenced to walk with crutches, in which he daily improved. The great cavity left by the wound of operation steadily healed from the bottom, being simply dressed with carbolised oil morning and evening.

His convalescence was materially retarded by the old wound from the necrosis of the femur reopening, apparently in consequence of a piece of bone being set free.

The limb (ten months after the operation) is about two inches shorter than the sound one; but this great difference is in some measure due to the knee being still slightly flexed. There is no pain in or about the seat of operation. When he stands erect, he can lateralise and rotate the limb for several inches; and, with the aid of crutches, he can walk up and down stairs.

During the course of treatment, he complained of severe pain in the inside of the knee, which was invariably relieved when extension was being applied by taking care that it was in the axis of the leg, and not forcing the knee towards a straight position.

## NOTE ON GOUT.

By G. OWEN REES, M.D., F.R.C.P., F.R.S.,

Consulting-Physician to Guy's Hospital.

NOTWITHSTANDING all that has been written and said concerning gout, we still find our knowledge of its pathology most uncertain, and the views of our modern authors differing in a remarkable manner. Having lately perused a valuable lecture by Sir James Paget on what he terms gouty phlebitis, I have been reminded of many facts and views observed and considered by me for years past, and these have proved of more interest since reading that lecture, and I have become the more inclined to entertain the belief that the phenomena of the acute gouty paroxysm are best explained on the theory that the disease is essentially a capillary phlebitis, the venous inflammation being caused by the circulation of a blood-poison.

The comments made by our best known authors on gout, when alluding to the works of their brother-labourers, show that serious objections exist against the reception of any theory yet propounded in explanation of the acute attack. Thus, while Dr. Garrod believes that the presence of uric acid in the blood constitutes gout, and that the effusion of urate of soda is the proximate cause of the fit, we find, on the other hand, that Dr. Gairdner gives reasons for altogether doubting the correctness of that view, stating that Dr. Garrod's theory "not only does not explain the symptoms, but is absolutely contradicted by them".

When considering the opposing opinions of authors, it has often struck me that there must be some condition necessary to the production of gout other than the presence of urinary constituents in the blood, while it must still be admitted that such contamination plays a considerable part in the causation of the disease. We cannot doubt that, before an attack of gout occurs, the blood always contains an excess of uric acid. This, Dr. Garrod maintains, produces the attack by depositing as urate of soda in the tissues. Dr. Gairdner argues that, if it be so, the inflammatory symptoms ought only to set in when the effusion of material takes place, whereas the severe pain and vascular excitement appear *before* the swelling takes place and subside immediately on its appearing.

These litigants, however, cannot but agree upon one point; viz., that there is an excess of uric acid in the blood, though they differ so materially in regard to the effects attributable to its presence.

Now, we know that animal poisons of obscure character are occasionally produced in the blood, and cause inflammation of the veins among other evils. Is it not probable that, in gout, the blood, charged with urinary material, becomes so changed, that a poison is elaborated which inflames the venous capillaries? Sir James Paget has shown that the larger venous trunks are especially prone to disease in gouty persons. If so with the larger trunks, why not so with the capillaries?

The phenomena of the gouty seizure may, I think, be more satisfactorily explained on this theory than upon any other. The disease thus beginning in the elaboration of a poison from the urinary materials found in the blood, the venous capillaries inflame as a consequence; severe pain is experienced, which is relieved immediately when effusion and swelling occur.

Dr. Gairdner's views have especial reference to the veins, but he does not believe in any poisonous influence nor in the phlebotic state. He considers, however, that the "real seat and cause of the painful phenomena of gout" is in the distended venous capillaries, and he accounts for this distension as follows. "This fluid (the venous blood) is compressed between two opposing forces, that, namely, which is derived from the heart and arterial system, urging it forward on its course, and, on the other hand, the antagonistic resistance of the great veins leading to the right auricle." This position is attacked by Dr. Garrod, who states that the general state of vascular plethora is by no means always present, and its absence is observed in spare subjects and in those who strongly inherit the disease. This objection seems well founded.

If we assume, however, that venous inflammation is present, then, of course, we can explain the condition of the larger veins of the limb, which, thus affected by poison, will not be able to propel the venous current, and will become distended and remain so till the poison is eliminated or destroyed.

It seems certain that, when urinary matters are retained in the blood, very different poisons may be formed, owing to some varying causes of which we know but little. Thus, in Bright's disease, the blood becomes so contaminated, but the effects, as is well known, are very different from those of the gouty seizure. The poison produced is of quite a different kind, its most distinctive character being shown in its powerful action on the brain and in the production of convulsive action.



It is, of course, impossible to say how or why it is that the same urinary matters should become converted into different poisons in the blood in different diatheses; but, if we turn to non-vital chemistry, we find analogical results. The ferment present may differ, the fluids may vary in density or in temperature, and, in the one case, a poison may be produced capable of causing violent convulsion, and, in the other, a milder toxic agent may appear as a result, causing inflammation of venous capillaries and all the phenomena of acute gout.

In connection with this subject, I would wish to direct attention to the fact that a condition may be brought about by the gouty poison, which it is difficult to separate from ordinary pyæmia. I lately met with such a case in the person of a gentleman engaged in large practice, whose diathesis was decidedly gouty. The disease seized him in nearly every joint, and was treated at the onset with the ordinary approved remedies. After a few days had elapsed, he became anxious, and I was called to see him. I found both hands and feet swollen and tender. One knee was involved, and he complained a good deal of the back of his neck. His pulse was extremely weak, and so rapid that I counted it with difficulty. Notwithstanding this state of the circulation, his intellect was quite clear, but his respiration was rapid and his temperature 104 deg. My first idea was that the case was one of ordinary pyæmia; but from the history there could be little doubt that the disease commenced as gout. This gentleman recovered well under the free use of stimulants. During the progress of the case, there was a good deal of tenderness for two or three days over the saphena major vein, but the vessel did not become hardened or thickened. A pain occurred also over the hip during convalescence, and there was considerable tenderness over the part for a day or two. If the view I have here taken of the nature of gout be correct, it would appear that in treatment our object should be to exhibit some remedy capable of acting upon the poison and destroying its virulence. The power which colchicum evinces looks much like this, acting, as it often does, so very rapidly in removing gouty inflammation.

There are one or two points having reference to the treatment of this disease upon which I will venture to remark.

1. Too little attention seems to have been paid to the amount of solid food allowed to gouty patients. Most of them eat too much.

2. It is much the fashion to prescribe strongly alkaline waters in large quantity. This depresses the gouty, and tends to impair the digestive power of the stomach. In moderation, however, the milder alkaline waters are of value.

3. Though it is true in the general that alcoholic drinks in the form of spirits are better than wines, yet it often happens that these, after a time, become very objectionable to the patient, and prevent him eating his food with appetite. In this case, it is always better to allow wine, which should be always of the highest quality. From what I have observed, I am much inclined to believe that really good wines are generally used to advantage, and that the vegetable extractives of these mellowed specimens are easily digestible by the gouty stomach.

4. Much may be done by remedy to ward off the gouty seizure, and the patient generally receives a warning. When such symptoms arise, a combination of quina, colchicum, and colocynth, taken twice or three times a day, is an excellent medicine.

Some few years ago, I saw two gouty cases which much impressed me, and which showed how dangerous it is for gouty people to take quantities of cold water day by day, even though the quality of the fluid be of mild character. During a stay at Homburg, I was entreated to see an Englishman who was said to be in imminent peril. I found an inveterately gouty man with an immensely distended abdomen. The heart's action was thereby much impeded, and he was nearly pulseless. This was brought about by taking the waters in accordance with the generally prescribed rules. I saw a very similar case shortly afterwards. The treatment consisted in prescribing an opiate at night (for there had been great loss of sleep in both cases), and in administering alcoholic stimulus in the form of warm brandy and water. The patients recovered rapidly.

## THE MEDICAL FACTS AND EVIDENCE IN THE CASE OF THE QUEEN v. TREADAWAY.

By A. HUGHES BENNETT, M.D., M.R.C.P.

ON February 8th, 1877, at the Old Bailey, Frederick Treadaway was sentenced to execution for the wilful murder of John Collins, and was also found guilty of an attempt to take the life of Mrs. Collins. As the defence was in great part of a medical character, and the case a very peculiar one, it may be interesting to the profession to learn the medical facts of the trial. This appears to be all the more necessary

as the reports of the evidence as given in the daily newspapers were very imperfect and inaccurate, and, in some of the leading articles, even strictures were passed on the nature of the defence. Lastly, in the BRITISH MEDICAL JOURNAL of February 17th, there is a letter criticising the medical evidence. This contains certain inaccuracies, and the conclusions are sometimes arrived at from erroneous premises, not due so much to the inexactitude of the author as to the imperfect data from which, I presume, his facts were collected. It is not my intention to enter into legal questions, to discuss the general evidence, or to question the decision of the jury; I propose only to record the medical history and condition of Treadaway and the professional evidence given in his defence.

On December 23rd, 1876, I was requested by the prisoner's solicitor to investigate his mental and bodily condition, and, after five prolonged interviews with him, the following are the results of my inquiries.

*Frederick Treadaway, aged 20, a Hosier's Assistant.—Family History.*

—According to the report handed to me by the solicitor, and to inquiries made by myself, Treadaway is the eldest of nine children. His eldest sister suffered from "brain fever" when a child; she had delirium and convulsions, and was subsequently paralysed for six months. His father is a man of depressed and melancholic temperament. His aunt died during an epileptic fit at the age of 22, having suffered from that disease all her life. Both his grandparents were persons of depressed and nervous habit, his grandmother being described as incompetent and requiring a companion to be constantly with her. One granduncle died imbecile, a second granduncle committed suicide, and a third granduncle died in a "fit". A grandaunt is described as a woman of "strange behaviour". His great grandmother was imbecile; one great granduncle was imbecile; and another was an inmate of St. Luke's Asylum. The daughter of a great grandaunt was an inmate of Hanwell Asylum. On the mother's side, two granduncles were insane.

*Personal History.*—Treadaway states that he was quite healthy till about two years ago. For twelve months prior to this, he had indulged in great sexual and alcoholic excesses. With this exception, he had before and has since led a steady and temperate life. Shortly after this, he became very subject to frequent and severe headaches of a stabbing and throbbing character, which symptom has lasted to the present time. During the last two years, he has had six or eight seizures of unconsciousness, or, as he calls them, "fainting fits". All these have been of similar character, some of them, however, being more prolonged and severe than others. He described these as follows. While in ordinary good health, without apparent cause, he suddenly experienced a severe shooting pain and throbbing in his head, followed by a giddy sensation, in which everything seemed to turn round. He staggered and had to lay hold of something for support. He had the sensation of a "black cloud" coming over him, and then he lost consciousness. On recovering his senses (he thinks in a few minutes), he suffered from headache and felt confused in his ideas. In a short time, the latter passed off, and he was able to walk on, and in an hour or so he was again quite well. During the last two years, and only since then, he has been subject to occasional involuntary micturition during sleep. This occurred every month or two, and without apparent cause. He has also since that time complained of various pains, sometimes in the branches of the fifth nerve, but more especially in the cardiac region, where he describes a severe pain and the sensation as if a cord was being tightly pulled round his chest. About the middle of August last, he was out of employment, and had in consequence to live at home. Although he was supported by his family, and received every kindness at their hands, he gradually became depressed and despondent. He brooded over his "misery", and finally became so melancholic (apparently without cause), that he several times contemplated "putting an end to himself" by suicide. Several methods suggested themselves to his mind, such as drowning, but he finally decided to shoot himself, as being, he thought, the most expeditious method; hence the purchase of a revolver. On the morning of December 15th (the day of the crime), Treadaway says he awoke with a severe headache and felt generally unwell. While sitting talking with Collins on different subjects, he experienced a sudden throbbing in his head, followed by giddiness and the sensation of a black cloud and darkness coming over him. From that moment, he remembers nothing till he found himself in the street. For the remainder of the day, he felt dazed and confused, and it was not till the following morning that he thoroughly realised his position. With the above exceptions, he has always considered himself a perfectly healthy person.

*Present Condition.*—Treadaway is a youth of fair complexion, somewhat short stature, well-built, and healthy looking. His forehead is low and his head small. There is nothing abnormal about his appear-

ance; on the contrary, his countenance is frank and open, and decidedly pleasing. His statements are perfectly consistent. He makes no attempt to conceal anything connected with himself or the crime of which he is accused, but explains it as above mentioned, and expresses the greatest sorrow and horror at its results. Altogether, his conduct and conversation impressed me favourably. On physical examination, all his organs were found healthy.

*Commentary.*—In my report to the solicitor, I concluded the enumeration of the above statements by saying: "If the preceding assertions can be established, the following conclusions might be deduced.

"1. That, as insanity or some form of nervous disease has existed in the families of both the parents of Treadaway for several generations, to a large extent on the male and to an appreciable degree on the female side, there is a strong presumption that Treadaway inherits a predisposition to nervous disease.

"2. That, although the health of Treadaway is apparently normal at the present date, still, from the description that is given of the various symptoms from which he has suffered during the last two years, there is a strong probability that he has been affected with epilepsy.

"3. That, although since August last he has been in bad circumstances and has had certain vexations and troubles, he has greatly exaggerated their importance, and has been unusually depressed in mind, and has several times contemplated suicide. These are indications of mental weakness.

"4. That Treadaway committed the crime of which he is accused during an epileptic seizure. In such a condition an individual is unconscious, and not responsible for any act which he may perpetrate.

"5. That, considering the consistent statements of Treadaway, and his accurate description of a complaint which is little known to the public, there is every probability that his assertions are in the main truthful.

"6. That, looking to his naturally kind and amiable disposition, his temperate habits, his making no attempt at concealment, his apparent want of motive, his inability to remember the details of his act, and all the general circumstances of the case, the homicide would appear to be rather the result of disease than of malice or intended robbery."

*Froofs.*—During his first examination at the Westminster Police Court, the prisoner had two "fits". No medical man was present, so that their nature remains uncertain.

During the trial at the Old Bailey, the prisoner had a "fit". He suddenly uttered a smothered cry, and fell down. When I reached the dock, perhaps a minute later, I found him lying on his side held down by two or three warders, his body writhing and his limbs being moved about in every direction. The face was slightly flushed, the eyes were widely open and staring, but the conjunctivæ were sensitive to the touch. The prisoner was immediately removed to the cell below the court. His condition then, that is perhaps two or three minutes after the seizure commenced, was as follows. He was lying on his back on the floor. At intervals, there were powerful convulsive movements of all the muscles. The whole body, and especially the limbs, were thrown into such violent movements, that it required two or three men to keep him from injuring himself or others. The head was thrown somewhat backwards, and there was slight tendency to arching of the back. The muscles of the face were contracted, although the countenance was not actually distorted. There was no evidence of the tongue having been bitten. Some of the movements seemed to be of a tonic, and others of a clonic, character. The movements of the muscles were such, that the body was pushed hither and thither as it lay on the floor. The face was paler than at first. The eyelids when opened remained so, leaving the eyes partially exposed. The eyes were fixed and staring; the conjunctivæ were perfectly insensible to even the roughest touch; the pupils were widely dilated, and insensible to the stimulus of light. The patient was perfectly insensible. I placed a large pinch of snuff in a quill which I had in my pocket, and blew it up his nostrils; there was no sign of sneezing or reflex action. The lips were covered with frothy saliva, but no appearance of blood. The respiration was impeded, and at intervals a quick inspiration was taken. The pulse was small, weak, and rapid. The arteries of the neck throbbed strongly. In what appeared to be about five minutes, Treadaway drew a long sighing inspiration, after which the movements of the body almost stopped, and he at once began to sneeze. The conjunctivæ were then found to be sensible to the touch, and the pupils had contracted and acted on the stimulus of light. He remained in a drowsy and soporose condition, and did not speak. When asked repeatedly if he felt any pain, he never took any notice, but once he put his hand to his head. This condition remained for perhaps fifteen minutes longer, when it was seen that he would not be able to appear

in court again that day. Half an hour later, when I saw him at New gate, he had somewhat recovered, but was still in the same soporose condition. The muscles were relaxed, interrupted only by occasional slight twitchings of the limbs. He could not speak, but on one occasion, when asked if he had pain, pointed to his head, and said "knife". He also placed his hand over his heart, as if there were pain there. In this condition I left him. Next morning, when I saw him before the trial, he was quite well, and had passed a fair night, but had not his accustomed appetite for breakfast. Mr. Gibson informed me that he had this morning given the prisoner a pinch of the same snuff that had been used without effect on the preceding day; now it caused him to sneeze with great violence.

At the trial, the following facts were established by witnesses: 1. The hereditary history of insanity and epilepsy in the family; 2. The headaches; 3. Having had at least two fits, one two years ago, and one last July; 4. The wetting of his bed during sleep; 5. His great depression and melancholia since August last; 6. His having suggested before more than one person ideas of suicide; 7. His appearing unwell on the morning of the crime; 8. The epileptic seizure of the preceding day; and 9. The naturally amiable and affectionate disposition of the prisoner.

*Medical Evidence.*—In the public newspapers, this was imperfect and on many points erroneous. I now endeavour to give the evidence *in extenso*. It was to the following effect.

Dr. HUGHES BENNETT.—Although sane at the present time, it does not follow that the prisoner was conscious of his actions at the commission of the crime of which he is accused. According to all the circumstances of the case, the facts proved, and if the statements of the prisoner be correct, there is every probability that he is an epileptic. There are several forms of epilepsy. The popular idea of the fit is that which is accompanied with convulsions. There need not necessarily be convulsions, but only loss of consciousness. This latter has been called epileptic vertigo. These two forms may alternate with one another. Owing chiefly to the writings of Hughlings Jackson, Maudsley, Russell Reynolds, Hammond, Trousseau, Falret, Esquirol, and others, epileptic vertigo is a recognised disease. There is abundant testimony to show that, during such seizures, persons may perform actions and even speak and answer questions automatically. There are numerous examples in the works of the above authors proving that, in an unconscious condition, persons can perform odd or eccentric actions or deeds of violence, suicide, or murder—being unable to remember the circumstances afterwards, and therefore irresponsible for their actions. Dr. Bennett quoted instances in his own experience, more especially two cases. The first was that of a gentleman of the highest education and integrity. He was officer in a Peninsular and Oriental steamship in which he (Dr. Bennett) happened to be travelling. Various statements were from time to time made, and amply witnessed, of odd things this gentleman had done, and of which he had always denied any knowledge. During Dr. Bennett's personal knowledge of him, he had several times attempted to commit suicide in different ways. He was prevented from doing so by others; and in a few minutes afterwards, when he came to himself, he was totally unconscious of having made any such attempt. He fancied he was being made the subject of a hoax. He several times tried to throw himself overboard. He on one occasion attempted to poison himself, but drank by mistake an innocuous fluid. These attacks came on about once a month. During the intervals, he was perfectly sensible and intelligent, and could not imagine what had induced him to do what he did. Finally, one day Dr. Bennett found him looking ill. He was asked what was the matter. He replied, he felt very unwell, but did not know why. Opium-poisoning was suspected, and subsequently about a pint of laudanum was extracted from his stomach with a stomach-pump. He had taken it out of the surgery, and was afterwards quite ignorant of the fact. On account of these seizures, he was dismissed from the service, which ruined his career in life. Another case was cited, where a respectable married man had sudden temporary fits of unconsciousness. While they lasted, he assaulted his wife, children, the other patients in the ward, or any one who was beside him; although, when in his senses, he was a most affectionate husband and father. He was perfectly ignorant of what he was doing, and was deeply distressed at the results of his violence. A person might suffer from epileptic vertigo without knowing it. Epilepsy in all its forms is hereditary. There is a certain affinity between insanity and epilepsy, in so far that insane parents may beget epileptic children, and *vice versa*. The prisoner's family was strongly tainted with insanity and epilepsy, and therefore it is probable that he inherits a predisposition to nervous disease. Dr. Bennett stated in detail the symptoms described to him by the prisoner. Sexual and alcoholic excesses are considered by many to be an exciting cause of epilepsy. This occur-



ring shortly after puberty, with a predisposition to disease, might cause nervous affections to manifest themselves. The description the prisoner gives of his "fainting fits" is quite consistent with epileptic vertigo. Frequent throbbing in the head, without apparent cause, in a young healthy man, is consistent with epilepsy and is a common symptom of that disease. Involuntary micturition during sleep without cause was also met with in such cases, indicating an attack during the night. The neuralgic pains, especially the angina pectoris, sometimes accompanied epilepsy. The attacks the prisoner described must be one of two things, either epilepsy or ordinary fainting. From any single attack, it would be difficult from description to distinguish between the two. Assuming the statements of the prisoner to be correct, and taking the family history and the other nervous symptoms into consideration, the evidence appears to be in favour of epilepsy. It is quite possible that a crime might be done during an epileptic seizure. The fact that the prisoner was depressed and melancholic without sufficient cause, and his constant statements that he was miserable and anxious to "put an end to himself", indicated, in Dr. Bennett's opinion, an abnormal mental condition. The fit the prisoner had in court yesterday was, in Dr. Bennett's opinion, somewhat an anomalous one, but was of an epileptic character, indicated chiefly by the total unconsciousness and the dilated and insensible pupils.

*Cross-examined.*—In the ordinary acceptance of the term, the prisoner could not be said to be insane. While in a state of epileptic unconsciousness, a person might commit almost any act without knowing it. The attack itself did not generally last more than three or four minutes, but the effects of it might last several hours. Taking the attack which occurred last July alone, there would be nothing from the description inconsistent with an ordinary fainting fit. Epilepsy is a disease of the brain.

Dr. RHYS WILLIAMS, Superintendent of the Bethlehem Royal Hospital, had seen many cases of epileptic vertigo, and he corroborated the evidence of the last witness that this was an acknowledged form of disease. He described a case in which a gentleman, while sitting at breakfast, had assaulted his wife with a table-knife, and afterwards was not able to give any explanation for his conduct. He was subsequently under medical treatment for fourteen months with epileptic vertigo. Everything done by persons while suffering under attacks of epileptic vertigo was automatic; they were then mere machines, and would afterwards have no knowledge of anything that occurred during the attack. When he recovered, a patient might feel that he had done something, but he would not know what. The longest instance of unconsciousness of this kind he was acquainted with was one hour. The witness stated that all the symptoms that had been described in this case with regard to the prisoner were consistent with the idea that he was suffering from epileptic vertigo. He had seen the prisoner on the previous day in the cell below the court, and he found him perfectly unconscious, and the pupils of his eyes were dilated. He had no doubt that it was an epileptic fit combined with hysterical symptoms. He regarded epileptic lunatics as the most dangerous of all those afflicted with insanity; and such persons were most likely to commit acts of violence.

Mr. RICHARDS, Superintendent of Hanwell Asylum, had great experience in epilepsy; himself treating, on an average, one hundred and fifteen cases *per annum*. He had seen several cases of epileptic vertigo. He agreed in the opinion expressed by the two previous witnesses with regard to the nature of that disease. He had been several times attacked by patients suffering from epileptic vertigo. On one occasion, an epileptic patient was talking pleasantly to him when, suddenly, her eyes became vacant, and she hit out at him. She appeared to recover immediately, and he asked her why she had struck at him, and she said she did not know that she had done so, and appeared quite unconscious of what had taken place. A few days later, this patient had a violent attack of epilepsy. He saw the prisoner yesterday, when he was unconscious, and he was of opinion that it was an epileptic fit, with modified symptoms.

Dr. SMILES, Surgeon to the House of Detention, said the prisoner was under his care from December 18th to January 15th. During that time he was in good health, and never on any occasion exhibited any appearances of epilepsy. With regard to the attack of the previous day, he was of opinion that there was a good deal of hysteria mixed up with it. He heard a young woman, who had been examined as a witness, utter an exclamation, which evidently affected the prisoner and brought on the attack. He had no opportunity of seeing the prisoner, except from the court, and he did not go into the gaol. [It is to be observed that this witness was on the bench. The prisoner's attack took place on the floor of the dock, and chiefly in the cell below the court.]

Mr. GIBSON, Surgeon to Newgate, said the prisoner had been under

his charge since January 15th. While under his observation, he had been in perfect health. Although the chief symptoms of yesterday's attack were those referring to a hysterical condition, the graver of them were of an epileptic character. There might be a distinct convulsive attack in those cases, without any premonitory symptoms. Strong efforts had been made to restore him after he was taken from the dock, and a quantity of snuff was blown up his nose, but was not followed by any effect. This morning, he had given the prisoner a pinch of the same snuff, and it caused him to sneeze violently.

The jury were asked to decide whether, at the time the prisoner fired the revolver, he was conscious and knew the nature of his act. They answered in the affirmative, and found him guilty. He was accordingly sentenced to death.

Such are the medical facts and evidence in this remarkable case. The jury have found Treadaway guilty; nor am I prepared in any way to question their decision. There was no defence whatever, except the question as to whether, as the prisoner stated, he was unconscious of his act. The judge admitted that no proof whatever could be obtained of any motive for the crime. In the interests of justice and humanity, it was, therefore, incumbent on those intrusted with the task to carefully collect all the statements and facts connected with the prisoner's health, and, in laying them before the authorities, it was their duty conscientiously to draw from them such inferences concerning the prisoner's condition as would assist the jury in the performance of their most responsible duty.

## LARGE WOUND OF SCLEROTIC, THREE-QUARTERS OF AN INCH IN LENGTH, TREATED BY SUTURE: RECOVERY OF SIGHT.

By SIMEON SNELL,

Ophthalmic Surgeon to the Sheffield General Infirmary.

THOMAS W. PARKIN, aged 16, whilst at work on September 6th, 1876, was engaged cutting a piece of scrap iron with shears, when the portion he was cutting off, about two inches long, flew up and struck his left eye. Within an hour of the accident, he was brought to me. The eyeball was then collapsed and soft, and the aqueous chamber filled with blood. Just below the cornea, at its middle, commenced a clean cut wound, running obliquely outwards and downwards, and measuring not less than three-quarters of an inch in length. It involved the deeper tunics, was wide and gaping, so that a finger could easily have been thrust into it. A large quantity of vitreous had evidently escaped. The lower lid was slightly cut towards the outer commissure. Vision was reduced to perception of light.

As there was no evidence of any foreign body being in the eye, although apparently with little prospect of restoring useful vision, it seemed to me well to close the wound by a suture, and thus, at all events, attempt to leave the organ as little unsightly as possible. This was accordingly done at once by means of a single loop of very fine platinum-wire, uniting the edges of the wound at about its centre. On placing the speculum beneath the lids to introduce the suture, the wound gaped so widely that it seemed as if the eye would be turned inside out. A pad of lint, wetted, was applied by means of a bandage, and a two-grain solution of atropine in an ounce of water ordered to be dropped into the eye three or four times daily. It was directed, also, that the lint be kept constantly wet with cold water. The day following, the eye had resumed its normal shape; the edges of the wound were in good apposition, and apparently closed. There had been very little pain.

September 8th. The suture, after having been in thirty-six hours, was removed. The wound was quite closed; the tension of the eyeball nearly normal. There was some little oedema of the conjunctiva, but no pain. He saw fingers indistinctly; no reflex was yet obtainable with the mirror.

September 11th. The blood in the eye had cleared up considerably, some filus floating in the vitreous body, but the fundus could be seen with the ophthalmoscope. He now read 16 Jäger.

He was still by far, I think, his usual employment.

September 12th. The eye has been rather improving in vision, and he has been able to read 20 Jäger. The wound is now represented by a faint, yellowish line, and a yellowish clouding of the lower margin of the pupil, the edges of which do not offer the usual appearance from its being closed.

Under the most favourable circumstances, a very small amount of wound may take, even though the vitreous body be largely involved. Two points, no doubt, contributed very materially to the good result obtained in this instance, which was

better, I think, than the most sanguine could have expected; finally, the short period that had elapsed since the injury before the effect of the wound were manifest; and, finally, the clearness of the eye. Small wounds of the sclerotic are not unfrequently met with, and these, for the most part, unite readily without a suture.

Platinum-wire can be obtained of extreme fineness, as fine as hair; it is little prone to oxidise, and seems to be a valuable wire for suture. I have used the very fine wire as a substitute for hair in performing the old Celsian "hair-loop" operation, revived by Snellen, for ingrowing eyelashes.

## THERAPEUTIC MEMORANDA.

### ACTION OF SALICYLIC ACID.

IN the notices which have appeared in the JOURNAL with respect to the action of salicylic acid and its compounds, no mention has yet, I think, been made of drowsiness as a symptom induced by its use. Dr. Ransom, senior physician to this hospital, first directed my attention to the fact; and since then I have observed it in cases under treatment here to a greater or less degree, but markedly so in one now in the hospital. The patient was admitted on the 7th instant with acute rheumatism of a fortnight's duration, being the fourth attack since childhood (twenty years), with a double aortic murmur and a temperature of 103 deg. Fahr. Salicylate of soda was administered in twenty-grain doses every hour for seven hours, when the usual physiological symptoms became manifest, accompanied by drowsiness, with complete relief from pain, which was severe on admission. A fall of two degrees and a half in the temperature was also registered. In the succeeding thirty-four hours, six hundred grains were taken, the drowsiness becoming much more marked, the patient sleeping constantly unless roused by being spoken to. Twitchings of the muscles of the forearm also existed, and the secretion from the skin was quite suppressed. On the drug being withheld, this state gradually passed away; without, however, a return of the pain or increase in temperature.

Our practice also goes to show that, for its antipyretic properties, where admissible, salicylic acid is unrivalled, having been fairly tried with quinine and digitalis; but, beyond this, in chronic rheumatic arthritis, marked benefit has accrued. As a febrifuge in cases of febricula, it has proved very serviceable; although in typhoid fever the success has not been what was expected, great care having to be used in its administration, on account of the tendency to produce diarrhoea and sickness. Salicin has also had a fair trial, but without success. Salicylic acid, if used by us, has been found to be more successfully administered in thin water-arrowroot than in any other way, this method being suggested by Dr. Ransom. The soda salt has, however, been returned to, because it can be given without so much fear of diarrhoea, etc., usually caused by the acid.

L. W. MARSHALL, M.D., Resident Surgeon,  
General Hospital, Nottingham.

### INJECTION OF AMMONIA INTO THE VEINS IN COLLAPSE.

ON a recent occasion, I injected ammonia in a case of collapse from scarlet fever. The patient had been unconscious for some time, and at the time of injection there was no perceptible pulse at the wrists; the respirations were about six to the minute; the arms up to the elbows were livid and cold, as were also the nose, lips, and ears. After five minims of the liquor ammoniæ fortior had been injected into the median cephalic vein (previously laid bare and separated from surrounding tissues), the patient gave a cry and threw up his arms; the pulse returned to the wrists; the natural hue and temperature to nose, lips, etc.; and consciousness returned, so that he could hear, understand, and give intelligent replies to my questions. Three hours afterwards, he was again in a state of collapse; and this time I injected eight minims into the median vein, with the same result as before. In an hour and a half, he was again in a state of collapse, and this time I could find a vein to inject. In this case, the undiluted liquor ammoniæ was injected, although Dr. Halford recommends now to dilute with equal or two parts of water. The effect after each injection was almost instantaneous—certainly under one minute after each. Although life was not saved, it was prolonged for six hours; for I am satisfied that the patient would have been dead within five minutes of the time I first injected.

The case is instructive from a medico-legal point of view, for there was perfect return of consciousness after the somewhat prolonged

period of perfect unconsciousness; and this might be an important thing in the case of signing wills, identifying murderers, or giving last instructions to relatives summoned from a distance, etc.

There was no appearance of sloughing, although the undiluted liquor ammoniæ fortior (*B. P.*) was used; and I am convinced that the danger of sloughing need never be an impediment to its use in ordinarily skilful hands; and if, after baring the vein, a few drops of oil be poured over the wound before inserting the nozzle of the syringe, that danger is reduced to a minimum.

My case was a lad aged 15, weighing over 11 stone and measuring 6 feet 1 inch. He died on the seventh day of the fever. The eruption had been well marked; but on the fifth day it began to assume a livid hue, and severe jaundition set in. There was no suppression of urine at any time, and the throat was unaffected. The highest temperature recorded in the case was 103.4 deg. Fahr.

R. D. PINNOCK, M.B., Melbourne, Victoria.

## OBSTETRIC MEMORANDA.

### INFLUENCE OF MATERNAL SMALL-POX ON THE FÆTUS.

A CASE reported in the JOURNAL of February 10th, of variola in the later months of pregnancy, in which the infant appeared not susceptible to vaccination, reminds me of some cases that have occurred in my practice of a similar character, but with a different result to the infants.

The first case occurred at a period when there was no epidemic of the disease in the city, and was in the person of a married actress who had been moving from place to place, but was not aware of having been exposed to the infection of the disease. She had been vaccinated in infancy, but had not been re-vaccinated. She was the mother of several children, and was in the eighth month of her pregnancy. The disease, although presenting numerous pustules, was not confluent; it assumed a modified character, and was not attended by secondary fever. She made a good recovery, and was convalescent when delivered of a healthy vigorous child at the full term. The infant presented no evidence of the disease, but continued healthy, and was successfully vaccinated at the age of six months.

The second case occurred during an epidemic of the disease in this city, and was in the person of a young married female in her first pregnancy at the seventh month. She had been vaccinated in infancy, but had not been re-vaccinated. The disease was distinct and modified; and she made so good a recovery as to be about her household duties at the time of her delivery at the full term. The infant was strong and healthy, and did not appear to have suffered from its mother's disease. It was successfully vaccinated at the age of three months.

The third case occurred to a mother who was nursing two of her children with confluent small-pox. She had been vaccinated in infancy, but not re-vaccinated. The disease attacked her within a week of her confinement at the full term, and was fully developed at the time of her delivery; it assumed a modified form, and was attended with much fever, except at the prodromic stage. She made a good recovery, and was able to support her infant with an average quantity of breast-milk. The infant when born was vigorous and quite free from any indication of the disease, which, as far as I was able to ascertain, was not communicated to it. The infant was vaccinated at the age of between three and four months.

The fourth case occurred to a married woman about seven months advanced in pregnancy, whose children had lately suffered from the disease; it assumed a modified character, and the patient made a good recovery, during the pregnancy at the usual time. The child was vigorous and apparently unaffected; it was successfully vaccinated at the age of three months.

The influence of small-pox on the health of the mother and infant, and the fact that the disease may be communicated to the infant, are well known. It is, however, not generally known that the disease may be communicated to the infant, and that the infant may be vaccinated at a late age, and still be protected. The case reported in the JOURNAL of February 10th, of variola in the later months of pregnancy, in which the infant appeared not susceptible to vaccination, reminds me of some cases that have occurred in my practice of a similar character, but with a different result to the infants.

The sixth case was in a married woman who had been nursing one of her children with confluent small-pox, and who had been vaccinated in infancy, but had not been re-vaccinated. She was in the eighth month of her pregnancy, and the disease assumed a modified form. She was expecting



her confinement daily, and was delivered while the eruption was fully developed upon her. She, however, made a good recovery, and was able to nurse her infant almost from the day of its birth. The infant was vaccinated the day after its birth, but without success; but, probably from neglect, became afflicted about a week after its birth with infantile erysipelas, and continued unhealthy for nearly three months; it, however, recovered and was successfully vaccinated at between four and five months of age.

The seventh case was in a mother who was nursing some of her children with the disease, and which she contracted at between the seventh and eighth month of her pregnancy. She made a good recovery, and was delivered at the full term of a fine healthy child, which was perfectly free from any integumentary disease; it continued healthy, and was successfully vaccinated at the age of three months.

GEORGE RIGDEN, Surgeon, Canterbury.

## REPORTS

OF

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### MANCHESTER ROYAL INFIRMARY.

##### TREATMENT OF MULTIPLE ABSCESES BY HYPERDISTENSION WITH DILUTE CARBOLIC ACID.

(Under the care of Mr. F. ASHTON HEATH.)

FOR the report of the following case, we are indebted to Mr. Victor A. Wartenberg, Senior House-Surgeon.

Mr. Callender's method of treating large abscess cavities has lately been used in several instances at this hospital with marked success; the following case, which is at present under Mr. Heath's care in the wards, is a remarkably good illustration of its value.

Sarah W., aged 31, admitted December 12th, 1876, married two years, has two healthy children, the youngest not being seven weeks old. She had always had good health up to her last confinement, which was natural in character, and occurred on October 25th, 1876. Four days afterwards, she took cold, and was laid up with pains in the limbs and joints, and profuse sweating, and was said to have rheumatic fever. About a fortnight after these symptoms set in, she had one or two severe shivering fits, and noticed about then a swelling at the upper and inner side of the left thigh, and soon afterwards a second swelling over the right hip. She had continued attacks of vomiting, and was much purged until the time of her admission.

December 12th. She was exceedingly weak, and of a pale cachectic appearance; pulse 124, feeble and irregular; temperature 104.4 degs. At intervals she perspired profusely, and at other times became quite cold. She lay upon her face, and was unable to move her lower extremities. There was every symptom of chronic pyæmia, and at the upper and inner aspect of the left thigh there was a large abscess; a second one occupied the region over the right hip; a third one lay just over the upper part of the sacrum; and a fourth, a smaller one, was found in the left breast. She was ordered two grains of quinine three times a day, good diet, and six ounces of port wine.

December 19th. The largest abscess, that on the inner aspect of the left thigh, was opened with a scalpel; and carbolic acid lotion, 1 in 20, mixed with half its bulk of warm water, was injected, by means of a Higginson's syringe, continuously into the cavity until it was fully distended, and the fluid returned almost clear. A drainage-tube of perforated India-rubber was then introduced, and the abscess was dressed with "cere-cloth" soaked in glycerine and carbolic acid, and covered with oil-silk. Each day these dressings were renewed, and twice a little carbolic lotion was injected.

After the tapping on the 19th, when nearly eighteen ounces of pus were evacuated, the discharge lost its purulent character, became very scanty, and almost entirely serous in nature.

January 3rd, 1877. The abscess in the back was tapped in a similar manner to the previous one; about seven ounces of pus were removed, and dressings as before applied. The cavity of the other abscess was contracting.

January 6th. The abscess in the right thigh was tapped, and sixteen ounces of pus removed. The cavity was distended as before.

January 8th. The abscess in the breast was tapped, and six ounces of pus removed. The cavity was distended.

January 9th. Temperature 99 degs. The pulse, which the day before had been 110 per minute, was 84. The patient felt better.

January 16th. The patient was on a fair way towards recovery. The wounds in the back, breast, and left thigh were completely healed, and the one over the right hip almost so.

January 21st. The patient was up for the first time. She had a capital appetite, and was rapidly gaining strength.

REMARKS.—One remarkable feature in this case is the temperature, which persistently remained at from 100 to 100.4 degs., but dropped to 99 degs. as each successive abscess was tapped, only rising again on the second day. After the last abscess was tapped, however, it fell to 99 degs., and permanently remained at that. Dr. Ross, the pathologist to the hospital, received some of the pus in capillary-tubes as it came from the abscess, and examined it carefully under the microscope, and found it perfectly healthy and free from bacteria.

#### WEST SUSSEX INFIRMARY, CHICHESTER.

##### CASE OF STRANGULATED INGUINAL HERNIA: SECOND OPERATION SUCCESSFUL.

(Under the care of Mr. FREELAND.)

FOR the report of the following case, we are indebted to G. Gordon Sparrow, L.R.C.P., House Surgeon.

W. K., aged 36, was admitted October 16th, 1875, suffering from strangulated inguinal hernia on the right side. Taxis was performed, but without avail. The symptoms of strangulation becoming more marked, herniotomy was successfully performed, and the patient was discharged cured seventeen days after the operation.

He was readmitted on December 17th, 1876, suffering from the same complaint. He had always worn a truss since the last operation, even in bed. On the night of the 16th, however, the truss slipped, and he was awakened with great pain in the abdomen, and found that the hernia had descended into the scrotum, and he was unable to return it. When he was brought to the infirmary, he was placed in a warm bath, and taxis was performed, but without any favourable result. Two grains of opium were administered within three hours, and two turpentine enemata, but the bowels were not moved. As the symptoms were not urgent, the patient only vomiting occasionally, the pulse slow, the tongue moist, hot fomentations were applied to the tumour, and half a grain of calomel and opium given every four hours. The patient passed a tolerably good night, and appeared to be much relieved. On the morning of the 18th, the tumour was less tense, smaller in size, and not so tender. Vomiting was less frequent; pulse 60; temperature 99 deg. Fahr. On the same evening, the symptoms became more marked, stercoraceous vomiting and hiccough setting in; the tumour became tense and tender, and his countenance haggard. Herniotomy was performed by Mr. Freeland, who made an incision two inches in length along the direction of the canal, carefully dividing the structures in the usual manner. On opening the sac, a quantity of turbid serum escaped. The strangulated portion of the gut was found to be in a very congested condition; the stricture and the old adhesions which presented themselves were divided, and the bowel returned. The wound was brought together by silk sutures, and dressed with a large pad of dry lint and a bandage, and over this some lint saturated with carbolic acid lotion (1 in 40).

December 19th. The patient was doing well. He complained of slight tenderness over the right iliac region. Pulse 70; temperature 100 degs. Fahr.

December 20th. The pulse and temperature were normal. He took beef-tea and milk readily.

December 21st. The bowels were opened for the first time since the operation. The pulse and temperature continued normal. The wound was examined, and dressed with dry lint and carbolic acid lotion as before.

December 22nd. The edges of the wound having united, the sutures were removed. The patient complained of very little pain in the abdomen.

December 23rd. The wound was completely healed.

December 25th. The patient was allowed meat-diet.

January 6th, 1877. He was allowed to get up with a properly fitting truss.

January 16th. He was discharged cured.

REMARKS.—This case is of special interest in consequence of recovery from a second operation, and the wound healing with such rapidity without any appearance of suppuration.

## REPORTS OF SOCIETIES.

## OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, FEBRUARY 7TH, 1877.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

**Monstrosity.**—Dr. PALFREY showed a monster with two heads, three arms, one trunk and pair of lower extremities. The heads were nearly on a level, and the two passed through the vaginal outlet at the same time.—Dr. PRIESTLEY asked what amount of traction was necessary to effect delivery, what degree of laceration was caused, and what was the state of the mother afterwards.—Dr. TIPPLE, who attended the case, replied that the woman had had local peritonitis and a large ulcer behind the left iliac crest.—Dr. BARNES said that the longer head fitted into a concavity in the other.—Dr. HEWITT said it was evident that one head came down somewhat before the other.—The PRESIDENT referred the specimen to Dr. Hayes and Dr. Playfair for report.

**Epithelioma of the Cervix Uteri: Delivery.**—Dr. GODSON showed a foetus at full term, of which he had delivered a woman suffering from extensive epithelioma of the cervix. The patient was seen at the commencement of labour, and it was decided to deliver *per vias naturales* in preference to Cæsarean section, as affording a better chance of recovery to the mother. Dilatation by Barnes's bags, turning, perforation at the occiput, and cephalotripsy were subsequently adopted. The os uteri appeared to have escaped laceration, and the woman was doing well.—Dr. EDIS referred to a case in which he delivered *per vias naturales*. He thought, however, that the Cæsarean operation was in most cases preferable.

**Apparatus.**—Dr. HEYWOOD SMITH showed three new points for Paquelin's petroleum cautery, and "Bailey's patent" abdominal belt. The peculiarity in the belt was two slits to embrace the crista ilii, so as to prevent rucking. Dr. Smith showed also a pelvimeter, which could be equally used for internal and external measurements.

The new volume of *Transactions* was presented to the Society.

The PRESIDENT delivered his address.

**Inversion of the Uterus.**—Mr. R. HICKMAN described two cases. Both were attended by midwives, and the cause of the inversion in each case is uncertain. In both cases, the uterus was readily returned to its normal position. In one, the woman did well; in the second, the patient died soon after reduction.

**Spontaneous Inversion of the Uterus.**—Dr. F. R. ELKINGTON of Brockville, Ontario, described a case. Labour was natural. On the third day, the uterus became suddenly inverted, owing apparently to the administration of a large dose of castor-oil. It was easily reduced, and the patient did well. The author thought that "unequally distributed pressure on the fundus of the uterus after expulsion of the placenta occasionally gave rise to partial inversion.

**Inversion of Uterus.**—Dr. CLEMENT GODSON described a case. A patient, thirty-one years of age, had an easy labour with her first child two years and a half ago. From that time, she felt a lump in the vagina, which appeared to be lower during the menstrual epochs. She was very weak and anæmic. On examination, the uterus was found to be inverted. Dr. Greenhalgh and Dr. Godson made four different attempts at reduction by taxis, but without success. A plug of glycerine of tannin and an air-ball pessary were introduced into the vagina with a view to gradual reduction, but they had to be removed owing to profuse hæmorrhage. Finally, the uterus was removed by the *écraseur*. The patient lost but little blood, and made a rapid recovery. Another patient had had a long and difficult labour two years and a half ago. She lost much blood after the labour, and off and on until she came under observation. On examination, the uterus was found inverted. Repeated attempts at reduction by taxis were made, but they proved unsuccessful. Owing to the persistence of the hæmorrhage and the gradually increasing exhaustion consequent on it, amputation was decided upon. This was done by the *écraseur* without loss of blood. The patient made a good recovery.

**Inversion of the Uterus.**—Dr. HEYWOOD SMITH described the case of a woman aged 30, who was delivered of her first child by forceps three months before. The placenta was removed with some force. The bowels remained unrelieved for eleven days. An enema was administered; and, during the straining which followed, the womb appeared to have become inverted. From that time, she had a more or less constant sanguineous discharge. On examination, the uterus was found inverted, the orifice of the oviducts being felt. The patient was put under the influence of chloroform, and reduction was attempted in the way generally recommended, by constriction at the neck of the

uterus and pressure at the point of flexion. Pressure was then made on the fundus, while counter-pressure was exercised above the pubes; but, although a deep depression was made by this means, it failed of success. The whole organ was then pressed, so as to squeeze the blood out of it, and the tip of the finger was passed into the right oviduct. Reinvasion commenced under the tip of the finger, and in a short time the uterus was restored to its position. The patient made a good recovery. The author was of opinion that the only rational method of reduction is to begin at the insertion of an oviduct.

**Inversion of the Uterus.**—Mr. W. H. MABERLY described a case. The patient, aged 21, had had one child. The labour was easy, but was followed by profuse hæmorrhage. Afterwards she was the subject of menorrhagia. Dr. Greenhalgh found the vagina relaxed and capacious, and the uterus inverted. Three attempts at reduction were made by Drs. Greenhalgh and Godson, but without success. The uterus was removed by the *écraseur*. The night after the operation, profuse hæmorrhage took place, which was arrested by the application of ice to the abdomen and vagina. Recovery was slow.

Dr. SMITH asked what method of manipulation was adopted in this case.—Dr. GODSON said that general pressure was first used to expel the blood from the organ, and then pressure on one spot by the thumb. In one case, the orifices of the oviducts could not be found; in the others, they were extremely small.—Dr. AVELING thought, in returning inverted uteri, it was a point of great importance what part of the fundus should receive the upward pressure. He had, in a case of only ten days' standing, been unable to force the fundus through the cervix until that portion which corresponded with the insertion of the Fallopian tube was specially selected for pressure.—Dr. BRAXTON HICKS said the difficulty lay in the fact that the uterus was, in most chronic cases, shrunken and small, and its tissue so dense that it was not possible to indent it. Sudden reduction was not free from danger, for he had seen collapse take place while pressure was being made. He thought the slow method of reduction the best.—Dr. ROBERT BARNES said that recent cases could be reduced by the hand. It was advisable to swab the interior of the uterus afterwards with a styptic. Chronic cases were best treated by the slow method of constant elastic pressure and not by brute force. Placing an air-bag in the vagina was not enough. An elastic ring should be placed round the uterus, and pressure exercised from the lower part of the vagina. If this failed, small incisions should be made in the constricting part, and elastic pressure applied again. Amputation was not without danger to life, and it was a mutilation of the woman.—Dr. STORER (Boston) said that, in America, the inverted uterus was looked upon not as a fibroid or a polypus, the removal of which, if possible, was a duty, but as an important part of the body, to be replaced and preserved, and that operations for its removal were had recourse to only when cure had proved impossible. Dr. Storer thought that Dr. Thomas's operation, dilatation of the cervical ring from above after abdominal section, was based on sound reasoning; and he approved of Emmet's employment of metallic sutures to preserve the gain obtained at one operation for the following one, and render it possible to complete the operation successfully. Inversion was occasionally complicated by the presence of a fibroid. This fact throws some light on the causation of inversion otherwise doubtful. Where such existed, uterine contractions after labour would be almost necessarily irregular, and might force the fundus downwards. It would also impede reduction after long displacement. Irregular contractions, even from slight causes, might cause inversion.—Dr. EDIS called attention to the comparative frequency of cases of inversion. Judging from the cases recorded, this greater frequency was comparatively of recent date. He thought this was probably due to the employment of too much or of ill-directed force in the expulsion of the placenta. The treatment would vary according to the length of time which had elapsed since the inversion took place and other circumstances; but amputation should only be done as a *dernier ressort*, when all other means had failed.

## MEDICAL SOCIETY OF LONDON.

JANUARY 20TH, 1877.

WILLIAM ADAMS, F.R.C.S. Eng., President, in the Chair.

**Some Sympathetic Ear-Symptoms.**—Dr. E. WOAKES read a paper on this subject. The conditions discussed in this paper were based on the frequently observed occurrence of inflammation of the ear and otalgia caused by the presence of a decayed tooth, or a sore on the tongue, and the equally common event of spasmodic cough induced by the presence of a foreign body in the nostrils. The continuity of sensitive nerve-fibres being deemed insufficient explanation of these symptoms, the object of the paper was to supply the true method whereby through nerve-influence a genuine inflammatory action is set up in the ear, the original seat of irritation being widely separated



from it. Great stress was laid on the importance of the fact that fibrillæ belonging to the vaso-motor system of nerves are mingled in the same fasciculus with those of the cerebro-spinal system; the former set of fibrillæ being brought into reflex relationship with the nervi vasorum distributed on the arteries of the part reflexly affected, by means of the sympathetic ganglia in which the two sets of fibres communicate. In this way, it was shown that distinct channels of communication existed between the vessel nerves which regulate the supply of blood to the ear, and the otic ganglion, while branches of the fifth nerve connected the carious tooth and the ulcers on the tongue also communicate with this ganglion. It was then indicated how morbid impressions affecting the latter would influence the former, and thereby produce vascular distension of the drum-head and contiguous regions, producing a veritable hyperæmia of these parts, to the consequences of which the pain and inflammation were referred. A similar communication was also traced between the nervi vasorum of the vessels of the larynx and the auriculo-pneumogastric nerve supplying the meatus, through the medium of which connection a case of laryngitis from the presence of a bean in the external canal was traced. The paper concluded with the suggestion that, owing to the sympathy thus established, it was possible for spasmodic croup in children to be due to draughts of cold air falling upon the ear, and advantage was taken of this sympathetic association to suggest a simple method of treatment in such cases.

## ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

JANUARY 24TH, 1877.

S. CARTWRIGHT, F.R.C.S., President, in the Chair.

*Swelling of Upper Jaw containing a Temporary Tooth.*—Mr. T. EDGELOW described a case of maxillary disease presenting remarkable, if not unique, features which had recently come under his care. A circumscribed swelling occurred in connection with the right maxillary bone; it was situated on its outer side, and was connected with a sinus opening by the side of the second bicuspid tooth. This fistula was about an inch in depth, healthy pus escaping from it on pressure. At its extremity, a hard substance could be distinctly felt. The patient was sixteen years of age; and, all the permanent teeth being present with the exception of the wisdom-tooth, it was supposed to be an impacted supernumerary tooth; but, on cutting down upon it, it proved to be the second temporary molar, which not only showed that it had been decayed, but was actually stopped with an amalgam filling, proving that it had not only descended with the other temporary teeth, but that it had subsequently been driven beyond the range of the permanent teeth, giving no more trouble beyond the disfigurement occasioned by the tumour and a slight discharge which had lasted five years.—Mr. SALTER said that, in the only case of cyst yet recorded (by himself), in which a temporary tooth was the dental element concerned, the tooth was also a second upper molar. However, Mr. Edgelow's case was not really a cyst of this character. He considered that the tooth, having once been in normal position, had receded or been forced into the locality it afterwards occupied. The apparent cyst might have been the sac of an alveolar abscess, associated with this tooth. He had seen a condition repeatedly in which the second temporary molar tooth was pushed back into the substance of the jaw by the convergence and continued approximation of the crowns of the first bicuspid and first permanent molar. He had never seen the like effect produced upon any other temporary tooth than the second molar.—The PRESIDENT asked whether a bicuspid tooth had not been unnecessarily sacrificed in the operation. He thought that the tooth could have been removed without the extraction of the sound tooth.—Mr. COLEMAN thought Mr. Edgelow's case could be best explained by regarding the second temporary molar as placed in a double inclined place, viz., between the advancing crowns of the first bicuspid and first molar, which in their progress pressed or squeezed it up into the alveolus, as teeth were sometimes so pressed up under very undue pressure.—Mr. HAMILTON CARTWRIGHT said that, if Mr. Edgelow were correct in his assumption, that this temporary tooth was encapsuled with an osseous envelope, he thought that this case might be explained by the process of maxillary development. On the eruption of the second teeth, absorption would take place, and this tooth would have been wedged up by the action of descending second bicuspid and first molars. Eruption being completed, deposition of bone would be so active that it might have encased this foreign body, and the tooth would have been driven up into the alveolus, the tooth being in an infant, and set up inflammation, chronic mischief, and discharge.

*Caries of the Upper Jaw.*—Mr. H. CARTWRIGHT showed a patient,

the subject of caries of the right superior maxillary bone. The patient came to him with a tumour of the periosteum covering a large portion of the palate, this being in connection with two sinuses, one of which was at least an inch in depth, running parallel with the floor of the nares. On laying those open, he found the bone extensively diseased; and, on removing it with a gouge, he came upon the apex of a bicuspid root not much larger than a hempseed, whence the mischief had evidently primarily proceeded. The wound was now healing from the bottom, and all discharge had ceased.

*Hypertrophy of the Intermaxillary Bone.*—Mr. NATHANIEL STEVENSON exhibited some plaster-casts, showing the result of his treatment of a case of hypertrophy of the intermaxillary bone. The patient, being a lady of much personal attraction, was anxious to have the deformity removed; the protrusion of the tumour prevented her lips from completely closing, whilst the absence of the lateral, and the wide separation of the central incisors, and a mass of indurated gum exuding between them and embedding the canines on each side, added much to the unsightliness of the defect. As no mechanical contrivance could be of avail without operative interference, the incisors were extracted; and, the hard spongy gum being removed and the soft tissues dissected away, the hypertrophied bone was excised under the influence of nitrous oxide gas and ether. The wound soon healed, and he then supplied the vacancy by a suction-plate in the way shown in the accompanying model.—The PRESIDENT congratulated Mr. Stevenson upon the success of his treatment, the adoption of which was generally approved of by other speakers.

*Instrument for Keeping the Mouth Dry.*—Mr. A. COLEMAN showed an invention designed by Dr. Orphoot for keeping the mouth dry during dental operations. Its ingenious character was commented upon by Mr. Coleman, Mr. Morley, and Mr. Napier; though a general opinion seemed to prevail that it could only be used under exceptional circumstances.

*Odontoma.*—Mr. SALTER exhibited an odontoma of the kind called by M. Broca "radiculaire", but which Mr. Salter named "hernia of the fang". He remarked upon the extreme rarity of this tumour, there being only four recorded cases and two unrecorded of which he knew. The specimen was shown in its entirety previously to its dissection for microscopic scrutiny; after which, it will be again exhibited and the results of the investigation given to the Association.

*Alveolar Hemorrhage.*—Mr. HAMILTON CARTWRIGHT read notes of a remarkable case of alveolar hemorrhage occurring in a patient the subject of jaundice. A loose stump was removed from the gum, when uncontrollable bleeding ensued, not only from the wound, but from the whole surface of the mucous membrane. The case was considered hopeless; whilst it also transpired that the patient, though a healthy man before he became the subject of icterus, had subsequently to that period had hemorrhage not only from the gums, but also from other parts. When he saw the patient, after two days' bleeding, hemorrhage was taking place from the whole surface of the gum, and the patient was much exhausted. Perchloride of iron had been extensively used; and, although it had checked the bleeding on the first application, it utterly failed to arrest it afterwards. With the consent of the gentleman attending the patient, Mr. Cartwright took a model of his mouth, and made a gutta-percha compress accurately adapted to the teeth of each jaw, into each side of which strips of lint were placed over some solid perchloride of iron, the use of which was suggested by Sir James Paget; whilst space was left for the administration of food, thereby avoiding the necessity of giving it *per rectum*. Opium was also given freely. Bleeding was thus arrested for nearly twenty hours, but subsequently recurred, when the compress was reapplied with the result of arresting the hemorrhage. The attention of the Society was drawn to the not unfrequent occurrence of epistaxis in jaundiced patients; and the members were asked to give their experience of the effects of other constitutional lesions in inducing a hemorrhagic tendency. The use of the liquid perchloride was reprobated, on account of the sloughing it caused if primarily unsuccessful, thereby creating a larger surface from which bleeding could ensue. Mr. H. Cartwright extolled the use of opium in such cases, though, as a rule, internal remedies were not of much avail. In the present case, he believed that the attention paid to the patient by his medical attendant, the careful adjustment of the compress, and the means adopted of feeding the patient in combination with the opium saved his life. In cases of this kind, those around the patient would frequently misjudge the amount of hemorrhage taking place. It was, of course, a matter of great importance not to remove the compresses frequently in obedience to other fears, and he thought that a good criterion of the amount of blood swallowed was the frequency of swallowing, as proved by the movements of the larynx. After a few remarks from the President, Mr. Salter, Mr. Coleman, and Mr. Napier, the meeting adjourned.

## HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 1ST, 1877.

T. CARR JACKSON, F.R.C.S., President, in the Chair.

*Stone in the Bladder.*—The PRESIDENT brought forward some cases of stone in the bladder. A bottle was exhibited containing the *débris* of a calculus, which was removed from the bladder of a middle-aged gentleman, who had suffered from repeated attacks of nephritic colic. He was of gouty diathesis, and lived generously. He never showed a bad symptom. With this case was contrasted one of calculus in a man of the same time of life, who had suffered from hæmaturia. A severe cystitis was set up by the second sounding. Lateral lithotomy was performed. The convalescence was much perturbed. A variety of calculi were then exhibited. Lithotomy was a very successful operation when skilfully performed. Many successful cases of lithotripsy would have recovered equally well under lithotomy.—Mr. GANT made some observations as to the effects of the size and hardness of the stone, the patency of the urethra, and the age and constitution of the individual upon the results of the operation.—Mr. TEEVAN said that no two cases could be compared. Lithotomy should be reserved for a small number of exceptional cases. The mortality from lithotomy in London was very great. Lithotripsy was not always successful.—Mr. CARR JACKSON replied.

*Abdominal Disease.*—Dr. FITZPATRICK read a paper on cases of abdominal disease. He related two cases from private practice. The first was a gentleman aged 33, of phthisical family, who suddenly felt pain in his abdomen, chiefly in the left inguinal region, with frequent sickness. Local peritonitis was diagnosed. From this he gradually recovered. He had frequent returns of similar character, all of which were tedious and slow in recovery. The pain always remained in the same locality. At last, some fulness became perceptible. There were also blood in the stools and pain in the back. Extensive disease ultimately manifested itself, and colotomy was performed, but the patient died. On *post mortem* examination, the bowel was found inflamed and gangrenous. There was also a large growth. The second case was a female aged 25, tall and florid. She first had some chest-symptoms, with pyrexia and night-sweats. Then, a tender spot was found in the inguinal region. There was a tumour formed as large as a cocoa-nut. There was no albuminuria. The tumour grew towards the middle line. Dysuria set in. She went into the country; the abscess was opened; but she died. There was no necropsy.—Mr. GANT asked if the aspirator had been resorted to in either case.—Mr. BROADBENT thought the examination *per rectum* in the first case too long delayed.—Dr. WYNN WILLIAMS thought in the second case a vaginal examination with an exploring needle would have been desirable.—The PRESIDENT and Mr. TEEVAN spoke of chloroform and forcible dilatation of the rectum in doubtful cases.—Dr. DE GORREQUER GRIFFITH related a case of mistaken diagnosis.—Dr. FITZPATRICK replied; and the meeting adjourned.

## PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, JANUARY 13TH, 1877.

THOMAS HAYDEN, F.R.C.Q.C.P., President, in the Chair.

*Disease of Knee-joint.*—Mr. TYRRELL showed the structures of an excised knee. There was a four-years' history of disease. The synovial membrane was much thickened, the cartilages were completely eroded, but the bony parts were only superficially affected.

*Mitral Stenosis.*—Dr. NIXON showed the thoracic viscera of a man, aged 30, who had suffered from syphilitic periostitis. There was at the apex of the heart a presystolic murmur, which terminated in a clear and distinctly marked first sound. At the base, a systolic murmur was heard. While in hospital, the patient contracted varioloid, which became complicated with lobular pneumonia and hæmorrhagic infarctions in the right lung. After death, the left lung was found compressed. The left auricle was dilated; its walls were thickened. There was a funnel-shaped mitral valve. The cavity of the left ventricle was normal, but its walls were attenuated. Dilatation and hypertrophy of the right chambers existed. It will be observed that Dr. Balfour's physical signs of "funnel-shaped" mitral valve were present. Traction on the arterial zone led to the development of the basic systolic *bruit*, which had its seat in the anterior segment of the mitral valve.

*Melchior's Cancer of the Stomach.*—Dr. PENNY presented a specimen from the body of a man, aged 40, who had been long ill with dyspepsia (although his appetite was usually good), with eczema of the pudenda and legs. Just before death he vomited blood, and a bright florid hæmatemesis occurred. The stomach was found full of black clots of blood, and the intestines were throughout heavily lined with

blood. The stomach was also softened, and broken-down masses of cancer lay in its *cul-de-sac* and great curvature. The pancreas was partially adherent to the diseased mass. The splenic vein was intact; but the splenic artery traversed the growth, and a small branch of it having given way was the source of the hæmorrhage. The features of interest in the case were: 1. The absence of tumour, viz., Andral's sign of cancer; 2. The insignificance of symptoms; 3. The absence of apathy or emaciation; 4. The occurrence of death by hæmorrhage; and 5. The unusual site of the disease, viz., the fundus of the stomach. The liver was secondarily affected.

*Cirrhosis of Liver in a Boy.*—The PRESIDENT showed the viscera of a boy, aged 14, who had general dropsy with marked ascites. Passive pleural effusion occurred, and necessitated thoracentesis. On repeating the operation, the fluid was purulent. After death, the right lung appeared compressed and carnified; the pleura was thickened. The pericardium was firmly adherent to the anterior surface of the heart, which was small. A calcareous plate existed in the pericardium, and passed into the substance of the heart-itself. The liver was nodulated; its connective tissue was increased; its cells fatty. The kidneys were granular. The urine had been frequently tested and found free from albumen, of moderate specific gravity, and excessive in quantity. The atrophy of the heart, in the presence of an adherent pericardium, was doubtless due to the long-continued cachectic state of the boy's system.

*Calcareous Aortic Valves.*—The PRESIDENT exhibited the heart of an intemperate man, aged 30, who had œdema of the lower extremities, cough, and muco-purulent expectoration. There was a basic systolic murmur; also a ringing diastolic murmur, best heard in the third left intercostal space, and uneven inspiration—at first slight and then loud, as if an obstacle to the entrance of air had been overcome. The heart was enlarged. Its left ventricle was dilated and thickened, except at the apex, where its wall was about three lines in thickness. The mitral valve was quite healthy; but the aortic valves were rigid, rugged, and calcareous. This was also the condition of the right anterior sinus of Valsalva. There was no disease of the coronary artery. The ringing tone of the diastolic murmur was due to the calcareous condition of the aortic valves. Only a few specks of atheroma existed at the beginning of the aorta, which was otherwise healthy.

## SOUTH OF IRELAND BRANCH.

DECEMBER 16TH, 1876.

H. MACNAUGHTON JONES, M.D., President, in the Chair.

*Fusiform Dilatation of Aorta.*—Dr. R. ATKINS exhibited a specimen of this condition, taken from the body of a man who had been for the last thirteen years one of the healthiest inmates of the District Asylum, and never presented any appearance of organic disease, always occupying himself industriously in carrying messages, which necessitated his very frequently going up and down a hill, often bearing heavy weights. The man was found dead in bed; and, from his position and appearance, had evidently died while asleep. *Post mortem* examination revealed a hæmorrhage into the pericardium, the clot weighing six ounces and seven drachms. The aorta was considerably dilated throughout its entire diameter above the sinuses of Valsalva, and its inner cores were dissected from the outer ones for several inches in length; the reflection of pericardium enclosing the aorta and pulmonary artery was thinned and infiltrated with dark coloured blood, and the heart muscle at the origin of the aorta was softened, easily torn, and similarly infiltrated with blood. The cardiac valvular apparatus was generally healthy. A minute opening was found in the left lateral wall of the aorta, where the remaining coats were much thinned, and through this the blood had escaped into the pericardium. The liver, though of normal size, presented the characters of cirrhosis, an interesting fact in connection with the absence of any history of intemperance, which led to a discussion amongst the members present.

*Scars of Amputation.*—The PRESIDENT exhibited the amputation flaps from a Syme's amputation, which he had removed secondarily by Teale's rectangular flap-operation for recurrent disease, and related the history of the case; after which the meeting adjourned.

THE Pontypridd Rural Sanitary Authority have received an intimation from the Local Government Board that, being dissatisfied with the sanitary condition of the district, they have resolved to make a provision for the better management of the district, and that with that view a Local Board of Health should be established as soon as convenient.



# REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

## THE LINTON CAB.

ONE of our correspondents has recently inquired as to the most convenient form of a single-horse carriage for medical practice, and we have received several rather interesting communications on a subject which seems to occupy the minds of a good many medical men. That which we publish to-day goes pretty fully into the subject and speaks for itself. We may, however, take this opportunity of calling attention to a new form of carriage devised in some measure, we are informed, at the instance of the late Sir William Fergusson, and which will, we believe, be found to be particularly convenient for medical practitioners generally. It is practically a Hansom looking backwards. The advantages of this form of carriage are very numerous. In the first place, the person who rides in it escapes gusts of wind and showers of rain, and can read or examine papers, or smoke, whilst enjoying the fresh air, being under shelter. We know of no other carriage in which this can be accomplished with equal facility. The greatest advantage with regard to the draft of this carriage is that, the horse being close to its work, the carriage has a very light draft, and that sway and strain are avoided, which in the Hansom cab prove very trying to a horse, especially in turning corners. The carriage is of easy access in getting in or out; the clothes cannot touch the wheel; and it is practically almost impossible that any accident should happen to those who ride the Linton. It is close to the ground, and instant egress from it is very easy. On the whole, if the prejudice be set aside which a few persons may entertain from the fact that this carriage looks backward instead of forward, we believe it will, on examination, be found to be one of the most pleasant and useful ever introduced. It will be found particularly convenient when it is desired to go long distances with one horse without overworking the animal.

## NITRITE OF AMYL.

THE increasing appreciation of the value of this agent renders its safe administration in the emergencies for which it is required a matter of great importance, seeing that the vapour of five minims may save life, and that of twenty destroy it. To insure the instantaneous use of a safe dose, it has been suggested to have a few minims sealed up in a glass capsule, which can be readily broken when wanted. The extreme volatility of the fluid has presented a little difficulty which has been overcome, and Messrs. Allen and Hanbury, of Plough Court, Lombard Street, have forwarded to us capsules containing about four minims each. They are sold in boxes each containing six.

## TASTELESS PILLS.

THE division of labour between the pharmacist and the medical practitioner steadily extends itself, and is becoming gradually adapted to the greater requirements of the general practitioner who supplies his own medicine, in respect to the elaboration of modern therapeutics and the requirements of a more fastidious public for medicine which shall be as little nauseous as possible.

Few practitioners living—at least in great towns, and practising among the more fastidious classes—would now venture to prescribe the old-fashioned and nauseous black draught, or Gregory's powder. The tasteless pills which are now largely used are a great boon to patients, and, at the same time, the convenience with which they may be stored, their elegant appearance and constant readiness for use, make them equally or even more advantageous to the general practitioner. For purposes of prescribing, however, it is desirable to possess, or to be able to draw upon a considerable variety of formulæ.

Messrs. Probyn and Co. of Grosvenor Street and Pall Mall East have published a little book of one hundred and thirty-one formulæ, from which they prepare their tasteless pills. If only as a book of extremely good and varied formulæ resulting from a large experience of the prescriptions of well-known physicians, this little work is worth having.

In such cases, it is of course particularly important that the prescriber should be able to depend upon the good faith, scientific accuracy, and conscientious care of those who furnish the pills, and for this purpose the established reputation of the house affords no small guarantee.

The pills are perfectly tasteless, as well as soluble in about fifteen or twenty minutes in water at a temperature of 60 degs. Among the formulæ, which strike us as peculiarly good and useful, are such as the following: formula 41, for aloes and ipecacuanha pill; formula 68, for iron, quinine, and strychnine (each pill representing one drachm of Easton's syrup); formula 58, for a phosphorus, iron, and quinine pill; and formula 60, for phosphorus, iron, and strychnine; as well as other formulæ for combinations of phosphorus (see pages 16 to 19).

## PORTABLE UTERINE INSTRUMENTS.

WE have examined a very handy and complete set of instruments for uterine purposes submitted to us by Messrs. Salt and Son, surgical instrument makers, Birmingham, which we think will be found extremely useful. The instruments, six in number, the handle being



made of aluminium beautifully finished, are contained in a neat case six inches long by three inches wide and three-quarters of an inch thick. They are, a *porte-caustique*, lancet, sponge-holder, Playfair's probe, Simpson's sound and uterine elevator. These instruments all fit the same handle, and are propelled to the required length by a rotating motion similar to the clinical thermometers recently introduced by the same firm. The total maximum length of each instrument is twelve inches—long enough for use with any speculum. This pencil-case motion reduces the size of the case by one-half, and thus renders it specially convenient for the pocket.

## GRANULAR EFFERVESCENT SALICYLIC ACID AND GRANULAR EFFERVESCENT SALICYLATE OF SODA.

ACTING on our suggestion (see *ante*, page 138), Messrs. Savory and Moore have now submitted to us the above preparations. They are beautifully formed effervescent granules, and contain the important remedies named in a ready and convenient form for administration. The profession are indebted to Messrs. Savory and Moore for being the first to solve the difficulty found in the administration of efficient doses of such bulky drugs as salicin, salicylic acid, and salicylate of soda.

COCKERMOUTH.—The Local Board's statistics are satisfactory, as the birth-rate has increased from 30.01 to 32.00, and the death-rate has descended from the enormous altitude of 31.67 to 22.7, per 1,000 population. Out of the 170 births, only 22, or 12.9 per cent., died during the first year of life. The number of deaths from zymotic diseases was still large—viz., 29 out of a total of 121; but it was much less than in 1874, when the town suffered severely from scarlet fever, which had ceased as an epidemic by the middle of 1875. Mr. Fox, in commenting upon the large mortality from infectious diseases, attributes it to the existence of numerous minor nuisances, such as arise from the keeping of swine, filthy privies, and in many places small dilapidated cottages. As regards Cockermouth Rural Union, which includes Keswick, Cockermouth, Workington, and Maryport, with a population estimated at 49,493, the number of births was 1,850, or at the rate of 39.33; whilst the deaths were 1,159, or at the rate of 23.40 per 1,000 population. The death-rate of Keswick was 13.22; of Cockermouth, 18.80; of Workington, 25.68; Workington Urban, 28.83; and Maryport, 16.80. There were 131 deaths from zymotic diseases.

BRITISH MEDICAL ASSOCIATION:  
SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, FEBRUARY 24TH, 1877.

THE OBSTETRIC ASPECTS OF IDIOCY.

DR. LANGDON DOWN's paper on the Obstetrical Aspects of Idiocy, which was read before the Obstetrical Society on December 7th, 1876, and of which we published an abstract on December 23rd, opened up a field of discussion so wide as to daunt all but the most intrepid from entering upon it. The physiological foundation of the law of primogeniture, the remote consequences of ergot, the influence of maternal emotions and of consanguineous marriages, the alcohol question and the classification of idiocy, are scarcely to be adequately dealt with in one evening's debate; and it is not to be wondered at, therefore, that Dr. Down's paper elicited only some circumambient skirmishing on the confines of its subject, and no real conflict on the subject itself. The general tone of Dr. Down's essay, and of the remarks made on it, was somewhat apologetic; the drift of everything said went to show that the obstetric relations of idiocy are really few and insignificant, and that the causes of that condition are rarely to be found in the process of parturition or in its antecedent circumstances. Idiocy is to be traced to hereditary tendencies and developmental deviations, and not to forceps, ergot, or unnatural labours. That was the conclusion that found most favour, and yet perhaps it was not altogether justified by the facts and arguments advanced. The almost entire acquittal of the forceps, for instance, from a responsibility for the production of mental defects, was a verdict not unnatural in those who are accustomed to wield this instrument with benign effect, but not altogether in harmony with recorded experience. Dr. Langdon Down himself mentioned that, in three per cent. of his cases of idiocy, the forceps had been employed; and Dr. Howe, the most distinguished American authority on this topic, has recorded a larger proportion of cases in which idiocy was traced to the forceps. That the forceps may cause idiocy is unquestionable, and that this instrument does cause it is rendered certain by the occurrence of a dwarfed intellect in a child that bears on its skull the marks of its blades, and that is one of a family of bright healthy naturally born children; and many such crucial instances could be pointed out. There are throughout the country idiots with greatly distorted skulls who owe that distortion, and the mental limitation that accompanies it, to the grip of the instrument that brought them into the world. It might be objected that the cranial distortion in these cases was not the cause of the idiocy; for is not cranial distortion of an extreme type artificially produced by certain tribes of North American Indians, without interfering in any way with the mental growth and evolution of those who are subjected to it? Do not the Chinouks, Kathlamets, and Clatsaps, by mechanical contrivances flatten the heads of their babies, until the forehead becomes a horizontal plane? and is it not the testimony of all travellers that, for intelligence, accomplishments, and force of character, the flat-heads are by no means inferior to their rounder headed neighbours? That is so; but the material difference, to say nothing of numerous subsidiary ones, between Indian and obstetric distortion of the head is, that the one is induced suddenly and the other gradually; and the difference between the effects of sudden and gradual injury and displacement of the brain is quite as great as is the difference between the effects on the nervous system of rapid and slow hæmorrhage.

When the form of the skull is suddenly altered, the brain has no time to accommodate itself to its changed circumstances. Its structure is probably damaged by bruising, laceration, and extravasation, and pathological changes are thus initiated that interfere with its free growth. This may be retarded, too, by interruption in the growth of the cranial bones, evidenced by anomalies in the arch or at the base of the cranium, produced by an inflammatory condition of one or more of the sutures, which has taken origin in the violence to which they have been subjected, and which results in their premature occlusion. The early ossification of the sutures in those regions which the blades of the forceps have crushed causes narrowing of the cranium there; and this, with compensatory dilatation in other regions which the stenosis has not invaded, and where the expanding brain meets with least resistance, results, in some cases of idiocy thus caused, in extreme distortion of the head.

Injuries and shocks to the head in infancy are prolific of idiocy. Köstel has published the reports of forty-eight cases in which mental weakness was clearly to be traced to falls on the head; and all works on idiocy abound in instances of this kind. It seems unreasonable, therefore, to maintain that violence to the head, which shortly after birth is decidedly injurious, should at the time of birth be comparatively innocuous.

But if it be granted that some cases of idiocy are attributable to the forceps, it does not at all follow that the idiocy in those cases would have been averted had the forceps been withheld; for the prolonged and severe compression to which the fœtus is subjected during protracted and abnormal labour seems often to imprint upon its nervous system a tendency towards certain evil consequences, of which idiocy is one. It is quite a moot point whether the forceps more frequently wards off or induces idiocy. The impediment to the placental circulation which uterine contraction creates, if excessive in duration, leads to failure in the decarbonisation of the blood and asphyxia; while the pressure exerted on the cutaneous surface drives the blood to the internal organs and causes it to accumulate in the large veins. In still-born children the sinuses of the dura mater and the venous plexuses round the spinal cord, as well as the venæ cavæ, the right side of the heart, and the pulmonary system, are found engorged with dark blood. Dr. Evory Kennedy has taught that in children born dead there are sometimes effusions of blood on the surface or at the base of the brain; and Hecker has found, under such circumstances, numerous dotted petechial-like ecchymoses on the surface of the lungs and diaphragm, and also on the liver and heart. Considering the intense congestion of the intracranial vessels in asphyxia neonatorum, it is not unreasonable to suppose that there are still more minute punctiform apoplexies in the cerebral substance which must interfere with its nutrition and evolution. Such punctiform apoplexies have not, as far as we are aware, been actually demonstrated in the brains of the still-born, but they have been shown to exist abundantly in the brains of animals that have undergone cerebral concussion and injury. Even in their absence, however, there is enough in the extravasations that have been found between the skull and its membranes, and in the prolonged engorgement of the cerebral blood conduits, to account for an arrest or deviation in the development of the brain. And that such an arrest or deviation does frequently follow upon the suspended animation of unnatural parturition, is tolerably clear. Dr. Little, in a very valuable paper communicated to the Obstetrical Society in 1861, refers to two hundred cases of spastic rigidity due to asphyxia neonatorum, encountered in his orthopædic practice, and gives the details of fifty-three cases in which contractions of this kind, mental impairment, hemiplegia, or convulsions, were to be ascribed to abnormal or premature labour or asphyxia at birth. The late Sir James Simpson used to dwell upon similar consequences proceeding from the same causes, and always attached great importance to the pathological relations of the pressure on the fetal head at birth. To the effects of this pressure he attributed the greater mortality of male infants from all nervous diseases. An attempt has even been made to explain the greater prevalence of



insanity and cerebral disease in civilised, as contrasted with savage, races, in some part at least, by the deleterious influence on the higher nerve-centres of the more prolonged and severe compression to which, amongst the civilised, they are subjected at the time of birth. Among women of savage tribes, parturition is a comparatively short and simple process; but, as civilisation advances, it becomes more difficult and hazardous, because the foetal head has increased in dimensions and the adaptation between it and the pelvic passages has become less perfect. The protraction of parturition thus brought about is apt, as we have seen, to induce organic changes in the brain, or functional disorders, such as convulsions, which undoubtedly swell the contingent of lunatics and idiots in all civilised communities.

Dr. Down is disposed to think that the emotional condition of the mother during pregnancy has a powerful influence over the future mental life of the child. This is a popular belief, and in one sense it is clearly well founded. That the state of the maternal feelings may affect the composition of the maternal blood, and so influence the nutrition of the foetal nervous system, is more than probable; but that any particular maternal emotion or idea is transmitted to the foetus as a particular effect, has not been scientifically proved. The cases quoted to establish the proposition that one strong impression made on the mind of a pregnant woman has a distinct and recognisable effect on the physical or mental organisation of her offspring, require sifting and minute examination. Everybody has a case of the kind to quote, and every case contains an element of doubt. The subject is eminently deserving of investigation; and it would be an useful and interesting work to collect and submit to critical examination the classical instances of maternal impression, from the reflection of Rizzio's murder in the sword-fright of King James the First, downwards, and to collate and interrogate also the modern cases of the same kind which we hear of from time to time. Strawberry-marks are plentiful; it would be well to ascertain, once for all, if it were possible, if they have anything to do with strawberries. Deaf-mutes are numerous; it would be well to determine for how many of them, if indeed for any at all, the ubiquitous deaf and dumb beggar is really to blame. Over the child *in utero* the wildest storms of emotional excitement often pass, leaving it unscathed. Few women live through nine months without vivid emotions and powerful impressions of some kind; but, of course, we hear nothing of the cases in which a coincidence does not occur. Healthy and vigorous minded children are frequently born to women who have been insane during pregnancy.

#### VACCINATION IN IRELAND.

At the Birmingham meeting of the British Medical Association in August 1872, Professor Haughton delivered an address at the opening of the Section of Public Medicine. The learned professor called special attention to the epidemic of small-pox then prevailing in Ireland. Dr. Haughton remarked: "I have a right to present this, a solemn grievance. In the estimates for the present year, £10,050 was voted for the National Vaccination Institution of England; in addition to which, nearly as much more has been paid out of the public funds in payment for the services rendered by medical men in vaccination. Thus nearly £20,000 has been properly spent in providing the people of England with gratuitous vaccination. In Ireland, only £400 per year is spent on the same object."

The foregoing statement was considered by some of the non-professional journals of the time to be so incredible, that it was discredited and had to be substantiated by Professor Haughton. The statement, however, was perfectly true in 1872, and is still true in 1877, in spite of the experience of the small-pox epidemic of 1871, 1872, and 1873. Ireland has been again attacked by small-pox, and the disease is steadily and stealthily spreading. In spite of these warnings, no steps were taken either by the late or the present Government either to increase the supply of lymph or improve the character of vaccination in Ireland, until the matter was brought under

the notice of Parliament during last session by Mr. Meldon, M.P. for Kildare. The result of Mr. Meldon's movement in the matter is, that a National Vaccination Institution for Ireland is to be raised up from the Dublin Cow-pock Institution, which hitherto has, in almost a miraculous manner, supplied immense (though insufficient) quantities of lymph, at very low rates, for the use of the public vaccinators of Ireland. We should all be thankful for small mercies; but we have misgivings about the results which are likely to follow the placing of the worthy old Cow-pock Institution under the control of the Irish Local Government Board. To prove efficient, the Irish Board must show that it knows a little more of vaccination than it does of public health and municipal government. We are willing to give Sir Michael Hicks Beach every credit for his new move; but even the increased endowment and more extended basis of the Cow-pock Institution will not prove effective unless measures are taken to provide for the proper utilisation of the lymph supplied. At present, the public vaccinators of Ireland are so insufficiently paid, that it is not worth their while to work; and, if it were, there is no supervision whatever. There is no inspection of vaccination in Ireland, and there are no awards for special efficiency as in England. All these and many other minor defects must be remedied before vaccination in Ireland can attain any degree of efficiency.

The Council of the Irish Medical Association has taken such steps as will leave the Government no excuse for further delay in amending, altering, and consolidating the vaccination laws in Ireland. The Council has prepared two Bills for carrying out these objects: one for amending the present law; the other for *amending and consolidating* all the Vaccination Acts at present in force in Ireland. The trouble and expense gone to by its promoters in preparing the latter Bill show that the reforms are not proposed from any mere selfish motives, but from an honest desire for the public welfare. Dr. Albert O. Speedy has, at the request of the promoters of the Bills, carefully drawn up a series of observations upon the Bills, which point out the following as the salient points in the measure. 1. The alteration of the period of vaccination from six months to three. 2. Power to public vaccinators to take lymph on the eighth day. 3. An alteration in the destination of the certificate of successful vaccination from the registrar of the district in which the vaccination is performed to that in which the child's birth was registered. 4. To increase the payment for successful vaccination from the miserable fee of one shilling, as at present, to two shillings and sixpence. This is preferred to the English system of mileage rates, which would come to about the same amount and is more complicated. 5. To provide special awards for successful vaccination, as in England. 6. To provide for inspection of vaccination, as a great deal of imperfect vaccination is at present performed in Ireland. 7. To provide increased penalties for defaulters under the Act, the present not being sufficiently deterrent. 8. To provide remuneration to public vaccinators for attending and giving evidence at prosecutions under the Act.

Any one acquainted with the English vaccination laws will at once perceive, on reading the able abstract of Dr. Speedy's remarks, that the Bill of the Irish Association is an effectual measure for assimilating the Irish to the English law, so far as such assimilation is practicable. If the Government fail to take advantage of the assistance offered by the Irish Medical Association, we shall be much disappointed in our estimate of the energy and ability of the present Chief Secretary for Ireland.

OWING to the lamented death of Sir William Fergusson, the ball that was to be held in May next, in aid of the convalescents of King's College Hospital, is postponed till next year.

A COMMITTEE, consisting of Drs. Schröder, Böhr, Fasbender, Löhlein, and Martin, has been appointed by the Obstetrical and Gynaecological Society of Berlin to investigate the etiology and prevention of puerperal fever in that city.

At the last meeting of the Royal College of Physicians of London, Dr. Sieveking announced that he had discovered some very interesting manuscripts of Harvey, of which he will give an account in his forthcoming Harveian Oration.

LECTURES will be given, as will be seen by an announcement which appears in another column, during March and the ensuing summer session, at the Hospital for Sick Children, on some of the diseases of children. Dr. Sturges begins the course on Friday, March 2nd, at 4 P.M., taking the subject of Chorea.

DR. LAUDER BRUNTON commences his Goulstonian Lectures at the Royal College of Physicians to-day (Friday), and will continue them on Wednesday and Friday of next week. The subject of his lectures is Pharmacology and its Relation to Therapeutics. They will be published in the JOURNAL from the author's text.

FROM a circular recently issued by the general committee entrusted with the duty of collecting subscriptions for the erection of a statue to Liebig, it appears, says *Nature*, that the sum total contributed up to January 1st, 1877, amounts to over £7,000, after the deduction of the necessary expenses. Russia contributed over one-half of the receipts acknowledged in the third and last reports. Since the decision to provide Giessen as well as Munich with a statue, the authorities of the former place have selected a fitting locality for the memorial, and laid it out in a tasteful manner.

#### MILK-TYPHOID.

THE Medical Officer of Health for Burnley has reported that there have been fifty-seven cases of typhoid fever at Barrowford, as the result of taking milk from a farmer who had typhoid fever in his house. There have been eight deaths. The medical officer adds that the cases have been strictly confined to those who received the milk from the farmer referred to. The importance of a sanitary inspection of farms and dairies, and of careful precautions for guarding milk from adulteration and contamination, can hardly be exaggerated.

#### THE LEVÉE.

THE following members of the medical profession were presented at the levée held on the 15th instant by H.R.H. the Prince of Wales on behalf of Her Majesty: Surgeon-General Balfour, Dr. G. Birdwood (on being made a Commander of the Star of India), Surgeon Charles W. Owen, and Surgeon R. V. Power, by the Secretary of State for India; Deputy Inspector-General D. J. Duigan, M.D., and Fleet-Surgeon B. Ninnis (on return from Arctic service), by the Director-General of the Medical Department of the Navy; Dr. W. S. Playfair, by his brother, the Right Hon. Lyon Playfair; Surgeon John Walker, M.B., and Surgeon J. B. Watson, M.D., by the Adjutant-General.

#### COURT APPOINTMENTS.

SIR JAMES PAGET has been appointed Sergeant-Surgeon to the Queen, in succession to the late Sir William Fergusson. The two Sergeant-Surgeons to the Queen are Sir James Paget and Mr. Cesar Hawkins. The office of Sergeant-Surgeon Extraordinary to the Queen is not a formal part of the Royal Household, but was created originally, we believe, for Mr. Keate, and was subsequently filled by Sir James Paget, in recognition of his special services. Some doubt, we believe, was therefore felt as to the advisability of filling up the vacancy; but on this occasion also, after some hesitation on the score of precedent, it has been graciously decided by the Queen to recognise the services of Mr. Prescott Hewett to the Royal Family, and his eminent surgical position, by appointing him to fill the post vacated by the promotion of Sir James Paget. Mr. Prescott Hewett is, therefore, gazetted Sergeant-Surgeon Extraordinary to the Queen. The appointment is one which, we feel assured, will be ratified by the general voice of the profession as a just compliment to Mr. Prescott Hewett's eminent official and surgical position. The opportunity also has been

taken to pay a just compliment to Mr. Erichsen, who has long held a position in the surgical world which would have justified his receiving some mark of Royal favour and public distinction. He has been appointed Surgeon-Extraordinary to the Queen. University College Hospital can now boast of having on its staff four members who hold high Court appointments, while more than one of its junior *alumni* have also had the opportunity of doing service to the Royal Family of England.

#### SUNSHINE IN LONDON.

THE Astronomer-Royal having undertaken to register the hours of sunshine in comparison with the number of hours the sun is above the horizon, some interesting results have been obtained. Thus, last week the sun was above the horizon 69.3 hours, but his light was intercepted, and he only shone on London 9.3 hours: four days not at all; Sunday, 5.3 hours, Friday 3½ hours, and Saturday half-an-hour.

#### THE PUBLIC HEALTH.

THE mortality from all causes during the past week is reported by the Registrar-General to have been at the average rate of 23 deaths annually in every 1,000 persons living. The rate in London was 22, in Edinburgh 21, and in Dublin 26. Portsmouth had the lowest rate of mortality, and Oldham the highest. The deaths from small-pox in London, which had been 103 and 90 in the two preceding weeks, further declined to 72. The disease continues to show the greatest proportionate fatality in East London.

#### THE PEABODY BUILDINGS AND THE HEALTH OF LONDON.

THE Peabody Donation Fund is undoubtedly destined to exert, not only an appreciable, but a marked effect upon the health of London. The health of London is, and must be, judged by the health of its large majority of the working classes; and the health of the working classes is, to a larger extent than is generally acknowledged, governed by the sanitary condition of the houses and tenements in which they live. The Trustees of the Peabody Fund have just issued their report for the year 1876, which contains many points of interest bearing upon the present benefits enjoyed by the working classes from the Fund, and upon the prospect of constantly increasing benefits in the future. On December 31st last, the Fund amounted to £643,317, to which sum it had increased from the magnificent donations of half a million presented by Mr. Peabody. Of this capital, £166,511 was unexpended at the end of the year, including the sum of £20,988, which represented the net income of the year, fully equal to three per cent. upon the cost of land and buildings. Of necessity, therefore, the capacity and influence of the Fund for improving the dwellings of the working classes in London will increase year by year. During the year 1876, a new group of blocks of Peabody buildings was completed and fully tenanted; and the aggregate number of residents of all the buildings erected by the trustees amounted at the end of the year to 7,797, an increase of 2,169 upon the number in residence at the end of 1875. The report states that, when the buildings now in course of construction are completed, and this is expected in the course of the present year, the trustees will have provided dwellings for 2,165 families, representing a population exceeding 10,000 persons. The weekly wages of the heads of all the families in residence in the Peabody buildings at the close of the year averaged less than twenty-five shillings, proving that the majority of the tenants belong to the poorer of the working classes; this is further corroborated by an occupation-table, showing that the tenants include 545 labourers, 166 porters, 103 needlewomen, 92 policemen, and 65 carmen. The weekly rents of the tenements range from 2s., the lowest price for a single room, to 5s. 9d. and 7s. 6d., the highest for three and four rooms respectively. Those acquainted with the rents charged for rooms in tenemented house-property in the most crowded parts of London will not be surprised to learn that there is no difficulty in filling the Peabody buildings as soon as they are completed. The report briefly states that the death-rate among the population housed in the Peabody buildings during 1876, calculated upon the mean number of inhabitants, did not



exceed 19.02 per 1,000; this rate was 3.3 per 1,000 below the average rate in the whole of London. This fact affords conclusive evidence of the benefit which the health of the working classes derives from the operation of the Fund; and, when it is remembered that the death-rate in these buildings in 1875 was 24.3 per 1,000 (even this was a low death-rate for a poor working class population), we may fairly conclude that the benefit from these buildings will increase at a more rapid rate than the actual extension of the operations of the Fund itself. It appears reasonable to assume, and it is abundantly supported by the experience of the trustees, that the health of the residents, and especially of the infantile portion of the population, improves with length of residence; in other words, the baneful effects, social as well as sanitary, of previous housing and surroundings is not at once shaken off by the new tenants of improved dwellings. Great sanitary results may fairly be anticipated from the operations of the Peabody Trust Fund, and the devotion of other capital to similar purposes. It is much to be regretted that the various associations which are doing so much towards improving the dwellings of the working classes of London do not follow the example of the trustees of the Peabody Fund, by affording some clue to the vital statistics of the population living in their improved dwellings.

#### THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE following is the list of Officers and other Members of Council nominated for 1877-78. *President:* Charles West, M.D. *Vice-Presidents:* Richard Payne Cotton, M.D.; \*William Wood, M.D.; \*John Cooper Forster; \*John Wood, F.R.S. *Treasurers:* William Wegg, M.D.; John Birkett. *Secretaries:* John Harley, M.D., F.L.S.; John Whitaker Hulke, F.R.S. *Librarians:* \*Charles Murchison, M.D., LL.D.Ed., F.R.S.; Timothy Holmes. *Other Members of Council:* \*Robert Barnes, M.D.; Lionel Smith Beale, M.B., F.R.S.; \*William Chapman, Begley, M.D.; Edward Headlam Greenhow, M.D., F.R.S.; William Ogle, M.D.; Richard Barwell; Arthur Edward Durham; \*Richard Phillips; \*John Soelberg Wells; \*Erasmus Wilson, F.R.S. Those gentlemen to whose name an asterisk is prefixed, were not on the Council, or did not fill the same office last year.

#### THE PIMLICO MURDER.

We publish in another column letters concerning Treadaway, to whose case we last week directed attention. The Home Secretary, as we intimated, appointed Dr. Risdon Bennett and Dr. Crichton Browne to make an examination of the medical features of the case, and to report to him their opinion of the prisoner's responsibility. The inquiry has been conducted with great care, and with the assistance of all such documents and accessory facts as could throw light upon all the features of the case. There is now no doubt, as Dr. Bucknill intimates in his letter which we publish, and as will be seen from the medical details and the communications of Dr. Hughes Bennett and Dr. Rhys Williams, that this man is an epileptic. The final decision of Dr. Risdon Bennett and Dr. Browne is, however, not yet published.

#### BRITISH PHYSICIANS IN FRANCE.

THE ill-considered Bill of M. Roger Marvaise has received a good deal of support in France from a quarter where it might have been least expected; and some of the most respectable members of the Republican party have, on this occasion, shown that democracy can be more narrow and despotic than despotism itself. It is alleged that this Bill is aimed at the exclusion of quacks. If, indeed, it were so aimed, then it is condemned by its own provisions; inasmuch as it carefully excludes from practice the most eminent and highly qualified of foreign practitioners. It is not the fact, as some French journals pretend, that respectable qualified foreign practitioners are either prevented from or molested in practice in this country, as there are plenty of examples here to show. They are prevented from registering, and that is owing to the accidental miscarriage of the Medical Act Amendment Bill. Registration, however, is not at all essential to practice in this country; and if, in any future Bill, it should be made essential, the interests of

the qualified foreign practitioner would be duly provided for, as was done by the provision in the Government measure to which we refer. M. Bert, an eminent professor in the French Faculty, who is also a member of the Assembly, has given notice to move an amendment, to the effect that all foreign practitioners, provided with a regular diploma, shall be permitted to practise in France *ad eundem*. This amendment, we may fairly hope, will have the support of the Government, and it would meet all the requirements of the case. Should the Bill, however, be carried without this amendment, its effect cannot but be exceedingly injurious and annoying to the interests of British and other invalids in France, and, in the end, seriously detrimental to the French thermal stations, now largely populated by English invalids.

#### A YEAR'S OVARIOTOMY IN THE SAMARITAN HOSPITAL.

ON February 14th, Mr. Spencer Wells performed ovariectomy for the first time in 1877 in the hospital, on his return from the Continent; and he took the opportunity of giving the experience of the operation in the hospital for the year 1876. He said it was the most favourable yet attained in that hospital, and, he believed, anywhere. There had been fifty-five operations, and only five patients had died, while fifty had recovered: a mortality of little more than 9 per cent. He had done forty of these operations himself, and four patients had died, or one in ten. Dr. Bantock had done seven, and six patients had recovered; and Mr. Thornton eight, all of them successful. Many of the cases had been extremely severe, and in several both ovaries were removed. On the 21st instant, Mr. Wells added that the patient operated on on the 14th was recovering without an unpleasant symptom, and that three of the patients operated on last year had been examples of ovariectomy performed for the second time on the same patient. In one, the first operation was done eleven years ago; in the second, three years ago. Both patients recovered better after the second than after the first operation; and so had a third patient, on whom he (Mr. Wells) had operated three years after the first operation, which was performed at Portsmouth by Dr. Ward Cousins.

#### A NEW POISON.

AT the meeting of the Academy of Sciences of the 7th inst., a new poison was presented by M. Vulpian for MM. Ernest Hardy and Gallois. It is named inea, and is a heart-poison, already studied in France by MM. Polakillon and Carville, and in England by Dr. Fraser. Like digitaline, but in a stronger degree, it kills frogs and other animals, the heart being 'in systole. The discoverers scarcely know as yet how to class it, but they are convinced that it is not an alkaloid.

#### SELF-MUTILATION.

AT a recent meeting of the Medical Society of Vienna, Professor Leidesdorf showed a young man who had committed self-mutilation while under the influence of religious delusions. He had been a waiter in Vienna and Trieste, and had been noted for frequently attending the churches and for inviting his companions to meet him that he might explain the Bible to them. In July, he was going to the Herzegovina to fight against the Turks, but was seized and interned. On going to his room one morning, the commissary heard him praying aloud; and, on entering, found him covered with blood, his right eye lying on the ground and the left hanging down on his cheek. He was taken to the lunatic asylum at Trieste on July 25th, and the wound had quite healed on September 29th. The motive which he assigned for the act was, that God had commanded it; he did not regret what he had done, and hoped confidently that his sight would be restored. A similar case has been recorded by Dr. Bergmann, in which a woman—believing it her duty to carry out literally the precept, "If thine eye offend thee, pluck it out"—mutilated herself by tearing out both her eyes. In this case, also, healing soon took place. The woman was dismissed cured of her insanity from the asylum in which she was placed; the man, however, still remained the subject of various delusions. No cry of pain was uttered by the woman; and Dr. Leidesdorf said that in the man also there was no

expression of pain. He believed that in such cases of ecstasy, as in certain forms of catalepsy, melancholia, etc., there was a diminution of sensation, perhaps amounting to total analgesia.

#### AN INTERESTING COLLECTION.

A COLLECTION of drawings by the late Sir Charles Bell have been sold this week by Messrs. Christie and Manson. They were all studies, numbering about seventy, and exhibiting considerable artistic power. The prices obtained for them were very low, varying from two to six guineas for each lot.

#### HOSPITAL FOR SICK CHILDREN.

THE twenty-fifth anniversary festival of this Hospital took place on Wednesday evening, at the Freemasons' Tavern, under the presidency of the Earl of Carnarvon. A large party assembled at the dinner-table. In the course of his remarks, the chairman said that he entirely disagreed with the notion that money was thrown away upon ornament in hospitals, or that the plainer an article was the better it was. He believed that ugly things were just as dear as pretty things; and in nine cases out of ten not so effective for their purpose. He remarked that only £8,000 of the £20,000 required to finish the hospital were now in hand; that the hospital now contained a hundred and four beds, but when completed it would be capable of accommodating eighty more patients. Mr. Walter, M.P., in returning thanks for the toast, "The Committee of Management", said the annual cost of each bed in the hospital ought not to exceed from £50 to £60. At the Hospital for Sick Children in Philadelphia the cost was about £40 yearly, whereas the expense of each bed in Great Ormond Street Hospital was now something between £73 and £74. Much of that excessive expenditure was due to the incomplete state of the establishment. He valued hospitals so much that he would like to see their scope extended to all classes of the community. He hoped to see the establishment of hospitals for the middle classes, and for the upper classes, if they chose to avail themselves of them. Dr. Dickinson returned thanks for the toast of the "Medical Officers", and spoke in highly laudatory terms of the work undertaken by Dr. Charles West, the consulting physician, in originating and establishing the hospital. The secretary announced contributions made at the dinner, which amounted to nearly £2,000.

## SCOTLAND.

THE Senatus Academicus of St. Andrew's University have determined to confer the degree of LL.D., among others, upon Dr. B. W. Richardson and Dr. James Murie of London.

#### EVOLUTION OF THE BRAIN.

A COURSE of lectures arranged by the Glasgow Science Association was terminated on February 15th with a lecture by Professor Allen Thomson on the Evolution of the Brain. At the conclusion, he stated that he was inclined to accept the Darwinian theory, that the brain had been gradually assuming, in the long succession of ages and under the variations of hereditary transmission, the complex structure and lofty powers which it exhibits in the now existing condition of man.

#### FUNERAL OF SIR WILLIAM FERGUSSON.

THE funeral of the late Sir William Fergusson took place at West Linton in Peeblesshire on Friday, February 16th, and was very largely attended by the proprietors and by all the residents in the immediate neighbourhood. Among the old medical friends of the deceased who were present from Edinburgh, were Professor Spence, Mr. Walker, and Professor Balfour. The English burial service was read by the Dean of Kilmore.

#### ROBBERY OF A MEDICAL PRACTITIONER.

ONE night last week, Mr. Nash, senior, a medical practitioner of Slamannan, left Falkirk in his carriage accompanied by a man named

Brock, who had asked him for "a lift", representing that he was on his way to Slamannan. When they had reached a lonely part of the road, Brock turned on Mr. Nash, and, threatening to blow his brains out with a pistol, violently tore away his watch from the vest pocket. He then leaped from the gig and disappeared. Mr. Nash gave information to the police, and the man was shortly afterwards taken into custody, having pledged the watch in Glasgow.

#### DEPOSITS IN WATER-CISTERNS.

DR. MACADAM has recently made an examination of deposits taken from cisterns in various cities of England and Scotland. The result showed that much contamination of domestic water was caused by the noxious nature of the deposits which were formed in water-cisterns, consisting not only of siliceous matter and oxide of iron, but of finely divided lead-compounds and organic matter. He strongly recommended that all domestic cisterns should be carefully cleaned out at least every quarter, so as to reduce the sediment to a minimum.

#### EDINBURGH HOSPITAL FOR INCURABLES.

A MAGNIFICENT contribution has lately been made to the funds of the Edinburgh Hospital for Incurables by the late Mr. Longmore. The deceased left a considerable sum of money for the benefit of incurables, and his trustees have resolved to give the Association £10,000 to help to build a new hospital, and have intimated that when the hospital is built they will give a further sum of £300 a year for its support. At the meeting at which this announcement was made, Dr. Keiller, the Chairman, suggested a scheme by which the working classes might largely assist our charitable institutions without taking any money out of the pockets of themselves or their families. This scheme had already been carried out by a friend of his, and consisted in an arrangement between masters and men, by which the latter should give, say an extra hour a day of labour for ten days in the year, the proceeds to be handed over to the charitable institutions. He looked upon himself and the other medical men who had passed their ten years' service in the Royal Infirmary, as having made donations of £1,000 to that institution.

#### BUTTERINE.

AT a recent meeting of the Scottish Society of Arts, Dr. Stevenson Macadam read a paper on butterine, and showed samples of the substance, both pure and mixed with butter. The high and increasing price of butter, he remarked, had lately stimulated manufacturers in this and other countries to make a wholesome article which should be suitable in taste and nutritious qualities as a substitute for butter. The original or raw material now used was the best ox-suet, which was taken in a thoroughly fresh state, and, the membranous parts being cut away, was gently heated in a steam pan until the finer and purer part of the fat was liquefied. This was then run off, and while still warm was skimmed repeatedly, and thereafter allowed to cool. The semisolid fat thus obtained was pressed through bags for further purification, after which it was churned with some milk, and kneaded and salted in the usual way. In chemical properties, the butterine which was thus obtained was almost identical with ordinary butter, the only difference being a few per cent. of volatile fatty acids forming butyric in the true butter. Fully 90 per cent. of both butter and butterine consisted of the more liquid fats which were common to both; in fact, the butter was practically the animal fat which the cow had passed through the udder in the milk from which it was manufactured, and the butterine was the finer part of the animal fat which the ox had stored up in the suet from which it was manufactured. The two fats were equally cleanly and wholesome, and when put on its proper footing as a substitute for butter, the butterine was a legitimate article of trade, and would prove a great boon to consumers who did not care to pay famine prices, and who could be supplied with a substance almost identical with butter in chemical nature, and combined with wholesome and nutritious properties.



## IRELAND.

SIR DOMINIC CARRIGAN has been re-elected on the General Medical Council as the representative of the Queen's University in Ireland for the ensuing year.

THE Duchess of Marlborough paid a visit to the Hospital for Incurables last week, inspecting the various wards, and distributing flowers and pictures for the use of the inmates.

AN address, accompanied by a handsome carriage, was recently presented to Dr. Christopher J. Payne, of Clifden, Galway, by his friends and acquaintances on his restoration to health after a severe illness occasioned by harassing professional duties.

WE hear that considerable alterations, more especially of a sanitary nature, will be commenced in the Royal Barracks, Dublin, in a week or two. The drains will be opened and relaid, being at present, it is said, in an unsatisfactory condition; whilst the troops stationed in the barracks will be removed to other quarters pending these alterations.

DURING last year, the deaths from zymotic disease registered in Belfast, included 149 from whooping-cough, 105 from fever, 86 from scarlatina, 15 from diphtheria, 13 from measles, 165 from diarrhoea; these 533 deaths being equal to 12 per cent. of the total deaths, and 2.9 per 1000 of the population.

## ADELAIDE HOSPITAL, DUBLIN.

THE "Madeline" Wing of this Hospital, which it is intended to erect, will contain three wards, each holding fourteen beds, appropriated to surgical cases. The architect's plans have been selected, and the building will be shortly commenced. Improvements and additions are being made to the hospital, which will necessitate an expenditure of £10,000; and towards the cost £3,405 has been already received or promised.

## ROYAL COLLEGE OF SURGEONS OF IRELAND.

A MEETING of the College, consequent on a requisition signed by several fellows, has been convened by the President for Wednesday, 28th instant, for the purpose of considering the question as to whether it may, or may not, be expedient that the offices of president or vice-president should in future be held for a longer period than one year.

## RATHMINES AND RATHGAR WATER SUPPLY.

THE canal water which supplies this township having caused great dissatisfaction, owing to its impurity and want of proper pressure, a committee of ratepayers was recently formed for the purpose of trying to induce the commissioners of the township to substitute the Vartry water for that at present in use. A deputation from this committee lately waited upon the commissioners, but not receiving satisfactory replies, a meeting of the ratepayers was held at the Town Hall, Rathmines, on the 15th instant, when it was resolved that a deputation should obtain an interview with the Local Government Board, with a view of having steps taken to procure a purer supply of water to the township. At the same meeting a vote of want of confidence in the commissioners was passed. We may add that the Royal Commissioner, Sir John Hawkshaw, in 1860, when reporting for the Vartry and against the canal water, states that "the canal, as far as the effect upon the water is concerned, may be regarded as a large open ditch abounding in rank vegetation, which generates, by its decomposition, products that render the water unfit for the supply of Dublin; but the water from the Vartry, without filtration, will be equal in quality to any other, and is wholly unobjectionable." We trust the Local Government Board may persuade the commissioners to change the present supply, for it should be remembered that the organic contaminations found in the canal is much derived from animal refuse out of sewers and drains, but that in the rain water collected at the Vartry reservoir at Roundwood, and conveyed in pipes to Dublin, arises from harmless vegetable matter.

## SIR WILLIAM FERGUSSON, BART., F.R.S.,

SERGEANT SURGEON TO HER MAJESTY THE QUEEN; SENIOR-SURGEON TO KING'S COLLEGE HOSPITAL; ETC.

SIR WILLIAM FERGUSSON has occupied for so many years the foremost place in the surgical world, and had so long been regarded by the whole medical profession in Great Britain as its leading representative in surgery, and as one to whom they looked up with proud affection, that many had come to consider him as perhaps older than he really was. His death, however, although preceded by twelve months of illness of a character which presaged a fatal result, has been a painful shock to the whole profession, for it might reasonably have been hoped, judging from his stalwart figure and hearty manner, that he was in possession of a vitality which would carry him through a long series of years of active usefulness. Hence the anticipation was indulged that the wide influence which he exercised in society might long have been preserved for the benefit of his profession, and that we might still have seen him using his energies, as he was always most prompt to do, on behalf of every good cause in furtherance of professional interests and in favour of those public objects of his profession with which he had unfailing sympathy, and to which he was always ready to sacrifice his time and labour.

At the time of his death, Sir William Fergusson was nearly sixty-nine years old. He was born on March 20th, 1808, at Preston Pans, in East Lothian. He was a cadet of a family which had resided as lairds for many generations at Lochmaben in Dumfriesshire, where he received his early education. Subsequently he entered at the High School in Edinburgh, and his general education was completed at the University of Edinburgh, under the guidance of his uncle Colonel Fergusson, subsequently General Fergusson. He was intended for the legal profession, and was placed in a solicitor's office; but in a short time he left in order to study medicine, towards which he was naturally bent, and to the pursuit of which his father advised him.

During his medical education, he paid great attention to the practical study of anatomy; he was a pupil of Dr. Robert Knox, and his skill in dissection and love of the work attracted the attention of his teacher, who appointed him Demonstrator of Anatomy to a class numbering four hundred pupils. He obtained the Fellowship of the Royal College of Surgeons of Edinburgh by examination in 1829, being then only twenty-one years of age; and for a long time he devoted much of his leisure to elaborate dissections, of which two preparations are still preserved as monuments of his skill in the museum of the College of Surgeons of Edinburgh. "The dissection of the nerves of the face is," Professor Turner writes to us, "an admirable example of manipulative skill and dexterity. The stand on which the dissected part is placed was made by Sir William Fergusson, and is a specimen of his skill in cabinet-work." His manual dexterity, his eminent knowledge of anatomy, and the whole bent of his mind, evidently marked him out as a surgeon; and, in 1831, he was elected Surgeon to the Edinburgh Royal Infirmary and to the Dispensary, and began to deliver lectures as one of the extramural teachers in Edinburgh. He had fitted himself for the conscientious discharge and the skilful performance of his surgical duties by the most arduous and enduring labour.

The dissecting-room is the proper scene for the preparation of the man who subsequently intends to take up the position of a skilful operating surgeon; and Fergusson would often spend from twelve to sixteen hours a day in the dissecting room, while he was pursuing the preliminary studies and furthering the ripper work of his later years, as student and teacher of anatomy and of surgery. Thus, when he was appointed Surgeon to the Dispensary, he was at once prepared to undertake and accomplish, with confidence and ability, all the most important surgical operations; and in the first year of his election, he performed an operation which had only twice been done in Scotland before that day, the ligature of the subclavian artery; and he soon showed so much coolness, power, and capacity, that he shared the fortune and favour which Sydenham, his senior, enjoyed as head of the surgical profession in Scotland.

In 1839, Mr. Fergusson was elected Surgeon of the Royal Infirmary in Edinburgh, an appointment which he received as the just reward of his great talents, and without possessing any personal influence or exercising any extraneous pressure. He had married, in 1833, Miss Ranken of Spittlehaugh, Peeblesshire, heiress to the estate to which he constantly retired in the autumn months, and where all his best holi-

The address which he gave at the opening of the meeting was marked by some of those mental characteristics of deficient abstract thought and an imperfect grasp of large subjects, of which we have spoken. He based all the conclusions upon the sum of his own individual experience, and of the little which was told him by others, and, in consequence, his address attracted very little of the interest which might have been expected. He was, however, very sincere, and his earnestness was manifest. He was, also, very kind, and his address was marked by a certain amount of tact and discretion. He was, however, very much of a man of letters, and his address was marked by a certain amount of literary style. He was, also, very much of a man of letters, and his address was marked by a certain amount of literary style. He was, also, very much of a man of letters, and his address was marked by a certain amount of literary style.



humanity and character of English biologists. On an earlier occasion in his career, Fergusson had inconsiderately assumed certain relations with homœopathic practitioners, and did not succeed in very gracefully defending a position which he ultimately abandoned.

No biographical notice could claim to be sincere, complete, or just to the life-history of Fergusson, which omitted to notice these elements of his character or these incidents of his career. On the other hand, it is more pleasing to recall the fact that his errors were always on the side of amiability and tenderness of heart, and that his faults were faults of a judgment which leaned always to the side of sympathy. His sterling worth, the simple good nature with which he accepted criticism, and his readiness to display friendly personal feeling to those who conscientiously blamed his public conduct, not only removed the sting of criticism, but conciliated universal regard and showed the fine qualities of heart which endeared him to all who knew him. Thus the later years of his life were enriched with many testimonies of the general affection and esteem. His full-length portrait by Lehmann, painted by subscription, was presented to the College of Surgeons in 1874, and now holds a place of honour there. He reached the highest honours by reason of his own exertions, and wore them with universal approval by reason of his goodness of heart and generosity of character. His hospitality was large and catholic; and his circle of friends included the notabilities of the drama and of the arts, as well as men eminent in graver pursuits. During his last illness, he was cheered by the wide-spread solicitude and kindness of troops of friends; and his remains were borne towards their last resting-place followed by the sorrowing respect of the whole profession, and indeed of the whole country. The portrait which we present to-day is from an excellent photograph taken not long since by Messrs. Barraud and Jerrard.

#### THE VACANCY AT KING'S COLLEGE HOSPITAL.

THE reported intention, on the part of some of the authorities of King's College, to invite Professor Lister from Edinburgh, is this week much discussed in London. No steps have yet, however, been taken in the matter; but it is certain, from the general tone of professional feeling in the metropolis towards Mr. Lister, that if the invitation be given and he should accept it, he will receive in this metropolis a very cordial welcome. The prestige which he would bring to the school and the hospital could not but be highly valuable, calculated as it would be to aid in maintaining that important institution in the highest position of European reputation. In a metropolis, with three million inhabitants, and the centre of a population constantly attracted towards it, no great reputation can injure any others. The day of professional jealousies is now ended, it may be hoped; nor is it any longer one of the clauses of hospital faith, that institutions exist for their officers rather than the officers for the institutions. It may be assumed with certainty that, should the invitation be given to and accepted by Mr. Lister, there will be no fear of his being the subject of any of the annoyances which might once have surrounded the position; and that, if any should be forced into existence, they will be speedily dissipated.

#### THE MEDICAL DEFENCE ASSOCIATION.

THE Medical Defence Association are engaged, we learn, in carrying into effect the suggestion which we have made more than once in these columns; that, pending any larger measure of medical reform, it is desirable to obtain an amendment of the penal clause of the Medical Act, which is at present almost entirely unworkable, and, even under the most favourable decisions of the most friendly magistrates, a very blunt weapon for the defence of public and professional interests, and for the chastisement of even the most blatant and most dangerous quacks. Prosecutions taken under the Medical Act have, in a large portion of cases, recently failed, as they failed originally when first attempted after the passing of the Act. Those which succeeded have been prosecutions undertaken for contravention of the Apothecaries' Act. In many of the cases where prosecutions have been attempted under the Medical Act, the defendants have been enabled by the looseness of the wording of the penal clause to evade its operation, by parading the ostentatious declaration that they are "not registered".

It will be remembered that, in the Medical Act Amendment Bill, which was passed some years since through the House of Lords by the Government and brought to a second reading in the House of Commons with the approval of the General Medical Council and of the medical corporations throughout the kingdom, a satisfactory and stringent penal clause was inserted forbidding the assumption of medical

titles by unqualified persons. With this was incorporated a supplementary clause permitting the registration, under the control of the General Medical Council, of respectable foreign qualifications. We have suggested that a short Bill should be introduced effecting this desirable object. We have just received a preliminary draft of a Bill, prepared by the Medical Defence Association, intended to carry out this purpose. Unfortunately, it is so badly worded and ill drawn that, as it stands, it would have no chance of passing. The clauses in the Government Bill were well drawn and generally approved, and all that is necessary is that they should be drawn and embodied in the new Bill.

#### THE GENERAL MEDICAL COUNCIL.

THE General Medical Council will, we believe, probably meet this year about the 9th of May. Some desire has been expressed by the Branch Council of Ireland for an earlier meeting, in the middle of March. It is, however, a very costly matter to hold two annual meetings of the General Council, and one which could only be justified by circumstances of emergency. The meetings of the Council must be regulated by a consideration of the state of public business and professional affairs; and, as far as can be seen, no medical business is likely to come before Parliament which would call for an earlier meeting than in May or justify two meetings. The meetings of the Council cannot, of course, be arranged to suit the precise personal conveniences of every member, although the present President of the Council, like his predecessors, will no doubt show his desire to consult the general convenience so far as it is compatible with the despatch of business. The leading business of the Council will be in relation to education this year, and it is not likely that the English conjoint scheme can be settled for consideration by the Council before May.

#### MEDICO-LEGAL CASES.

##### THE QUEEN v. THORNTON: AMERICAN ECLECTIC DIPLOMAS.

IN the Queen's Bench Division of the High Court of Justice, before the Lord Chief Justice and Mr. Justice Mellor, last week, a case was tried in which a person, calling himself "Dr. Thornton", appealed against a conviction under the Medical Act. The charge made was that of wilfully representing himself as qualified by English law as registered or qualified as a medical practitioner: viz., "That you did wilfully and falsely use a name—i. e., the name of 'Thornton, Dispensary'—as implying that you were recognised by law as a practitioner in medicine." At the hearing before the magistrates, the defendant produced certain documents purporting to be American diplomas; but, there being no regular proof of their authenticity, they were rejected, and the defendant was convicted and fined £10. Mr. Grain, on the part of the defendant, contended that the conviction could not be sustained. It was, he urged, on a charge of "falsely and wilfully representing that he was recognised by our law as a practitioner in medicine", whereas he had only represented himself as a foreign practitioner. Such was the plain and obvious meaning of the words over or upon his door: "Dr. Thornton, member of the Eclectic Medical College, Pennsylvania". And as to the proof of the diplomas, he was prepared with proof of the signatures to these documents, which, he said (in a case he cited), had been held to be sufficient evidence of the authenticity of such documents. Mr. Cave, Q.C., on the other side, argued, in support of the conviction, that the effect of the title "Dr. Thornton" was to represent that he was qualified in this country as a doctor of medicine or a physician, and he relied on the provision in the Amendment Act of 1859 (22 and 23 Vict., c. 21, s. 6), that nothing in the Act shall prevent any person, not a British subject, who shall obtain from any foreign University a degree or diploma of medicine, and shall have passed a regular examination in his own country, from practising as a resident physician of a hospital for the relief of foreigners, provided he is not engaged in any other medical practice "than in such hospital". From this he argued that the effect of the Act was that a person having only a foreign degree or diploma, was not entitled to practise in this country as a general medical practitioner. Mr. Grain urged, in reply, that even if this were so, still it did not sustain the charge, which was that his client had wilfully and falsely represented that he was qualified by our law to practise as a medical practitioner, which he had not done. Otherwise, the most eminent physician in Paris coming to reside in this country, and wishing to practise among his countrymen here, or those who had been his patients abroad, and simply calling himself "Dr.", would be liable to be convicted under this enactment. After some discussion, the Lord Chief Justice said it was an important question: whether a person representing himself as a foreign doctor or licentiate



of medicine, and practising in this country as such, was liable to be convicted upon such a charge as this. It was fit that such a question should be decided upon a fuller statement of the facts; and the case was sent back for that purpose.

## CORRESPONDENCE.

### CONJOINT EXAMINATION BOARD FOR IRELAND.

SIR,—In the JOURNAL of last week, there is an article entitled "Conjoint Examination Board for Ireland", in which statements are made in reference to the Royal College of Surgeons in Ireland that demand notice.

After relating that, at the request of Trinity College, representatives were appointed by the Colleges of Physicians and Surgeons to confer with representatives of Trinity College, the article proceeds to state that it was agreed to report in favour of a scheme for conjoint examination. I am aware that this statement appears in the preface to the scheme that was drawn up; but, though I was not present at the last meeting of the Conference, I believe I am correct in saying no such resolution was passed, and, in point of fact, the representatives from the College of Surgeons had no power to agree to such a resolution. They were appointed simply to attend the Conference and report the proceedings to the Council of the College.

The Council of the College rejected the scheme by an almost unanimous vote, because they believed it to be radically defective, and not through a desire, as you assert, to obstruct reform. They had already proved their readiness to join in a well digested scheme. You, however, accuse them of insincerity in this, and say their sympathy was only apparent. This is a charge from which it is not necessary for me to defend the Council of the Royal College of Surgeons in Ireland, even though made by the BRITISH MEDICAL JOURNAL.

Nor can it be necessary to defend the College, before those who know anything whatever of its history or its proceedings, from your insinuation that they have been guilty of the downward competition, the evils of which are so apparent. I believe there is no body that has suffered so much from this competition as the Irish College of Surgeons. It is only necessary to refer to their curriculum to see that it is of the highest order; and that their examinations are more difficult than those of other colleges, is proved by the frequency with which their rejected candidates are admitted elsewhere.

In the next paragraph of your article, you assert that, in the Dublin College, teachers have long examined their own pupils and conferred licences on them to practise surgery. This statement is utterly at variance with the fact; and I cannot but express my surprise that any one, proposing to write on the subject could have been so ignorant as to make such a charge. The Irish College of Surgeons is prohibited by its charter, and is, I believe, the only one of the licensing bodies in the three kingdoms that is so, from electing teachers, except hospital surgeons, as examiners.

If a conjoint scheme is to be promoted, let it be done honourably, and without raising feelings of enmity and ill-will. Individually, I believe a conjoint examination, or an attempt to make a single portal whereby to enter the profession, to be a mistake; but I was quite ready to yield my opinions on this point, and to join in the establishment of a good and practicable scheme, but such has not yet been laid before us.—I am, your obedient servant,

GEORGE H. KIDD, President, Royal College of Surgeons.  
Dublin, February 21st, 1877.

SIR,—Having used my position as Fellow and Member of Council of the Irish College of Surgeons to defeat the two conjoint schemes, I feel called on to notice your leader on the subject. It unaccountably errs in stating that "teachers examine their own pupils, and confer on them licences to practise, as the Dublin College of Surgeons has long done"; for that is the only one of the nineteen licensing bodies in which such a system is forbidden by charter. The first scheme was fully discussed in your pages three years ago, and the main reasons for which our Fellows repudiated it were the too favourable terms, especially those monetary, which it offered Trinity College and the Apothecaries' Hall; for instance, all preliminary examinations were yielded to the former. The far weightier objections to the recent one were clearly but briefly set forth by the leading members of the Council, who proposed and seconded its rejection. The first clause was as vital as the preamble of a Bill; and, when it was negatived, any discussion upon the details would have merely wasted time. They were fully considered by every member, who for weeks previously had a copy of the document. Its main faults were: it did not include two

of our five licensing bodies; it should lower to a ruinous degree the income of our College; no examinations in anatomy or physiology were to be held till the end of the student's third year; and undue advantages were given to Trinity College. Half the examinerships would have been held by professors in that school, while the other half would be divided among the teachers of the five schools under the superintendence of the College of Surgeons. Can it be wondered that our Council almost unanimously condemned it?

Your article attributes to our College a system of downward competition. Now, its educational standard has always been as high as any in the United Kingdom, and, during the past ten years, its examinations have been brought up to the level of those of any other corporation.—I am, etc.,  
E. D. MAPOTHER.

### THE CASE OF FREDERICK TREADAWAY.

SIR,—I regret that Dr. Bucknill was not in court during the trial of Frederick Treadaway, as in that case, I venture to think, his criticisms on the medical evidence would have assumed a different character. It is, I believe, the intention of Dr. Hughes Bennett to publish the whole facts connected with this case, and I will therefore content myself with replying to that part of Dr. Bucknill's letter which has reference to myself and to those circumstances that came under my own observation.

In the first place, the word "mental" is an addition of the reporter. The first question asked me was, "Is epileptic vertigo or *petit mal* a recognised form of disease (not mental disease, as reported)?" This I ventured to answer in the affirmative. During the whole of my evidence, I drew the distinction between epilepsy with insanity and without, and was finally asked whether, in both cases, I considered epilepsy a disease of the brain.

The counsel for the defence elected to go deeply into the theory of automatic unconsciousness associated with epileptic vertigo, and nearly the whole of my examination was directed to cases of this character. I certainly never expressed any opinion that, at the time of committing the murder, Treadaway was in a state of automatic unconsciousness; the learned judge ruling that such evidence was inadmissible, it being the sole province of the jury to decide the state of mind of the prisoner at the time of the commission of the crime.

I regret that greater stress was not laid upon epileptic furor. "It is to be observed that very frequently the presence of epileptic insanity is indicated, not by epileptic fits, but simply by the character of the mental disturbance, the paroxysmal gust of passion, the blind fury, without an adequate cause. As experience shows that the mere epileptic vertigo or *petit mal* is quite as dangerous to the integrity of the brain as the *grand mal* (or even more so), the very cases in which the most serious consequences follow are those in which it is the most difficult to prove that disease sufficiently accounted for the act." (*Bucknill and Tuke*, 3rd edition, p. 339.)

After hearing the whole evidence, the following circumstances appear to me worthy of close attention.

1. The hereditary history of Treadaway is certainly unfavourable, showing insanity or epilepsy on both sides of the family. One relative died in Hanwell, another was in St. Luke's Hospital, a third committed suicide; another, twice before his death, tried to drown himself; another was "quite insane", and obliged to have a person always with her; another, who died at 45, was strange in her manner and quite childish; and the prisoner's aunt was subject to epilepsy, and died in an epileptic fit.

2. The medical history of the prisoner, as detailed by Dr. Hughes Bennett and corroborated by the father and sister.

3. The nature of the seizure in court. Either during the seizure or immediately after it, the prisoner was seen by four medical men, some of whom may certainly claim to have had some experience in the diagnosis of epilepsy (Mr. Gibson, Dr. Hughes Bennett, Mr. Peeke Richards, and myself). All these medical men swore that, to the best of their belief, the seizure was an epileptic one.

Dr. Smiles, on whose evidence Dr. Bucknill appears to rely, did not see the prisoner either during or after the attack. Dr. Hughes Bennett's answer—"There was nothing in the circumstances inconsistent with an ordinary fainting fit"—had reference to the seizure witnessed by the father in the Holloway Road.

I trust it is hardly necessary for me to state that I do not consider either epileptic vertigo or epilepsy a form of mental disease, and should not think of denying to epileptics who are not insane during the intervals of their malady the full validity and responsibility of their actions.—I am, sir, your obedient servant,

W. RHYNS WILLIAMS, M.D.

Bethlehem Royal Hospital, February 20th, 1877.



SIR,—Referring to my letter on the medical evidence given at the trial of Treadaway, it is but just to Dr. Rhys Williams to inform you that the word *mental*, as applied to the disease of epileptic vertigo, was an interpolation of the reporters. I am also able to inform you that there is now no doubt that Treadaway is an epileptic.—I am, your obedient servant,

JOHN CHARLES BUCKNILL.

39, Wimpole Street.

#### ALCOHOL IN MEDICINE.

SIR,—On the 10th instant, in your able and interesting leader on the Relation of Alcohol to Medicine, some of the conclusions at which you have arrived are not precisely in accordance with what some of us have observed in practice. The first conclusion is, "that alcohol acts by paralysing the vaso-motor system of nerves". In this, although a very important physiological effect of alcohol, we recognise only a part of its great value as a therapeutic agent. Supported as it is by the arguments of such accurate and scientific observers as the late Dr. Anstie, Dr. Lauder Brunton, Professor Binz of Bohn, and others, it seems difficult to ignore the reality of its action as a food. It is consumed as a fat within the body, and as such is especially valuable in fevers during the greatest elevation of temperature and the most marked acceleration of pulse. It is unnecessary to say that, of course, no universal rule can be laid down concerning the use of this agent; for, as with other potent remedies, its effects vary according to circumstances, and require very careful supervision.

Moreover, is it quite certain that alcohol has this paralysing action on the vaso-motor system in acute disease? This, as it seems to me, is more than doubtful; for it is well known how patients suffering from fever, pneumonia, etc., can take large quantities of alcohol without exhibiting even the slightest symptoms of intoxication. Indeed, under its judicious administration in such cases, the temperature falls, the pulse is reduced in frequency, the tongue becomes moist, and sometimes even delirium disappears.

Again, although the moderate use of alcohol may in certain instances be useful in the spanæmic stage of fevers, it is not, as a matter of course, necessary or advisable. In the majority of cases, the appetite and digestion are gradually improving, and plenty of other nourishment of a sufficiently stimulating character can be taken and assimilated, without having recourse to alcohol. And a strong reason for withholding it at this stage, if possible, is the great tendency of the patient to acquire a relish for such beverages, and thus become a slave to that greatest of all curses—systematic drinking. The importance of the subject, and the views I have held and carried out in practice during the last fourteen years with some slight modifications, must plead my excuse for venturing to offer any remarks on your valuable and instructive article.—I am, sir, yours faithfully,

EDWARD S. TIBBITS, M.D. Lond.,

Physician to the Bradford Infirmary.

Bradford, February 13th, 1877.

\* \* We are obliged to Dr. Tibbits for his courteous letter, and none the less so because he does not quite agree with our conclusions. Of course, as we pretend to no monopoly of knowledge on this subject, we believe that free discussion of different opinions is one of the best means of arriving at the truth. Dr. Tibbits raises several questions in his interesting letter. First, he says he thinks alcohol acts as a food, and that the form of food which it can more or less replace and be compared with is a fat. We are aware of the difficulties attending the question, but we think it almost impossible to maintain this opinion, for this reason: fat belongs to the carbonaceous group of materials, and the main (though not the only) function of this group is to maintain the temperature. If alcohol be a *fat food*, as Dr. Tibbits thinks, why does it lower, or at least not elevate, the temperature? Its administration during the congestive stages of fever Dr. Tibbits recommends, in order to *reduce* temperature; and yet the fats which he says it resembles *raise* temperature. Next, Dr. Tibbits asks, Is it certain that alcohol has this paralysing action on the vaso-motor system of nerves in acute disease? In asking this question, is not Dr. Tibbits running into the common error of supposing that acute disease is something superadded to, or at least something other than, a state or condition, or set of conditions, of the organism? We carefully said that there were exceptional cases where alcohol ought to be administered in the congestive stages, but that the rule to follow was that it should not be given then. But we should give it in those exceptional cases for the purpose of inducing the congestion, which, in asthenic cases, does not readily follow the primary stage of depression. And we believe it would act in such cases, just as it would in health, by paralysing the vaso-motor nerves. The term "paralysis" is perhaps misleading. The effect of alcohol would be better described, we think, as "re-

moving the inhibitory action" of the vaso-motor system of nerves. A comparison of the removal of the pneumogastric inhibition from the heart, with the effect of alcohol on the capillary vessels, would help to clear up our ideas on this subject, and tend also to the more precise use of general terms. Thirdly, Dr. Tibbits misunderstands us, if he think we said that alcohol "is, as a matter of course, necessary or advisable" in the spanæmic stages of fevers. That is just what we did not say, contending that it was not, as a matter of course, necessary then, but that, when it was advisable or necessary, those stages offered a favourable time for its administration. Compare what Dr. Anstie says about the usefulness of alcohol in neuralgia. Surely, that is not congestive, but spanæmic neuralgia which he describes. It is by removing the inhibition of the vaso-motor nerves, and so by increasing the blood-supply, that alcohol is useful then; and it is for this reason also that we must lay down the rule, not to trust to alcohol alone, but to strive to get food assimilated, so that, when contraction of blood-vessels again supervenes upon alcoholic congestion, the blood may be able to restore the depressed structures. Lastly, Dr. Tibbits says the administration of alcohol, when we recommend it, will tend to the increase of systematic drinking. We guarded ourselves, as we thought, very rigidly on this head, saying that the sound advice was that alcohol was to be taken, in order that its further use should be made unnecessary, and recommending that this advice should be given and followed.

#### GALVANO-PUNCTURE IN AORTIC ANEURISM.

SIR,—In the JOURNAL of last week there is a report of some of the cases occurring in the Manchester Royal Infirmary. Perhaps, in the short interview that I was only able, unfortunately, to obtain with your reporter, that gentleman may have misapprehended some of my hurried remarks, and he will not, I feel sure, object to my adding a few words by way of explanation.

In reference to some of my cases of aortic aneurism in which galvano-puncture was used, he says, "When large plates had been used in a previous case, erosion of the needle and suppuration had followed"; as if erosion of the needle and suppuration were generally undesirable results and necessarily connected together. It is well known, however, that when no suppuration occurs, some erosion of the needle from the positive pole usually takes place, and, as Dr. Poore says, may be considered as a rough test of the electrolytic action.

I hope before long to have an opportunity of more fully recording my cases, and of venturing some remarks on the treatment of aneurism. The last sentence also of the paragraph relating to my cases may, perhaps, convey an erroneous impression. It is as follows: "Another case of abdominal aneurism had recovered well under iodide of potassium and Tufnell's plan of diet, though the man gained flesh." It is not meant, of course, that gaining flesh retarded recovery; but the remarkable fact was, that a big strong man did gain flesh while kept strictly on this somewhat abstemious regimen.—Yours faithfully,

Manchester, February 20th, 1877.

HENRY SIMPSON, M.D.

#### DISLOCATIONS OF THE THIGH: THEIR MODE OF OCCURRENCE.

SIR,—With reference to Mr. Willett's observations upon my paper on this subject, which was read before the Royal Medical and Chirurgical Society on the 13th and reported in the JOURNAL of last week, I should like to make the following statements. 1. Professor Busch's views, referred to by Mr. Willett as being similar to mine, are almost exactly opposed to them. 2. The surgeon to whose opinions and experiments Mr. Willett must have alluded is Professor Fabbri, from whom, in a short article in the BRITISH MEDICAL JOURNAL of January 11th, 1868, Mr. Holmes Coote states that he learnt the views which he (Mr. Coote) afterwards taught at St. Bartholomew's Hospital. I have never seen Professor Fabbri's paper, which has not been translated from the Italian into English; but, from what I can gather, his mode of experimenting was not the same as my own, although his results and conclusions were similar. 3. So far from these views having been "generally accepted", even at St. Bartholomew's, one at least of the present surgeons of that hospital has distinctly opposed them. 4. The teaching of the last edition of Holmes's *System of Surgery*, quoted by Mr. Willett, is the same as that of Professor Busch, to whose writing reference is made; while the directions therein given for the reduction of manipulation are insufficient for the purpose. 5. With the exception of Professor Fabbri and Mr. Holmes Coote, no writer, so far as I at present know, has taught what my paper is intended to prove; viz., that all simple dislocations of the thigh at the hip are primarily downwards, and that the head of the bone reaches its ultimate position



according to the law of rotation and the degree of flexion or extension which accompanies the experiment. 6. Opinions up to the present time have been unsettled as to the principle upon which reduction by manipulation is carried out; so much so that Hamilton, one of the chief authorities of the day, after enumerating some of the dangers of the method, owing to the great power which may be brought to bear upon the parts by it, says: "It is not certain in our mind but that, when the principles which control the reduction are more completely understood, these evils may be lessened; yet we can scarcely persuade ourselves that by any future observations the state of the question will ever be greatly changed."—I remain, sir, your obedient servant,

HENRY MORRIS.

#### CHRY SOPH ANIC ACID.

SIR,—As the first specimen of chrysophanic acid, which is now creating so much interest in this country as a remedy for ringworm, was prepared by myself in our laboratory from Goa powder, according to the process devised by Professor Attfeld, and some of it afterwards given to several medical friends, amongst them Mr. Balmanno Squire, you will, I am sure, permit me to state that the easiest, the simplest, and by far the best method of making it into an ointment is to dissolve the acid in hot fat. I find that two drachms will dissolve in one ounce of lard, but this is very concentrated. The hot ointment should then be transferred to a mortar, and rubbed down till cold.

If, to each ounce of ointment so prepared, two drops of otto of roses be added, a most beautiful preparation results, possessing, in an eminent degree the active properties of the acid with the delicate and attractive odour of the rose.

Mr. Gerrard, the dispenser at University College Hospital, first published this method of dissolving the acid in hot fat; and it is a pleasure to find that Mr. B. Squire has abandoned the unpleasant odour of the benzole process he advocated in its favour.—Your faithful servant,

35, Baker Street, W.

A. W. POSTANS, F.C.S.

## ASSOCIATION INTELLIGENCE.

### NORTH WALES BRANCH.

THE intermediate meeting of this Branch will be held at the Wynnstay Arms Hotel, Wrexham, on Tuesday, February 27th, at 1 P.M.: JOHN RICHARDS, Esq., Bangor, President.

Mr. R. W. J. Evans will read a paper on the Use and Abuse of Stimulants in the Treatment of Disease.

Dinner at 3.30 P.M. Tickets, 5s., exclusive of wine.

T. EYTON JONES, M.D., *Honorary Secretary*.

Wrexham, February 9th, 1877.

### BATH AND BRISTOL BRANCH.

THE fourth ordinary meeting of the Session will be held at the York House, Bath, on Thursday evening, March 1st: H. F. A. GOODRIDGE, M.D., President.

R. S. FOWLER, Bath, } *Honorary Secretaries*.  
E. C. BOARD, Clifton. }

Bath, February 7th, 1877.

### SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT MEETINGS.

THE next meeting will be held at the Crystal Palace Hotel, Upper Norwood, on March 5th, 1877, at 4 P.M.; Dr. JEFFRESON in the Chair.

Dinner will be provided at 6 P.M. precisely. Charge, 6s. 6d., exclusive of wine.

The following communications are promised.

1. Dr. Moxon: Observations on the Use of Alcohol.
2. Mr. Maunder will Demonstrate Roussel's Transfusion on a Living Subject.
3. Dr. Dalton: Notes of a Case of Acute Mania following Scarlet Fever.
4. Dr. Miller: On a Case of Ulceration of the Oesophagus.
5. Mr. H. Taylor (Guildford): A Case of Subcutaneous Osteotomy.
6. Mr. Sidney Turner will exhibit an Apparatus for Contracted Tendon.

JOHN H. GALTON, M.D. Lond., *Honorary Secretary*.

Woodside, Anerley Road, S.E., February 12th, 1877.

## MEDICO-PARLIAMENTARY.

### HOUSE OF COMMONS, Thursday, February 8th.

*Pure Vaccine Lymph.*—SIR TREVOR LAWRENCE asked the President of the Local Government Board whether, having regard to the severity of the present epidemic of small-pox, the urgent necessity of providing facilities for vaccination in its most efficient form, and the prejudices which, however unreasonable, exist in some parts against vaccination from arm to arm, he will take steps to provide a supply of vaccine lymph from the calf for such public vaccinators as may require it, as was done in Belgium.—MR. SCLATER-BOOTH: The subject of vaccination from the calf has not been overlooked by Her Majesty's Government. The practice, as pursued in Belgium and other countries, was investigated personally by the present medical officer of health of the Local Government Board. The results of that inquiry will be found in the twelfth annual report of the Medical Officer of the Privy Council, and they were not favourable to the adoption of the practice. Subsequent experiences of it have been of a conflicting character. The subject is now attracting attention in the country, and will not be lost sight of by the Local Government Board.

*The Storage and Conveyance of Water.*—MR. WHALLEY asked the President of the Local Government Board whether it was his intention to introduce a Bill for affording facilities for the storage and conveyance of water, pursuant to the recommendation of the Commission in their sixth report on the pollution of rivers and domestic water-supply.—MR. SCLATER-BOOTH: I presume the recommendation to which the hon. gentleman alludes is, "that the owners of land should be permitted to include the cost of village water-supply among those expenses which they are now enabled to charge on their estates, with consent of the Improvement Commissioners". Taken by itself, this would hardly be for me to initiate; but taken in connection with another well-known recommendation of the Sanitary Commission, it would become of considerable importance. Having regard, however, to the amendments in the law which were effected in the Public Health Act of 1875, I am not prepared at this moment to introduce any Bill having the limited object suggested by the hon. gentleman.

### Monday, February 12th.

*The Carlisle Place Orphanage.*—Replying to MR. WHALLEY, MR. CROSS said: When this matter was brought under my consideration some two months ago, I requested my right hon. friend the President of the Local Government Board to allow one of its inspectors to make an inquiry. He was met by the ladies who have charge of the institution, and they showed him over the place, and offered to avail themselves of any suggestions which might be made for the better protection of infant life. The inspector made several recommendations with this view. I thought it right a few weeks ago to ask the inspector to go again, in order to see how many of his recommendations had been carried out. I have not yet received his report. But it is right I should state, on behalf of the ladies who undertake the management of this purely charitable institution, that I have this morning received a report from the sanitary authority of the Westminster Board of Works, who had sent their medical officer to report for their own satisfaction. That report concludes as follows:—"I cannot speak too highly of the general cleanliness of this institution, and the devotedness of those ladies who have undertaken to conduct it." I may say that, of the poor children who are taken care of from purely charitable motives in these institutions, a vast number of them would die if they were not admitted. They have been taken into those institutions in a most miserable and destitute condition, and, of course, deprived of the proper nourishment which children ought to have. It is a question whether such institutions may not require certain regulations, because medical men are of opinion that the gathering together of too many infants is likely to increase the mortality amongst them. The hon. member may rest assured that the matter is under the consideration of my right hon. friend and myself, not with regard to persons of one particular religion, but of all classes.

*The Sanitary Condition of the War-Office.*—MR. NORTON, in answer to SIR W. FRASER, stated that the attention of the Government had been called to the circumstances of the deaths of Lieutenant-General Sir James Lindsay, of General Egerton, and of Colonels Middleton and Jennings; and he rejoiced to think that the deaths of these officers could not in any way be attributed to the unhealthy condition of the War-Office. A return which he had obtained showed that, on January 19th last, out of the six hundred and thirty persons there were in the War-Office, only nine had been absent from sickness. The



causes and details were : one from typhoid fever, one from bronchitis, one from congestion of the liver, one from stoppage of the bowels, one from rheumatic gout, one from sprained neck, one from disease of the mouth. During the year 1876, there was only one case of typhoid fever. Complaints had been made with regard to the condition of the building, but these formed part of departmental minutes, and could not be laid on the table of the house; but these complaints had been attended to by the Board of Works, who had in every case endeavoured to remedy the evil. A Royal Commission had been appointed by Her Majesty on the subject, and its report would be printed, and every effort would be made to carry out effectually and as stringently as possible the recommendations contained in the report.

*Lunacy Law.*—Mr. DILLWYN moved for a Select Committee to inquire into the operation of the lunacy law, and whether any and what amendment thereof was expedient with regard to the violation of personal liberty.—Mr. LUSH supported the motion.—Mr. CROSS said it was unadvisable to do anything in this matter rashly; but, after communication with the noble lord at the head of the Lunacy Commission, he acceded to the motion. There was a strong feeling among the public that sufficient safeguards did not exist, and it was necessary that that feeling should be dissipated.—Agreed to.

*Thursday, February 15th.*

*The Arctic Expedition.*—Dr. WARD asked the First Lord of the Admiralty whether an inquiry had been ordered into the outbreak of scurvy among the crews of Her Majesty's ships *Alert* and *Discovery* during the recent expedition to the North Pole; and, if so, whether he would lay the report upon the table of the house.—Mr. HUNT: Yes; I have appointed a committee to inquire into the cause of this outbreak of scurvy. The committee has made very considerable progress in its labours, and I hope before long it will make its report. I shall be happy to lay both the report and the evidence on the table when I have received them.

*Vaccination.*—Mr. S. BOOTH, in reply to Mr. Wethered, said the Local Government Board had heard of the death of three children near Gainsborough from erysipelas following from vaccination, and an inspector had been asked to make a careful investigation into all the circumstances of the case. It was true that the children were vaccinated from lymph taken from a child which had been vaccinated from points supplied by the National Vaccine Establishment. That child, however, was not suffering from erysipelas, and it seemed certain that the lymph furnished from the child did not contain any infection of erysipelas. Moreover, there was no reason to suppose that the infection in any of these cases arose from the lymph used. Several other cases of erysipelas had occurred in the district, some following vaccination, and others having no connection with that operation. The whole of the circumstances were dealt with in the report of the inspector, which would be laid on the table of the house.

*Army Medical Department.*—Mr. HARDY, in answer to Mr. Dunbar, said that twenty-three candidates had presented themselves for admission to the Army Medical Department—fifty appointments were offered for competition, and forty-nine candidates had presented themselves for the twenty-seven appointments in the Indian Medical Department.

*Friday, February 16th.*

*Surgeons in the Volunteer Force.*—Mr. HERBERT asked whether it was the intention of the Secretary of State for War to grant the request of the surgeons of the volunteer force, and give them the instructions necessary to enable them to teach a certain number of men of their respective regiments the difficult duty of carrying sick and wounded men in case of war; and whether such instructions were carried on in the army generally.—Mr. HARDY replied that the question was not before him at present, and that no general instructions had been issued to the army generally on the subject.

*Monday, February 19th.*

*Public Health (Ireland) Bill.*—Sir M. H. BEACH informed Dr. Ward that he would reintroduce the Public Health (Ireland) Bill in the course of a few days.

*Vivisection.*—Mr. MUNDELLA moved for a return of the persons to whom certificates had been granted under the different sections of the Act to amend the law relating to cruelty to animals.—Mr. CROSS said he was quite willing to give any return where the action of the Home Secretary was called in question, but he thought it would be quite sufficient in the first place if he gave the number of licences granted. If the honourable member were not satisfied with that as showing the working of the Act, the fuller return could then be asked for. At present, but one certificate had been granted for ex-

periments without anæsthetics, and that was given, not because pain would be inflicted, but because there was some doubt as to the construction of the Act, and as to whether the smallest puncture might not be considered by the judges as causing pain. So far as the Act was concerned, no experiment had, since its passing, been performed in England calculated to cause pain to any animal. He hoped the house and the country would be equally ready to acknowledge what to his mind reflected the highest honour on the medical and scientific world. They had shown themselves ready to join that house and the Secretary of State, and the feeling of the country as far as possible, and to co-operate to show an example that they had no intention, unless they were bound to do so, to inflict pain of any kind on any animal. He then moved for the return in the following amended form: 1. The number of persons to whom such licences have been granted since the Act came in force, and the names of places registered under the Act; 2. The number of licences which the (optional) provision (Clause 7), requiring that the place wherein the experiment is performed shall be registered, has been inserted; 3. The number of certificates which have been received under Clause 3, permitting experiments as illustrations of lectures to students; 4. The number of certificates which have been received under Clause 5, permitting experiments on cats, dogs, horses, mules, or asses; 5. The number of certificates (special) which have been received for performing experiments without anæsthetics, and the number of such experiments in which curare has been employed; 6. The scientific authorities who have in each case granted such certificates.—Mr. MUNDELLA said he would accept the return in its amended form.—Dr. WARD, in consequence, withdrew any opposition to it.—After some remarks from Mr. HOLT and the HOME SECRETARY, the amended return was agreed to.

*Tuesday, February 20th.*

*Vaccination.*—In answer to Mr. Barran, Mr. SCLATER-BOOTH said his attention had been called to the death of a child at Leeds, which was alleged to have been due to vaccination, and he had caused inquiries to be made on the subject. The vaccination, it appeared, had been performed by a private practitioner, and, at the inquest which was held, the jury found that the child had died from erysipelas, but did not agree as to how the erysipelas had been caused. He might observe that the lymph with which the child had been vaccinated had been used in other cases without prejudicial results. When cases of this kind occurred, it was his invariable practice to institute an inquiry into the circumstances attending them. He had received a report on the Gainsborough case, to which he referred the other day, and had laid it on the table. He believed it would illustrate similar cases, and be useful in showing how bad after effects sometimes followed vaccination as they did other operations.

*Army Medical Officers.*—Dr. LUSH asked the Secretary of State for War whether, seeing the continued indisposition to enter Her Majesty's service in the medical department of the army, evinced by the scarcity of applications for commissions, he could hold out any prospect of the condition of that service being improved; and especially whether he was prepared to place the medical officers upon the same footing as other officers with regard to exchanges.—Mr. HARDY: Considering the very short time the new system has been established, I do not consider fifty-six candidates a small number to have presented themselves since August last. Thirty-three have passed through the school this month, and will be duly commissioned; and twenty-three are now under examination. Further, it should be remembered that three departments are competing at the same time for medical men, and that India, being the best paid, of course monopolises the largest share. I may mention that the greater number of vacancies is caused by the retirement on half-pay through ill health of medical officers of twenty and twenty-five years' service. With regard to exchanges, I have, on a former occasion, stated to this house that each application is considered on its own merits, and the Director-General of the Army Medical Department uses discretionary power in recommending or refusing the indulgence, having due regard to the officers' services at home. In fact, no application has been refused when an officer has been at home under three years.

*Small-Pox Hospital at Limehouse.*—Mr. RITCHIE called attention to the proceedings of the Metropolitan Asylums Board in establishing a small-pox hospital at Limehouse, and moved for a Select Committee to inquire into its powers, duties, etc. In support of his strictures on the Board, he reviewed at length its procedure in regard to the outbreak of small-pox, censuring the contempt with which it had treated the representations of the Local Government Board, and its neglect to provide huts and other temporary receptacles for the patients. With regard to this hospital, the neighbourhood selected was most unfit.



There was no isolation, for it was close to large workshops, in which a panic had been created, and it was placed between a stagnant canal and the parish dustyard, and in close proximity to several chemical works. The Board, he insisted, ought not to have the irresponsible power of setting down such a hospital wherever it pleased without consultation with the local authority.—Mr. SAMUDA, in seconding the motion, censured the Board for the mistaken policy of introducing cases of sickness from the country into a densely populated district.—Mr. SCLATER-BOOTH sympathised with many of the objections to this hospital, though he did not admit that the health of the neighbourhood had suffered, and he thought the Board to blame in not having provided huts, etc., as had been recommended. But he pointed out in extenuation that the Board could not have expected so speedy a recurrence of a small-pox epidemic, and that when the offer of this building was made to it the necessity was very urgent. However, in less than a week there would be no further occasion for using it, as the Board would have two hundred and forty beds at its disposal at Fulham and Deptford. As to a Select Committee, no case had been made out for it; and he pointed out that there had been an inquiry very recently.—Mr. WALTER described the impression produced on his mind by a visit paid to the neighbourhood that afternoon, and though he admitted that it was not fitted for a permanent hospital, he did not think the Board was to blame for having selected the building for the temporary purposes for which it had been used. It certainly was not an overcrowded neighbourhood, and the apprehensions which had been excited had no reasonable foundation.—Mr. HARDCASTLE and Mr. COOPE concurred in thinking that the Board ought not to have the power of intruding a hospital in any locality without the consent of the local authorities; and, after some observations from Mr. COLLINS, Mr. RITCHIE withdrew his motion.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### CLIMATIC DIARRHŒA AND TYPHOID FEVER.

DR. GOLDIE, the Medical Officer of Health for Leeds, has lately read a paper on this subject, in which he considered the following points: 1. That epidemic diarrhœa is an autumnal disease of large towns; 2. That it is confined chiefly to children under five years of age. To illustrate the former of these, he selected the years 1868, 1870, and 1872, when the disease was unusually fatal in Leeds. In each of these, the highest temperature observed in the shade was unusually high, having been 94 degs. in 1868, 92 degs. in 1870, and 93 degs. in 1872, whilst the lowest in 1868 was 42 degs., in 1870 35 degs., and in 1872 36 degs., showing an enormous range during the three months ending September 30th. Dr. Goldie refers to the mean temperature of the air for the third quarter of 1868, which is printed 84.8 degs. instead of 64.8, degs. The total number of deaths in this year from diarrhœa was 739; whilst in 1870, with a lower mean temperature, but less rainfall, there were 657 deaths, and, in 1872, 616 deaths. The mean of all the highest temperatures was 73.3 degs. in 1868, the most fatal year; 71.4 degs. in 1870, and 70.7 degs. in 1872. The mean temperature for each quarter was 64.8 in 1868, 60.1 in 1870, and 60.1 in 1872, so that the mortality coincided pretty closely with the temperature. This, however, has been well known for many years. We have had to calculate these means from the table, and also pick out the number of deaths, as they are not cast up by Dr. Goldie. In 1870 and 1872, some sanitary defects were found in a large proportion of the houses, chiefly defective drainage or accumulation of refuse, so that Dr. Goldie says, "I am certain that the epidemic character of the disease is caused by excessive heat playing upon animal and vegetable matter in a state of decomposition". Bad nursing, improper food, excessive drinking and destitution are enumerated amongst the other factors of the disease. He, therefore, advises the prompt removal of all accumulations likely to undergo decomposition, the liberal use of disinfectants, good subsoil drainage of houses, regular flushing of the drains and sewers, a good paving of yards and streets, so as to prevent the saturation of the soil with liquid filth.

Mr. Serjeant, the Medical Officer of Health for Bolton, has just made a report to the Local Government Board on the prevalence of diarrhœa and fever in his district. It appears that the diarrhœa-rate in the quarter ending September 30th, 1876, was 19.2 per cent. of the total mortality, and that the "chief victims were children under one year old". Besides the heat, Mr. Serjeant says that bad nursing, im-

proper food in lieu of the natural sustenance, the unwholesome condition of many of the houses which did not admit of proper ventilation, and offensive ash-pits, were the chief causes of the high rate of mortality.

For some years past, there has been an enormous mortality from infantile diarrhœa in Leicester, which has been carefully reported upon by Dr. Birch and Mr. Franklin, who consider it to be "specific" in many instances, and to be caused by the action of the solar heat on a sewage or water-logged soil. Dr. Johnston, the Medical Officer of Health, is of opinion that it is not specific, but that it arose from impure air resulting from the action of heat on sewage, from impure water, and improper food. He says that many of the sewers do not carry off the sewage properly, being almost of a dead level, and always more than half charged, in consequence of accumulations that exist at intervals. He shows that 76 per cent. of the places where summer diarrhœa always prevails, corresponds with the localities where the sewers are in the condition as above stated, and that 90 per cent. of the fatal cases under five years of age in 1875 occurred in these places.

### PAUPER LUNATIC CERTIFICATES AND QUARTERLY VISITS IN SCOTLAND.

SIR,—For the benefit of other parochial medical officers in Scotland, I subjoin the following letter from the Secretary to the Board of Supervision in reply to certain queries, the nature of which will be apparent from the answers.

"Board of Supervision, Edinburgh, February 15th, 1877.

"Sir,—I have to acknowledge the receipt of your letter, dated the 14th instant, and in reply,

"1. I am not aware of the fee usually charged for certifying a pauper lunatic in terms of the Lunacy Acts, but a good deal will depend on the circumstances.

"2. Quarterly visits to pauper lunatics, as required by the Lunacy Acts, are not duties which the medical officer is bound to perform in consideration of his salary and without extra remuneration.

"3. A pauper lunatic, in so far as supply of medicines is concerned, is in the same position as any other pauper.

"I am, sir, your obedient servant,

(Signed)

"JOHN SKELTON, Secretary.

"Dr. Lewis, Rosemount, Houston."

As one of those parochial medical officers who have been in the habit of certifying pauper lunatics, as well as paying quarterly visits, without extra remuneration, I shall be glad to hear the amount of the fees usually allowed in such cases.—Yours truly,

WILLIAM LEWIS, M.D., C.M., L.K.C.P. and S.Ed., etc.,

Parochial Medical Officer, Houston, Killelan, and Erskine.

Rosemount, Houston, N.B., February 17th, 1877.

### REPORTS OF MEDICAL OFFICERS OF HEALTH.

YORK.—Mr. North lately proposed an improvement scheme for Castlegate and Water Lanes, in accordance with a memorial numerously signed by ratepayers. A committee, which inquired into the matter, reported that the district complained of should be widened and otherwise improved. Mr. North pointed out the necessity for speedy action, and the entire removal of the dwellings included in the area. The subcommittee, to whom the matter was referred, reported favourably as to the adoption of the enlarged scheme, and pointed out that a rate of a little more than a penny in the pound for fifty years would defray the cost. The medical officer has also published a report of the sanitary state of the city of York during the six months ending March 31st, in which he shows that the annual birth-rate for the quarter ending December 31st was 37.9, and for that ending March 31st was 38.4; the annual death-rate being 23.7 and 22.84 for each quarter respectively. Whooping-cough was very fatal in the first, and inflammatory diseases of the lungs in the latter quarter. The death-rate from young children is stated to have been high. Mr. North points out that ill-constructed house-drains, badly paved yards, numerous soil-pits, and other nuisances, are accountable for some of the deaths.

SKIPTON AND SETTLE.—Dr. E. West Symes refers to the anomaly which has been noticed by several other medical officers of health, that vaccination, which is essentially a means for the prevention of disease, has been entrusted to boards of guardians instead of to the sanitary authority; and notices especially the great injury inflicted on the public health by the action of the Keighley guardians; also the want of an uniform system of registration of disease, as well as the almost uni-



versal want of care in preventing the entrance of sewer-gases into inhabited houses. The population of the district is estimated at 49,170. The deaths amounted to 985, which give a death-rate of 20.03. There were 1,553 births, or 31.5 per 1,000 population. The total number of deaths from epidemic diseases was 83, against 110 in 1874. There were 18 deaths from scarlet fever, 12 from diarrhoea, and 11 from whooping-cough. The ages at death are given, but are not cast up, so that the table of infant mortality is rendered almost useless. There were 353 deaths under five. Separate reports are made for Skipton, where the death-rate was 20.6; for Settle, where it was only 17.4; for Skipton Urban District, in which it was 19.55; and for Silsden Urban District, where it was as high as 24.5, with a birth-rate of 36.4. It is much to be regretted that the tables agreed to by the Society of Medical Officers of Health are not in universal use throughout the country, especially as it is open to any officer to append as many additional tables as he may wish.

#### VISITING OF PAUPER LUNATICS IN SCOTLAND.

SIR.—Visiting of pauper lunatics is one of the extras in Scotland, as here, and is paid for at the usual rate, 2s. 6d. each quarterly visit. Your correspondent J. L. P. is, therefore, entitled to the usual fee for such attendance, and should claim it forthwith.

I may be allowed to add, that anything the medical officer may find necessary, and orders in the book kept by the friends of the pauper lunatic, must be supplied by the Parochial Board as soon as possible after the notice duly given to the Inspector of Poor.—I am, etc.,  
F.R.C.S. Ed.  
February 12th, 1877.

#### EXTRA FEES FOR OPERATIONS.

SIR.—Could you kindly inform me whether a Board of Guardians are compelled by law to pay their medical officers the usual extra remuneration for operations, etc.; or whether they can arrange with him that the only extras are to be midwifery and lunacy?—Yours faithfully,  
A SUBSCRIBER.  
February 12th, 1877.

\*A Board of Guardians may contract with a medical officer that, on payment of a certain sum, all fees laid down in the scale of extras by the Local Government Board shall be commuted, not excluding even midwifery and lunacy fees. In the great majority of instances, a fixed sum is paid, which is based upon the understanding that the salary will be supplemented by the fees in such scale of extras. These latter can be legally recovered in a court of law.

#### UNREGISTERED ASSISTANTS.

SIR.—Will you be so kind as to answer the following question in your JOURNAL; viz.: Whether the Poor-law Board sanctions a medical officer to a district to appoint his assistant, who is qualified, but unregistered, to act as his substitute?—I remain yours faithfully,  
INQUIRENS.  
I enclose my card.

\*The Local Government Board would not sanction the employment of an unregistered assistant, though he may be qualified, as substitute, if they heard of it; but the appointment of a substitute is not reported to them. "Inquirers" may, therefore, employ such assistant, subject to these drawbacks: that he cannot fill up a certificate of lunacy, as it would be an illegal document; that he cannot give evidence as a medical witness in the coroner's court, as the magistrates would disallow the fees; that he cannot give evidence in a higher court—it would not be legally receivable; and his employer could not recover in the County Court, if he attended any one and the claim for such attendance were disputed.

#### MR. BLOXAM AND THE ST. GEORGE'S UNION.

SIR.—I suppose that I ought to feel deeply grateful for the interest taken in me and my doings by Mr. Price. Mr. Price makes the great discovery that "Dr. Bloxam does hold office in St. George's Union". This is very well known, and needs no assertion. "Dr. Bloxam denies that a fee of £5 5s. was given him for such attendance." "There must be here some error, for I am in a position to assert that such sum was voted on the 13th ultimo." It was only yesterday (Feb. 7th) I received a cheque from the St. George's Guardians for extra medical services, sanctioned by the Local Government Board, of which £2 2s. are for the case in question—not £5 5s., as stated by Mr. Price. It would not be pleasant to me to have to tell the actual reasons why I was applied to in this case; let us hope that they will never recur. I am, sir, yours very obediently,  
February 8th, 1877.  
WM. BLOXAM, M.D.

#### REGISTRARSHIPS IN IRELAND.

A. N. K. asks:—Can the medical officer of an Irish Poor-law dispensary decline to accept the post of Registrar of Births, Deaths, and Marriages; or, having once accepted it, can he give it up without at the same time giving up his dispensary?

\*These appointments are generally held to be distinct, though the rule is that, in Ireland, both should be held by the dispensary medical officer. If, however, at the time of election the medical officer were first elected for the dispensary, and subsequently appointed Registrar, it is legally possible for him to resign the latter without of necessity disturbing his life-tenure of the former. As, however, a difficulty might arise, we would advise our correspondent to write to Mr. B. Banks, Chief Clerk to the Local Government Board, Custom House Quay, Dublin, for his advice. Mr. Banks has at all times manifested much courtesy to dispensary medical officers.

## MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Licentiates on February 21st, 1877.

Bevan, Richard, New Romney, Kent  
Byam, Samuel Henry, 14, Milner Street  
Cameron, Charles Hamilton Hone, Bethlehem Hospital  
Clubbe, Charles Percy Barlee, St. Bartholomew's Hospital  
Cooper, Peter, 3, Tavistock Street, Bedford Square  
Dawson, Cautley, Leeds  
Edwards, Frederick Swinford, St. Mark's Hospital  
Gorst, Henry, Royal Infirmary, Liverpool  
Goulder, Frank Samuel, Woodbastwick, Norwich  
Irvine, Delaware Lewis, Newcastle-upon-Tyne  
McDonagh, George Raymond, M.B., 139, Kennington Road  
Rees, Alfred, Maesteg, Glamorganshire  
Roughaton, James Woolley, 7, Birkbeck Street, Norwood  
Rudduck, John Burton, London Hospital  
Stevenson, Leader Henry, Guy's Hospital  
Symonds, Edmond, Thaxted  
Turner, Edward Beadon, 9, Sussex Gardens  
Tyrell, Robert Shaw, M.B., 139, Kennington Road  
Webb, John Rheece Wynn, St. George's Hospital  
White, Charles Haydon, Brathay House, Tufnell Park

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 15th, 1877.

Horrocks, Peter, Over Darwen, Lancashire  
Scott, John William, Dunfield, Sheffield

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examination meetings of the College, held on February 13th, 14th, and 15th, the following candidates were successful for the Licences to practise Medicine and Midwifery.

Hoggan, Mrs. Frances Elizabeth, Roe, Charles  
McCluney, John

#### MEDICAL VACANCIES.

The following vacancies are announced:—  
BIRMINGHAM GENERAL DISPENSARY.—Resident Surgeon. Salary to commence at £130 per annum, with allowance for cab-hire, and furnished apartments, lights, and attendance.  
CARLISLE DISPENSARY.—Junior House-Surgeon. Salary, £90 per annum, with apartments, coals, gas, and attendance.  
COVENTRY AND WARWICKSHIRE HOSPITAL.—House-Surgeon. Salary, £100 per annum, with board, lodging, and attendance. Applications to be sent in on or before the 24th instant.  
HOSPITAL FOR EPILEPSY AND PARALYSIS, Portland Place, W.—Two Assistant Physicians. Applications to be sent in on or before the 28th instant.  
HOSPITAL FOR WOMEN, Soho Square.—House-Physician. Applications to be made to David Cannon, Esq., Secretary.  
KILFRINCHEN and KILVICKEON, Parish of.—Medical Officer. Salary from Board, £70 per annum; from other sources, £20. Applications to be sent in on or before March 3rd.  
NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.—Resident Medical Officer and Registrar. Salary, £100 per annum, with board and lodging.  
NEWPORT INFIRMARY and DISPENSARY, Monmouthshire.—Resident Medical Officer. Salary, £100 per annum, with board, attendance, furnished apartments, etc. Applications to be sent in on or before the 28th instant.  
ROYAL FREE HOSPITAL, Gray's Inn Road.—Junior Resident Medical Officer. Applications to be sent in on or before the 28th instant.  
STOW-ON-THE-WOLD UNION.—Medical Officer for the Loughborough District and Workhouse.  
SUSSEX LUNATIC ASYLUM, Hayward's Heath.—Senior Assistant Medical Officer. Salary, £175 per annum, with board, lodging, and washing. Applications to be sent in on or before the 27th instant.  
UNIVERSITY COLLEGE HOSPITAL.—Resident Medical Officer. Applications to be made on or before March 10th.  
WHITEHAVEN UNION.—Medical Officer for the Gosforth District.  
WOLVERHAMPTON and STAFFORDSHIRE GENERAL HOSPITAL.—Physician's Assistant and Pathologist. Salary, £50 per annum, with board, washing, and furnished apartments. Applications to be sent in on or before March 6th.

#### MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.  
GREENE, Richard, L.R.C.P., Senior Assistant Medical Officer, Sussex County Asylum, Hayward's Heath, appointed Medical Superintendent of the East Riding Asylum at Beverley, vice \*N. G. Mercer, M.D., deceased.  
WILLIS, G. Owen, Fell, F.P.S. Glasg., appointed Surgeon to the Monmouth General Hospital and Dispensary, vice G. Wilson, M.R.C.S. Eng., resigned.  
WILSON, George, M.R.C.S. Eng., appointed Honorary Consulting Surgeon to the Monmouth General Hospital and Dispensary.

#### BIRTHS, MARRIAGES, AND DEATHS.

The charges for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

#### DEATH.

\*GODDEN, Joseph, L.K.Q.C.P.I., M.R.C.S.E., etc., formerly of Birkenhead, on February 15th, at his residence, Claverton House, Eastbourne, aged 54.

# THE GOULSTONIAN LECTURES

ON

## PHARMACOLOGY AND ITS RELATION TO THERAPEUTICS.

*Delivered at the Royal College of Physicians, London.*

By T. LAUDER BRUNTON, M.D., D.Sc., F.R.S.,

Fellow of the Royal College of Physicians; Assistant-Physician and Lecturer on Materia Medica and Therapeutics at St. Bartholomew's Hospital.

### LECTURE I.

IN the course of these lectures, I purpose to consider Pharmacology and its Relations to Therapeutics, or, in other words, the relations between the action of drugs on the healthy body and their uses in the cure of disease. In dealing with this subject, I shall divide it into four sections:

1. The reasons why therapeutics has made such slow progress in the past, as shown by the history of medicine.
2. The methods by which it is at present advancing.
3. Some of the most important results obtained by the use of these methods.
4. The prospects of therapeutics in the future.

Although few persons possessing any knowledge of the history of medicine will deny that therapeutics has made some progress during the last thousand years, yet it is impossible to read the writings of the ancients without feeling that, not to mention such men as Hippocrates and Galen, if some of the old Egyptian physicians were to arise from their graves and commence practice, we would have but little cause to sneer at their treatment, although we have the advantage of possessing the medical knowledge accumulated during the two or three thousand years which have elapsed since they flourished. For those old Egyptians seem to have been acquainted with the use of emetics, enemas, and purgatives, those potent agents which are, perhaps, more used and more useful than any others in our own armamentarium. They paid attention to the diet of their patients. For the cure of dropsies, they used squills and iron.\* In addition to drastics,† squill, broom,‡ and balsams,§ an ancient Greek would have tapped the abdomen when the distension became great, and would have taken every precaution to prevent syncope from the operation. These are the very methods of the modern physician; and, although he might give digitalis and blue pill along with the squills, and suggest nitrous ether and juniper, yet his reasons for this would be the same as those of the Egyptian or Greek—viz., that he had seen the remedies prescribed do good before, and expected them to prove beneficial again. As to the *modus operandi* of these remedies, or the reason why they should succeed in one case and fail in another, the ancient and the modern would be almost equally in the dark; for medicine with both would be an art, not a science.

If we turn to other branches of knowledge—astronomy, chemistry, or physics—the case is widely different. Not that the ancients were entirely ignorant of these subjects—far from it. The Egyptians had a fair knowledge of chemistry as an art, for they made glass mosaics such as Venetian manufacturers have only of recent years been able to fabricate.¶ They produced imitations of precious stones such as moderns can hardly surpass.¶¶ They mixed metals into a bronze almost equal in toughness and elasticity to steel.\*\* They used metallic oxides so as to give their porcelain most beautiful colours. They knew how to fashion patterns in cloth by the use of acids, in much the same way as our own Manchester manufacturers.†† Their technical knowledge was deep and varied. Modern skill has striven in vain to equal or surpass many of their achievements. But here their triumphs end; for in modern times—we may say in the preceding century—science has taught us that wonderful affinity in nature which enables us almost to rival nature in the beauty and perfection of our work; to discern the relationships of the elements; to pull a compound to pieces; to tear down and build up; to create the most complex

products of vegetable life—dyes of brilliant and enduring lustre,\* and poisons of deadly power.†

The same is the case with astronomy and physics. Thales might predict eclipses,‡ and Hipparchos could calculate them with accuracy; but they had no conception of the laws which regulate the movements of the heavenly bodies—laws which enable us to calculate the position of the planets at any given moment for centuries backwards or forwards, to determine their masses, to measure their distances from the sun, to ascertain the rate at which they roll along their orbits, and foretell the existence of unseen bodies which disturb the regularity of their motions. Archimedes was acquainted with the reflection of the solar ray, and may have used his knowledge to destroy the ships of an enemy; but he was utterly ignorant of those wonderful properties of light which have enabled us within the last few years to accomplish the apparent impossibility of analysing the composition of the sun and stars, millions of miles removed from us, almost as readily as that of a meteorite which has fallen to the earth; to ascertain that an apparently motionless star is receding from us with enormous rapidity, and to affirm that a great conflagration is going on in another star with as much confidence as that a chimney has caught fire in a neighbouring street.

While the ancients had an isolated knowledge of facts, we know them in their relations. This difference is as great as the difference between our knowledge of a man from a casual meeting in the street, and a thorough acquaintance with his early training, his circumstances, his associations, his life-long conduct. You can tell what the former will do in circumstances in which, to your knowledge, he has already been; you can foretell what the latter will do under conditions in which he has never been. Your knowledge of the former is empirical; of the latter, scientific. You can tell that your casual acquaintance will salute you in passing, or that he will leave town by his daily train, because you know that he has done these things regularly for weeks, months, or years back; but you do not know whether he would prove a true man or a knave if you were to entrust him with an important commission. In the case of your life-long acquaintance, on the other hand, you could predict the result of such a trial, although you had never made it; and from your knowledge of him you could make certain that, according to his character and circumstances, he would wilfully break his pledge, like the faithless friend of the unfortunate Essex; or would, like Regulus, fulfil his engagements, though torture and death should be the result. It is such an intimate acquaintance as this with the properties of light that enables us to predict that, under certain conditions, one beam will extinguish another, so that, contrary to all our usual experience, two lights make a dark; and to understand the reason of our partial failure if we produce mere dimness instead of complete darkness in our endeavours to demonstrate the fact experimentally. An intimate knowledge of the chemical nature and relations of bodies enables us not merely to say that certain substances—for example, members of the alcohol series—may exist, but to foretell their properties, and, by using certain processes, to make them, although they had previously never been known, and probably had never even existed in a separate state. Unfortunately, we do not know medicine as we do chemistry and physics. We have medical sciences; for physiology, pathology, and pharmacology, are justly beginning to lay claim to the title; but medicine itself—the recognition and cure of disease—is still an art, and not a science. The truth of this becomes evident if we consider the case of ague, the disease in which the power of medicine, both as regards prophylaxis and treatment, is most marked.

We know that if a man pass through certain districts, and more especially if he sleep in them, he is likely to be attacked with a fit of shivering, which, after lasting some time, will be succeeded by a burning fever and then by profuse sweating, after which he will feel comparatively well until the next day, when another shivering fit will come on at the same hour, and run the same course as the first. We know that, by warning the man against the dangerous locality, or by making him adopt certain precautions, take cinchona alkaloids, if he cannot avoid the place, we may be able to prevent the disease; by administering one large dose of quinine before a paroxysm we may stop its approach, and by continuing the remedy we may prevent its recurrence altogether. But we are ignorant of the nature of malaria, as we term the cause of these paroxysms, whatever it may be. We do not know how it acts upon the bodily mechanism so as to cause them. We have no notion of the manner in which quinine counteracts the malarial effects, or why quinine should sometimes fail and arsenic prove

\* Pauw, *Recherches Philosophiques sur les Egyptiens et les Chinois*. Berlin, 1773; tom. i, p. 134.

† *Phallos Argemeta*, by Adams, Sydenham Society, p. 570.

‡ *Op. cit.*, p. 575.

§ *Op. cit.*, p. 571. Compare H. Thompson, *Lancet*, Nov. 29th, 1869, p. 742.

¶ Wilkinson's *Popular Account of the Ancient Egyptians*. London, 1854, vol. ii, p. 61.

¶¶ Wilkinson, *op. cit.*, p. 63.

\*\* *Op. cit.*, p. 159.

†† *Op. cit.*, p. 66.

\* Graebe and Liebermann, *Zeitschrift für Chemie*, 1872, pp. 424 and 1868.

† Conia made synthetically by Hugo Schiff, *Bericht des Deutschen Chem. Vereins*, December 26th, 1870, p. 347; and Muscarin by Schmiedeberg and Harnack, *Centralblatt für die Med. Wiss.*, 1875, p. 598.

‡ Herodotus, i, 74.



efficacious.\* We first tell the occurrence of an ague-fit after exposure in a certain locality, and its prevention by quinine, in the same way that an astronomer of ancient Babel could predict the recurrence of an eclipse.† He saw that one was followed after a certain interval by another; and we have observed that exposure is followed by ague, and the administration of quinine by the diminution or absence of the paroxysm. Having seen the same sequence of phenomena before, he reasoned that it would come again, even as we reason now. But he had no idea of the cause of the eclipses. He did not know what was going on in the eighteen years' interval between them, nor could he account for any irregularity in their occurrence. We may say that the immediate cause of the ague-fit is probably intense irritation of the vaso-motor centre in the medulla oblongata, but we have no idea of the nature of the irritant, and we cannot even guess why the irritation should occur at regular intervals. We do not know the changes in the nervous system and tissues which occur during the intermissions, and we are utterly at a loss to explain why a man should come from a malarious district in India and die in England of jungle-fever, although he had never had it while abroad, and it is never seen in residents at home. We have no such accurate and comprehensive knowledge of the relations between the organism, malaria, and quinine as astronomers have at the present day of the relations between this globe of ours, its attendant satellite, and the solar and stellar systems, a knowledge which enables them to fix, years before, the precise spot on the earth's surface at which an eclipse may be seen, although totally invisible for thousands of miles around their home, and to make preparations for observing it accordingly.

If we inquire why medicine is so far behind astronomy, we shall find two reasons. The first is, that medicine is much more complicated and difficult than astronomy. For, instead of depending on mathematics and physics, it rests upon pathology and pharmacology, which in their turn depend upon physiology, while physiology depends on chemistry and physics. Some one has compared the advance of the sciences to a game at leap-frog, one jumping over the backs of the others. There is much truth in the comparison. Physics helps chemistry, chemistry helps physics, and both help physiology. Indeed, it is only through them that physiology can advance; for, without chemistry, the processes of respiration and digestion would be incomprehensible, and without physics a knowledge of the properties of the nervous system would be unattainable. Until chemistry and physics had made a certain amount of progress, physiology was obliged to stand still, and consequently pathology, pharmacology, and therapeutics could not advance.

The second reason for the slow progress of medicine is, that during many centuries it has been studied by wrong methods. In reading its history, I have found it by no means easy to understand the various phases through which it has passed, for I could not enter into a manner of thought so different from our own as that of Paracelsus until I remembered a trifling incident which occurred when I was a child. As others may have had the same difficulties as myself, and as this incident may help them as it has helped me, I shall not scruple to relate it. One day, when playing with a box, I "made believe" that the lock was out of order; and again "making believe" that I could mend it by the proceeding, I picked off a piece of the ivory with which the box was inlaid, and drove it into the keyhole, thus ruining the lock and seriously injuring the box. Every one here, I may even say every one in the world, has had some similar experience, for the habit of "making believe" is universal, and some of the oldest relics of nations past and gone are children's toys.‡ The little boy "makes believe" that a walking-stick is a horse, and feeds it with hay and corn. The little girl "makes believe" that her doll is good, and she pets it; naughty, and she punishes it; or sick, and she nurses it. As these children grow up, they throw aside their rocking-horses and dolls, but

they do not altogether throw aside their practice of "making believe". In early ages it did, and amongst rude peoples it still does, remain as a lifelong habit. Nor is it entirely destroyed, although it is of course lessened, by an advanced civilisation. We daily see around us illustrations of the proverb that the wish is father to the thought, the person who wishes "making believe" that facts correspond to his desire. It is evident, therefore, that this practice of "making believe" is not a mere childish folly, unworthy of a moment's consideration, but the outcome of a deeply rooted tendency of the human mind, and therefore deserving of most serious attention. Its nature is evident enough, for a few moments' thought will suffice to show that, in "making believe", we form a conception in our own mind, and proceed to act upon it, as if it were true, when there may be not the slightest accordance between it and things as they really are.

Indeed, the name we give to the power is sufficiently descriptive—imagination; *i. e.*, the forming of images, or, as the Germans term it, *Einbildung*, the painting of pictures in our brains, which may be perfectly unlike the real things they are intended to represent. We probably have all heard of the story of the camel, the parts played by the different nationalities varying according to the country in which it is told. An Englishman, a Frenchman, and a German were asked to describe and figure a camel. The Englishman went to Egypt, where he could see it in its home. The Frenchman went to the Jardin des Plantes, where he could see it without trouble. The German went to his study and evolved it of his moral consciousness. We laugh at the idea of the ludicrous discrepancies there would be between the picture of the camel drawn by the student from his imagination and the actual portrait of the animal, and yet every day we make a similar blunder. We form mental pictures of persons, of scenery, of occurrences, but how rarely do these coincide with the reality. How seldom does any celebrated person, for example, resemble the ideal of the imagination. Even after we have seen him, our mental portrait is still an ideal, for we picture him to ourselves either with qualities which he does not possess, or without qualities which he does possess. It is only by frequent intercourse, by repeatedly comparing our ideal with the reality, that we come to know the truth. In medicine, we find the same thing. Two physicians stand by the bedside of a patient who has a high temperature, rising at night and falling in the morning, a doubtful spot or two on the skin, tenderness over the abdomen, slight diarrhoea, moist râles in the chest, and a very indefinite and unsatisfactory history. One says the patient is suffering from typhoid fever with bronchitis, and immediately pictures to himself ulcers in the intestines and congestion of the bronchi. Both of these, he thinks, may get well, and he looks for the recovery of the patient. The other says tuberculosis, and pictures to himself the lungs studded throughout with white nodules, and the serous membranes strewed over with pearly granules. Instead of recovery, he looks for exacerbation of the symptoms, and predicts a fatal issue to the illness. The late Dr. Hughes Bennett, in his clinical teaching, used to insist strongly on the difference between ideas and facts. A student would be called to auscultate a patient, and was then asked by the professor what he had heard; "I think I heard a murmur," he would say. "Think," said Bennett, "I don't want to hear what you think; I want facts; there either is, or there is not, a murmur; and I want to know which." Of course, it is impossible for any one to communicate to another anything more than his idea, but he may take much trouble to make it coincide with facts; and the importance of insisting upon this in teaching, as Dr. Bennett did, cannot be overestimated. It is the agreement or non-agreement of the idea in the physician's mind with objective facts that makes his diagnosis right or wrong, and his treatment a success or failure. It is the practice of acting as if the creations of the physician's imagination were realities, without ascertaining whether they were so or not, that has proved so fatal to the progress of medicine; and it is only through the diligent comparison of ideas and facts that we can hope for its advance.

We may divide the modes of studying medicine into three.

1. Where the disease has been attributed to unseen powers, gods, or spirits, and means have been sought to influence them;
2. Where disease has been attributed to some disturbance of the mechanism of the body, but where the physician's ideas regarding that mechanism, as well as regarding the action of his curative measures upon it, have been erroneous;
3. Where disease has been attributed to some disturbance in the mechanism of the body, and where the physician's ideas regarding that mechanism, as well as the action of his curative measures upon it, have been rendered more or less correct by means of experiment.

I have already dwelt much upon the practice of "making believe", and have preferred this childish expression to the usual term of imagination, because childhood's follies present us with an exaggerated

\* The recent researches of Lanzi and Terrigi render it highly probable that malaria is of a vegetable nature; but this cannot yet be considered as perfectly proven. Lanzi was able to produce a rough-like vegetation by cultivation of the pigment granules found in the livers of persons who had suffered from malaria. These granules he considers to be identical with the granules found in withered algae; and Terrigi found them in animals which had breathed for some time the air from a swamp. *Contratti di Med. Moss.* 1875, p. 713.

† Hewell's *History of the Inductive Sciences*, 3rd ed. London, 1857, vol. i, page 121.

‡ When at Larnica in Cyprus, several years ago, I saw some relics obtained from excavations made in the neighbourhood. Underneath an old Greek town, and about fourteen feet below its level, the explorers came to the ruins of a Phœnician town. As the Greek town had been destroyed about the Christian era, and the depth at which the Phœnician ruins lay below it showed that it had been demolished many years before the Greek town, we are probably within the mark in estimating the age of the Phœnician relics at three thousand years. Amongst the most interesting objects discovered was a wooden horse, the plaything of some Phœnician boy. Wooden dolls, found in Egyptian tombs, are also figured by Sir J. Gardner Wilkinson, *Popular Account of the Ancient Egyptians*. London, 1854, vol. i, p. 196.



picture of our own, and enable us clearly to see things to which we might otherwise have been blind. For this reason, I shall ask you again to turn to the trivial incident which I have already mentioned, and consider what a child finding a box locked is likely to do. He may believe that some spirit, good or evil, prevents him from opening the lid, may consider his failure as a punishment for breaking his mother's china vase, and endeavour to appease the spirit by weeping over the fragments; he may try to propitiate it by burning his sister's best doll as a peace-offering, or may attempt to drive it away by putting snuff into the keyhole. Or, without believing in a spirit, he may fancy the lid held down by some occult indefinite power—bewitched, in fact—and may pull hairs out of the cat's tail to remove the enchantment. If we replace the words child, open, and lid, by physician, cure, and patient, we shall have a tolerably fair example of medicine in one of its phases.

Perhaps no better illustration can be given of one form of "making believe" than that which I now quote from the book of Isaiah. Speaking of an idolator the prophet says: "He planteth an ash and the rain doth nourish it. Then shall it be for a man to burn; for he will take thereof and warm himself; yea, he kindleth it and baketh bread; yea, he maketh a god and worshippeth it; he maketh a graven image and falleth down thereto. He burneth part thereof in the fire, with part thereof he eateth flesh, he roasteth roast, and is satisfied, yea he warmeth himself, and saith, Aha! I am warm, I have seen the fire; and the residue thereof he maketh a god, even his graven image, he falleth down unto it and worshippeth it, and prayeth unto it, and saith, Deliver me, for thou art my god. And none considereth in his heart; neither is there knowledge nor understanding to say, I have burned part thereof in the fire; yea, also, I have baked bread upon the coals thereof; I have roasted flesh and eaten it, and shall I make the residue thereof an abomination; shall I fall down to the stock of a tree?" Should such a devotee as this be stricken by plague, pestilence, or famine, he will believe it due to the wrath of his block of wood, and will offer gifts to appease it. He may attribute his calamity to the anger of a lump of stone, and call upon his block of wood for deliverance. In the Friendly Islands,\* for example, the natives believed that when a chief was sick he might appease the Deity and recover by strangling his relations. In Tahiti,† the priests pronounced certain words over the sick man, and tied cocoa-nut leaves to his fingers and toes. "In Madagascar,‡ when any person is sick, the nearest relations apply to the *ombiasse* or priest, who goes by night to the *amounouque* or sepulchre of the father, or, if the father be still living, of the grandfather of the afflicted person; then making a hole in the monument, he places a kind of cap upon the aperture, and begins his incantations with many grimaces, invoking the spirit of the deceased to take pity on the person disordered, and restore his helpless progeny to health and vigour. If the patient recover, the *ombiasse* receives great applause and is loaded with presents; but, if he die, the *ombiasse* imputes it to the evil demons, or to fate (for the Madagascariens are great predestinarians), but never to any fault in himself or his incantations."

In ancient Greece, the medical art was almost entirely exercised by the priesthood, and especially by the priests of Æsculapius, to whose temple patients were brought in order to be cured. The remedies consisted partly in prayers and offerings, and partly in remedies applied to the body, and intended to act upon it.§ As time rolled on, the secrets of the priests became known to the laity, and their practical traditions became modified by the speculations of the philosophers. Alexandria, as it rose to eminence amongst the schools of learning, attracted the Greek philosophers and physicians who there met with the sages of the East, and learned from them the wild fancies of the Jewish Kabbalah.|| While some rejected these new doctrines, and strove by eager examination of nature to advance their art, others gave themselves fully up to the influence of fancy, and developed a complete system in which the Deity, good spirits, and evil spirits, all played a part. Good spirits were coerced by prayers, evil ones by oaths (contracts) and offerings. The latter could be exorcised by means of certain magical words, and these were written up above the doors to prevent disease from entering. The early Christian fathers, Origen, Tertullian, and others, adopted this doctrine; it became the creed of the church, and, during the dark period of the middle ages, the influence of evil spirits or of undefined powers, included under the terms witchcraft and magic, were generally regarded as a common cause of disease. Amulets, relics, prayers to saints, and

visits to holy places, were the chief means of cure employed by the monks in whose hands medicine almost entirely lay, and the church pursued with unrelenting severity all those who were so unfortunate as to incur the suspicion of witchcraft. Luther ascribed most diseases to the direct agency of the devil; according to Robert Fludd, the exponent and apologist of the Rosicrucians, they were consequences of sin, and caused by four fallen angels. The celebrated Hoffmann attributed nervous diseases to diabolical agency, and it is little more than half a century ago that Windischmann, professor in Bonn, declared that a physician ignorant of exorcism lacked one of the most powerful agents of his art.

Besides the direct influence of demons, various undefined sympathies, relations, and powers, were supposed to exist between man and the stars, lower animals, plants, and metals. A man's fortune in life depended on the star under which he was born. The result of an undertaking could be foretold from the position of the planets. It was most important that medicines should be prepared and administered exactly at the time of particular planetary conjunction. By making an image in wax, repeating certain incantations, and performing certain ceremonies, it was supposed that one might establish such a relation between the image and a person whom he hated, that on pricking it with pins his enemy would be racked with pains in every part of the body, and would fall dead when it was pierced through and through. A sympathy was also supposed to exist between a wound and the sword, or other weapon with which it had been inflicted; so that by applying a salve to the sword, and carefully leaving the wound alone, it would heal. But if an enemy became possessed of the weapon, he could so treat the weapon as to cause the wounded man to suffer intolerable pain. A similar belief is not quite extinct even yet, for many persons still think that if a dog go mad after it has bitten a man he runs a risk of getting hydrophobia, and they, therefore, kill it to avert the danger. It is not much more than a year ago, that a man in the Midland Counties killed a poor woman by whom he thought himself bewitched. Nay, more, we daily use in our prescriptions a sign which, although now intended for recipe, was formerly the sign of the planet Jupiter, the cross in its tail bearing witness to its origin.

The doctrine of relations received a new impetus from Paracelsus, who, in particular, gave prominence to the imaginary virtues of magnets, and applied them to the body as a means of cure. He supposed that the body itself also possessed a kind of magnetic power by which the sick could infect the healthy. His follower, Van Helmont, also believed in a magnetic power of the body, capable of such external action, that he himself was often able by his mere presence to cure the sick and to impart peculiar virtues to medicines by his will. These ideas were adopted by various authors, but received their full development at the hands of Mesmer and Hahnemann. The former, by the application of magnets, afterwards by passes of the hands, and, latterly, by mere contact through a rod, was able to produce many extraordinary effects upon his patients, which he attributed to magnetism, but which we now ascribe simply to suggestion. The latter propounded the doctrine that diseases may be cured by small doses of those drugs which, in the healthy man, produce symptoms similar to those of his disease.

This principle, *similia similibus curantur*, is recognised by Hippocrates, who remarks that, under certain circumstances, purgatives will bind the bowels, astringents will loosen them, and substances which cause cough and strangury will also cure them.\* But the Father of Medicine also admitted the other doctrine, *contraria contrariis curantur*, and Hahnemann not merely rejected this, but launched out into the wildest vagaries. He was not content with making his doses so small as to obviate the slightest risk of producing symptoms like those they were intended to cure, but reduced them to an infinitesimal amount; imagining, however, that what he lost in quantity he gained in quality, by imparting to the drugs through repeated trituration a mysterious potency which Van Helmont had fancied he could do by the simple exercise of his will.

[To be continued.]

\* *Works of Hippocrates*, Sydenham Society's edition, p. 77.

DEATH FROM LAUDANUM.—Mr. John Cecil Wayett, son of the rector of St. Stephen's, Bristol, a medical student in Bristol Infirmary, some days ago, while suffering severely from neuralgia, rubbed his gums with laudanum to deaden the pain. The effect was to create thirst and stupor, and, while in this state, Mr. Wayett drained the laudanum-bottle of its contents. The stomach-pump, emetics, and all known remedies, were tried, but the unfortunate gentleman died from the effects of the poison, after remaining insensible for four hours.

\* Cooke's *Universal Geography*, vol. i, page 39.

† Cooke, *op. cit.*, p. 35.

‡ Cooke, *op. cit.*, p. 814.

§ *Works of Hippocrates*, Sydenham Soc. edition, vol. i, p. 6; Sprengel, *Histoire pragmatique de la Médecine*, traduit par Geiger, vol. i, sec. iii, p. 43.

|| Ennemoser, *History of Magic*, translated by Howitt, Bohn's ed., vol. i, p. 443.



# ON SOME RELATIONS BETWEEN INTEMPERANCE AND INSANITY.\*

By JOHN CHARLES BUCKNILL, M.D., F.R.S.,  
Late Lord Chancellor's Visitor.

OUR worthy Secretary having called upon me, at a somewhat late hour, to furnish you with a subject of discussion this evening, I have chosen the very important subject of alcoholic insanity, upon which, as it seems to me, our knowledge remains in a very ill-sorted and unsatisfactory condition.

Permit me, first, to submit to you certain propositions as to pathological varieties of drink-insanity, which seem to me well worthy of your attentive consideration. I wish to avoid all reference to that dreadful slogan, the classification of insanity; but I must remind you that a collection of diseased organisms is not like a piece of slate rock, with cleavage only in one direction. You may very fairly divide them lengthwise, or crosswise, or cornerwise, and tie them up and deposit them in any variety of parcels or mental pigeon-holes which may please you or seem to instruct you.

Now, it seems to me that the commonly accepted forms of insanity from drink, fairly well marked as they doubtless are in typical instances, have yet no sufficiently pathological foundation upon which to base a just conception of the real relationship of drink and insanity; and that, moreover, they do not adapt themselves to the generalisations I am able to make from my own observation and experience. These forms, as we all know, are: 1. Delirium tremens; 2. Mania *à potu*; 3. Dementia *à potu*, or alcoholism chronicus; 4. The moral insanity of drink, or oinomania.

No doubt, a large proportion of the cases that we meet with may be classed under one or other of these four heads; but it is one of the questions upon which I most desire to compare your experience with my own, whether these forms are not too definite and restricted, and whether we do not meet with cases of insanity caused by drink which present to us every known variety of mental disease. My own not very narrow experience would affirm that it is so; and that, although a certain concourse of symptoms appertains to a large proportion of cases of drink madness, yet there is a wide margin of cases which are strangely varied and quite unimpressible within the forms I have named.

If this be so, some new attempt to devise a scheme of drink cases must be made, and I shall venture to propose one in correspondence with my own clinical experience.

First, I think we have a number of cases of which mania *à potu*, or acute mania from drink, is the type, in which the alcohol acts as an excitant of morbid cerebral function. In these cases, there is almost invariably a strong hereditary tendency, or a previous history, of brain-disease; and the alcohol lights a train of mischief already laid, and which might have been exploded by any other moral or physical cause of mental excitement: by a fit of passion, or by mental overstrain, or by a blow on the head, for instance. In these cases, the mental symptoms may be maniacal, or melancholic, or delusional; in fact, they may be anything within the range of mental disturbance, the anything for which the brain was prepared; but it is to be noted that they are not characterised by the marks of the second mode in which alcohol acts, to which I shall now advert. These are the cases in which the alcohol acts, not as a cerebral excitant, but as a neural poison, producing a characteristic group of symptoms, varied in intensity so as to justify subdivisions, but rarely any of them altogether absent in some part of the course of each case. The typical form of this mode of causation is delirium tremens; but there are also many chronic cases of insanity in which muscular tremors, hallucinations (especially of hearing), local anaesthesias and palsies, and delusions of suspicion, persecution, and fear, mark their common origin in the toxic action of alcohol.

If these cases survive and are not cured, they pass into the third form by losing the more pronounced signs of nerve-poisoning, and acquiring those of cerebral atrophy and mental decay. But not seldom cases are met with in which the primary symptoms of cerebral disease from drink are those of degraded nutrition. The alcohol has not been taken in sufficiently large doses to act as a poison, but, continuously taken in smaller doses it has set up its peculiar action in the red blood corpuscles, diminishing their functional activity as oxygen carriers, and, if Binz be correct, diminishing the movements of the white corpuscles on which tissue-growth depends; and it has also acted directly on the cerebral capillaries, directly or through the vaso-motor centres, dilating them, thickening their coats, and deteriorating their function, the result being cerebral atrophy and mental decay. We may call these three

modes Alcoholismus excitans, Alcoholismus toxicus, and Alcoholismus atrophicus.

I have yet to mention a fourth mode of drink-madness, which, if it do really exist as a form of mental disease, is a very distinct and remarkable one—I mean the moral insanity of intoxication, or oinomania. It is said that this form of insanity may be caused by blows upon the head, by hæmorrhages, by hereditary transmission, and other influences not alcoholic, so that to call it an insanity caused by drink would, in such cases, be incorrect. Other instances, where the craving for drink is the result of a vicious habit merely, cannot rightly be called cases of insanity until the alcohol has produced its effects upon the brain, either as a poison or as a denutrient, to the extent of developing the signs of mental derangement; after which they will be included either in the second or the third of my specified modes. Therefore, I exclude oinomania from drink-madness; and if it do really exist, I place it with its congeners, kleptomania and homicidal mania, in the class of moral insanities.

Now, the existence of kleptomania or of homicidal mania would never be admitted simply on the evidence that theft or murder had been committed. The vicious circle would be too apparent for any one to be permitted to argue or to plead, he is mad because he has stolen, and he has stolen because he is mad. In all cases of moral insanity, a group of symptoms must be estimated in their collective significance; and if such a group of symptoms as that, for instance, by which Anstie depicts oinomania, in Russell Reynolds's *System of Medicine*, be considered as necessary qualities or attributes of oinomania, I admit that such cases are met with and are rightly described; and I have only one further remark to make respecting them, namely, that they are veritable and mostly incurable cases of insanity, and that they may without difficulty be dealt with under the existing lunacy laws.

We may now pass to another but allied subject, namely, the statistic of drink-madness, and the right method of investigating it. As we all know, the old method has been to lump together all insane persons of whom it was reported that they had been drinking, as cases of insanity caused by intemperance. Even this rough method failed to justify the statements with which we are but too familiar, namely, that drink causes from 50 to 80 per cent. of all the mental disease in this country. But, although the enthusiasts of total abstinence may, without much blame, be careless arithmeticians, for the purposes of science a stricter method and a more accurate estimate of the drink-agency are essential; and a more discriminating investigation has already been instituted, at my request, by several of my friends, whose statistic I have already published in the July number of the *Journal of Mental Science*; and I have now an important addition to make, for which I am indebted to my friend Dr. Major, respecting the drink-statistic of the 511 cases of insanity admitted into the Asylum for the West Riding during last year. Of these, 11.35 per cent. were Class A cases of insanity, resulting from the direct action of alcohol; 1.56 per cent. were Class B cases, complicated by hereditary tendency to insanity; 2.93 per cent. were Class C cases, in which alcoholic excess had been combined with other adverse physical conditions; and 1.95 per cent. were Class D cases, in which alcoholic excess had been combined with mental causes—making a total of 17.79 per cent. of alcoholic cases on the admissions. The total percentage on the male admissions was 31.20, and that on the female admissions only 4.98.\*

In forming a sound statistic on this subject, the first requisite is to exclude all cases in which drunkenness is not a cause but a symptom of insanity, which all experienced alienists know to be frequently the fact; for it would be as irrational not to make this distinction as it would be to lump together all insane persons who have suffered losses in business, not distinguishing those in whom the loss had been the

\* Dr. Rhys Williams has since kindly provided me with the following important statistic of drunken cases admitted into Bethlehem Hospital during the two last years, arranged in the same four classes.

		Number.		Percentage.	
		Males.	Females.	Males.	Females.
Number admitted during 1875	.. .. .	94	..	138	
Number admitted during 1876	.. .. .	114	..	129	
1875.—Class A.	.. .. .	2	2	2.19	1.44
.. Class B.	.. .. .	—	9	—	2.89
.. Class C.	.. .. .	1	9	0.10	1.44
.. Class D.	.. .. .	4	1	4.36	0.72
1876.—Class A.	.. .. .	2	2	1.75	1.55
.. Class B.	.. .. .	2	2	1.75	1.55
.. Class C.	.. .. .	—	—	—	—
.. Class D.	.. .. .	2	2	1.75	1.55
		13	15		
Total number admitted in 1875 and 1876	.. .. .	208	..	267	
Percentage of cases attributed to intemperance	.. .. .	6.25	..	5.61	

\* Read before the Medico-Psychological Association, January 31st, 1877.



cause of the insanity from those in whom insanity had been the cause of the loss.

Moreover, it is essential to a right understanding of the drink-etiology of insanity that the cases which have been directly caused by strong drink alone should be separated from those in which alcohol has only acted the part of an ally with other enemies of mental health; for it is very certain that, in many cases in which intemperance has aided in this warfare, its share of influence has been by no means the greatest; hereditary predisposition, mental overstrain, worry, and an array of combining causes having had by far the greatest power in bringing about the common result. The truth and importance of this view seem so obvious that I may well spare you further comment upon it, with the expression of an earnest hope that, now it has been accepted and carried into practice by our eminent associates, Drs. Clouston, Major, Duckworth Williams, and your President, this more discriminating statistic of drink-madness will be generally attempted in all our institutions for the insane. In carrying it out, I think some difference of opinion and practice may arise in the discrimination of the direct from the indirect cases; and I am myself inclined to believe that, the more thoroughly the histories of our drink cases are investigated and pondered upon, the larger will be the proportion of them which will be shunted from the direct to the indirect line of causation.

And now I have to offer to you a consideration, which will, at first sight perhaps, have a paradoxical ring, as coming from me after all that I have said and written respecting the potent influence of alcohol in the causation of insanity; but it is just in a careful analysis where the remainder is least forgotten. I am warned, however, by old experience of the way in which one's words are apt to be perverted from their true meaning, to protect myself by avowing once again that no one can detest drunkenness more than I do; that I think it the greatest remaining curse of this age and country; and that I believe intemperance in drink to be by far the most potent of all removable causes of mental disease.

After this, I may venture to indicate what I think to be another equally real aspect of drink in relation to insanity, namely, the causal relation between the occasional use of alcohol and the prevention or postponement of mental disease.

With men of such wide experience as my present audience, a few considerations will probably suffice to gain me many suffrages in favour of this novel and, I fear, startling proposition; but let us bear in mind many of the commoner moral and physical causes of insanity, the prevailing bodily conditions of the incipient disease, and the necessities of the treatment, and we must, I think, see and admit that this stimulant-narcotic, in such general use, must have a vast and varying influence upon the organisms of men, which is not likely to be invariably pernicious, and which may well be sometimes beneficial and conservative of the mental health.

Consider the great part which grief and anxiety, worry and overstrain, play in the production of insanity, the depressing effects of poverty and the failing struggle for existence, of misery in all its forms, and then consider to how great an extent the use of alcohol oftentimes tends to make the burthen of life bearable, if not by stimulating the powers, at least by deadening the sensibilities of men; and I think you will agree with me that, by the occasional help of strong drink, a man may sometimes be able to weather that point of wretchedness upon which his sanity would otherwise have been wrecked. The observation of life forbids us to doubt that "wine, which cheereth God and man", according to Holy Writ, doth sometimes blunt the keen edge of misery, so that the wretch is not "cut to the brain", like King Lear. Alcohol, in its physiological action, is *atriptic*, retarding the disintegration of the tissues, especially of the nerve tissue; and, when the brain is wearing itself into madness, alcohol, at the right time and in the right dose, does without doubt sometimes check the ebb-tide of reason. Perhaps, a few timely doses of opium might have the same or a better result, if the people of this country were in the habit of resorting to opium to dull their misery and assuage their pain; and in China opium, although the source of infinite mischief, is also, no doubt, a precious boon to the miserable who may use it aright, either by happy chance or wise direction.

Alcohol, moreover, is not only a narcotic which may "knit up the ravelled sleeve of care"; it is also, according to Anstie, Lauder Brunton, and all good authorities, a food, and as such it plays an important part in the therapeutics of insanity. I have myself no doubt that a moderate use of fermented drink is useful in the treatment of mental disease, not only that a cure, when possible, may be attained *cito, certo, et jucunde*, but that, in incurable cases, the bodily health may be improved and the mental misery alleviated.

I do not wish you to infer that, if called upon to adopt prophylactic treatment in a case where insanity was threatened, I should be likely

to prescribe alcohol in any form, unless it were specially indicated. I have generally succeeded in finding some better method of escaping the danger. But our uninstructed countrymen, whose custom it is to drown their phenalgias in the flowing bowl, do, according to my observation, sometimes succeed in the dangerous enterprise. The dreadful mischief of which strong drink is the source, in the causation of insanity, affords no good reason why we should refuse to observe that, under exceptional circumstances, it has no slight influence in the prevention of the same disease. *Ubi virus, ibi virtus*. Statistics, indeed, supply us with no ready-reckoner of this last named result; for, in the words of one who enjoyed much and suffered much,

"What's done ye aiblins may compute,  
But never what's resisted."

Burns, had he been sober, might have made a fortune by industry, lost it by speculation, and ended his days in the Crichton Asylum—leaving the world all the poorer for the want of some of its sweetest and tenderest poetry.

To conclude: as alcohol, by causing partial paralysis of the nervous mechanism, will sometimes obtund the shock of physical injury, which would otherwise be fatal, so, in like manner, it will deaden the blow of mental pain, which would otherwise destroy the reason. But, remember, that it is but a precarious refuge on urgent occasion from a greater danger than its use itself involves. The mental physician loves not an alcoholised patient one whit better than the surgeon does; for in either case, the repetition of the remedy may speedily brew as much mischief as the original injury could effect, and the man who resorts to the bottle to drown his habitual cares is on the downward slope of a road which surely leads to perdition.

Let me not, therefore, be misrepresented as recommending strong drink as a remedy for grief and care when they threaten sanity, because I say that, owing to the customs of living in this country, it not unfrequently is such a remedy, although a most unsafe one. But we physicians are not fanatics, and can have no more antipathy to alcohol than we have to arsenic, when used aright for a beneficial purpose; and we ought not to be debarred from recognising such possible occasions of its use, because more commonly it enters, as an evil spirit, into a herd of human swine seeking their own destruction.

## ON THE REMOVAL OF SCIRRHOUS TUMOURS OF THE BREAST.\*

By SAMPSON GAMGEE, F.R.S. Edin.,

Surgeon to the Queen's Hospital, Birmingham; Foreign Corresponding Member of the Society of Surgery of Paris; President-elect of the Birmingham and Midland Counties Branch of the British Medical Association.

FROM the patient now before the Society, I removed the right breast for scirrhous on May 29th, 1861. The tumour was of typical hardness and structure, and of considerable size, and the woman was in such delicate health, that a hospital surgeon, under whose care she had previously been, declined to operate. As the breast was perfectly movable, the skin and glands in no way affected, all the vital organs healthy, and the constitution wiry, though the frame was fragile, I deemed myself justified in operating. The patient bore a child two years afterwards, and another since; she has continued delicate, but has never ceased to work hard for her livelihood. She is now fifty-eight years of age; fifteen years and nearly seven months have elapsed since the operation, and the pale cicatrix continues perfectly healthy, as do all the organs.

In the other case, which was before you just now, I decline to operate. The woman is thirty-eight years of age, apparently in robust health. She has a scirrhous in the left breast, movable under the skin and in the pectoral muscle, with an enlarged, hard, and rather fixed gland in the axilla, and a chain of enlarged glands in the corresponding posterior triangle of the neck.

These cases suggest a variety of considerations, which, in compliance with the invitation of the President of the Section, my friend Mr. T. H. Bartleet, I shall embody in a review of the vexed question—When should a scirrhous of the breast be removed, or when left alone?

It is especially true of operations for cancer, that they should not be undertaken unless there is the utmost attainable certainty of the surgeon being able to complete them; to remove the whole disease, and leave the parts in a state favourable to speedy and solid union. If a scirrhous breast is to be interfered with at all, such interference cannot be too speedy or too thorough. From a woman above sixty, it is only under very exceptional circumstances that the removal of a scirrhous should be recommended. In old persons, such growths are often very

\* Abstract of an address to the Pathological and Clinical Section of the Birmingham and Midland Counties Branch of the British Medical Association.



slow in their course, give little pain, and are consistent with several years' life with comparatively little discomfort. The other conditions which are a bar to the operation are—*a.* Ulceration of the tumour and of the covering integument; *b.* Adhesion to the pectoral muscle; *c.* Infiltration of the mammary gland with cancerous matter as distinguished from a circumscribed tumour in its substance; *d.* A chain of indurated glands in the axilla; *e.* Any induration of the glands above the clavicle; *f.* Brawny infiltration of the skin over the affected breast; *g.* The existence of scirrhus in both breasts, or in any other organ besides one breast.

In an otherwise healthy person below fifty-five years of age, I do not consider a retracted nipple, a pucker or dimple in the skin, or one enlarged movable gland in the axilla, severally, objections to the operation. Once operative interference is decided upon, which is the best plan? Clearly the knife, not the elastic ligature or caustics. By the knife the surgeon can most safely ensure the removal of the whole disease; anaesthetics render its use painless, and the healing of the wound in the vast majority of cases is rapid, and unattended with constitutional disturbance or local trouble.

I have only lost two patients after the operation; one from secondary hæmorrhage, the other from embolism. In the former case, which occurred ten years ago, I had removed a large mass of axillary glands under circumstances which, with my present experience, would preclude me from operating. In the second fatal case, everything proceeded admirably to the thirteenth day, extreme precautions having been taken to ensure safety. The lady having gone off into a comfortable sleep, woke from it muttering unintelligible words, and sank in thirty-six hours with symptoms of embolism, verified on *post mortem* examination by my friend and colleague, Dr. Sawyer.

A few words as to the operation and its after-treatment. Commencing at the sternum, I direct the incisions straight across the chest through the fascia covering the pectoral muscle, which I invariably dissect clean. The mamma, grasped in the hand, is forcibly raised, the handle of the knife being freely used to separate its loose connections; the point or edge of the instrument is only employed to give a light touch to any bond of union which resists a goodly amount of traction. By this means very little blood is lost. It is now many years since I tied or twisted a vessel in an operation of this kind. The surface of the wound is lightly brushed with styptic colloid, and narrow strips of lint soaked in the same agent are used to close the wound after the edges have been very accurately adjusted by points of metallic sutures, at a distance of about three-quarters of an inch from each other. A drainage-tube is placed in the outer angle of the wound, and over it pads of picked oakum in common muslin bags. A nicely compressing bandage surrounds the chest, and binds the arm to the side with the hand across the chest. The dressing is not troubled for a week, when, as a rule, the greater part of the wound is healed. The operation, thus simplified according to the first principles of plastic surgery, is attended with singularly little pain. Yet it should never be undertaken unless the circumstances are favourable. To operate under desperate conditions is only to cause unnecessary pain, and to bring discredit on surgery, which admits of being so practised as to win esteem for the higher qualities of scientific judgment and humane prudence, quite as much as for captivating boldness and manipulative skill.

A very few words as to operations for recurring scirrhus. If the secondary growth be in or near the cicatrix, circumscribed, and unadherent to the parts below, the constitution unimpaired, and, so far as can be judged by careful examination, no malignant deposit elsewhere, the removal of the second growth is justifiable. I operated under such circumstances seven years ago, and the lady continues in perfect health.

## THE SUPRARENAL CAPSULES AND LYMPHATIC GROWTHS.

By BYROM BRAMWELL, M.B.,

Physician and Pathologist to the Newcastle-upon-Tyne Infirmary. Joint-Lecturer on Clinical Medicine and Pathology in the University of Durham College of Medicine.

THE passage from my case of lymphosarcoma which Dr. Pye-Smith criticises in the JOURNAL of January 27th was written nearly three years ago; and I frankly confess that at that time I was not acquainted with the facts brought forward by Drs. Wilks and Greenhow in proof of the proposition that Addison's disease is associated with one, and only one, morbid condition of the suprarenal capsules—*i. e.*, the quasi-tubercular change. The evidence adduced by these authorities is to my mind conclusive as regards the nature of the lesion. Dr. Pye-Smith

says, "It is *only* the peculiar quasi-tubercular change in *both* organs which produces the symptoms of Addison's disease". (The italics are my own.)

The case detailed below, in which there was discoloration of the skin and in which disease of one capsule only was observed, seems to throw a doubt on the lesion being of necessity bilateral; and in this I am quite in accord with Dr. Greenhow, who says, in those same Croonian Lectures to which Dr. Pye-Smith has referred me (p. 66), "in Addison's disease, on the contrary, in some of the very few cases in which one capsule only has been found diseased, the symptoms have nevertheless run a course in all respects resembling the usual course of the disease when both capsules are involved." Dr. Greenhow then gives (page 67) the following particulars of two cases of this nature, one of which was, curiously enough, diagnosed by Dr. Pye-Smith himself. "In a girl aged 11, whose case was reported by Dr. Guttman in 1870 and who had been under observation during five months, the left suprarenal capsule only was found to be diseased, the right one being still perfectly intact; but nevertheless the constitutional symptoms had been quite characteristic, and the discoloration of the skin very fully developed. A more striking case of the same class, which had been under observation for some years, was published by Dr. Murchison in the *Pathological Transactions* for 1866. In 1864, the patient, a man aged 27, was in the Royal Infirmary of Edinburgh, where his case was diagnosed by Drs. Dyce Duckworth and Pye-Smith as a typical example of Addison's disease. He survived until April 1866, having been occasionally able to work at his trade during the periods of remission of his symptoms. At the autopsy, only one of the suprarenal capsules was found to be diseased; the diseased organ exhibiting all the characteristic appearances of the capsules in Addison's disease, whilst the other had remained quite healthy."

The supposed relationship between the suprarenal capsules and the lymphatic glandular system to which I refer is still taught in some of our best physiological text-books. In the last edition of Kirkes's *Physiology*, published in October 1876, under the head of Vascular Glands or Glands without Ducts, I find the following passage (p. 422).

"There appears, however, to be a modification of the process of secretion in which certain materials are abstracted from the blood, undergo some change, and are added to the lymph or restored to the blood without being previously discharged from the secreting organ or made use of for any secondary purpose. The bodies in which this modified form of secretion takes place are usually described as vascular glands, or glands without ducts, and include the spleen, the thymus and thyroid glands, the *suprarenal capsules*, and, according to Esterlen and Ecker and Gull, the pineal gland and pituitary body, possibly also the tonsils.

"The solitary and agminated glands (Peyer's) of the intestine and lymph-glands in general also closely resemble them; indeed, both in structure and function the vascular glands bear a close relation on the one hand to the true secreting glands, on the other to the lymphatic glands." (No italics in the original.)

And again, page 427: "Although the function of all the vascular glands may be similar, in so far as they may all alike serve for the elaboration and maintenance of the blood, yet each of them probably discharges a peculiar office, in relation either to the whole economy or to that of some other organ. Respecting the special office of the thyroid gland, nothing reasonable can be suggested; nor is there any certain evidence concerning that of the suprarenal capsules."

Even granting that the function of the suprarenal capsules is unknown, the fact that they are so well endowed with nervous elements is a strong reason for believing them to be more than the inert bodies Dr. Pye-Smith supposes.

CASE. *Intrathoracic Tumour simulating Aneurism; Discoloration of the Skin; Right-sided Hemiplegia and Partial Aphasia; Pericarditis; Recovery from Hemiplegia; Relapse of Hemiplegia; Death; Pericarditis; Sacculated Dilatation of the upper part of the Pericardium; Tumour involving the Root of the Left Lung; Large Cyst in the Left Frontal Lobe; Recent Embolism in Left Middle Cerebral Artery; Left Suprarenal Capsule twice the natural size and transformed into a Putty-like Mass.*—W. A., a pitman, aged 45, was admitted to the Newcastle Infirmary under my care on October 1st, 1874, suffering from right-sided hemiplegia, cough, emaciation, and debility.

The previous history was ascertained from his wife to be as follows. At the age of 22, he had an attack of "inflammation of the chest". With this exception, he enjoyed excellent health until November 1873, when he caught cold. His eyes and nose began to run, and continued to do so for some time. In April 1874, he began to cough and lose flesh. In August, he commenced to spit; the sputa were white and frothy, never blood-tinged. He rapidly lost flesh; complained occasionally of pain in the chest and of palpitation. He never seemed



very short of breath. Six weeks before his admission, a marked change took place in his mental condition; he became very irritable and obstinate; slept badly; would sit silent for hours together; when spoken to, he answered in monosyllables. A week before his admission, he partly lost the use of his right hand. A few days afterwards, the leg became affected. He was at work, off and on, as a pitman, until a fortnight before admission to hospital.

The family history was good. None of his near relatives had died of cancer or consumption.

**Condition on Admission.**—The skin was of a dirty brown colour. His wife said it was much darker than it used to be. He was very thin and emaciated. He was unable to give any account of himself or of his complaints. He said "yes", "no", "nicely", or some short word, in answer to all questions. He seemed to understand fairly well what was said to him. There was partial loss of power in the right arm and leg. Sensibility was apparently natural. The muscles of the right hand and arm were not more wasted than those of the body generally. Muscular irritability was very marked. His sight seemed good. The pupils were equal and contracted. (At this time, I was not in the habit of using the ophthalmoscope in all cases, for I had not then realised the truth of Dr. Hughlings Jackson's observation that optic neuritis is often present with perfect vision. I regret, therefore, that I cannot state what was the condition of the optic discs). The other special senses seemed natural. The tongue was protruded in the middle line. He was very irritable and obstinate, slept badly, and often ground his teeth. The anterior wall of the left chest was unduly prominent from the second to the sixth rib. It measured, at the level of the nipple, half an inch more than the right, being eighteen inches. Pulsation could be seen and felt over the prominent area. The pulsation seemed to come to a focus at a spot an inch and a half above and slightly outside the left nipple. It was apparently distinct from the cardiac pulsation and quite as forcible. On percussion, there was absolute dullness over the left chest; anteriorly, from the clavicle to the sixth rib; laterally, in the axillary region; posteriorly, in the suprascapular, upper half of the scapular, and upper half of the interscapular region on the left side. Pain was complained of on percussion about the left nipple. On the right side, there was dullness over an area an inch square below the sterno-clavicular articulation. This dullness was directly continuous on its inner side with the dullness on the left side. The cardiac dullness could not be exactly defined by percussion, owing to the surrounding dullness. The apex-beat could be seen and felt between the fifth and sixth ribs an inch and a half below the nipple. On auscultation, the respiratory murmur was scarcely perceptible over any part of the left chest; it was entirely absent from the second to the sixth ribs anteriorly. Over the rest of the dull area, faint bronchial breathing was heard. Vocal resonance was greatly diminished all over the left chest; absent over the dull area. At the aortic cartilage, the first sound was replaced by a soft bellows-murmur. The second sound was well marked. Over the pulmonary area, the systolic murmur was heard, being fainter than over the aorta. The second sound was louder than the aortic. At the apex, the sounds had a dull thudding character. At the point of pulsation, an inch and a half above the left nipple, both cardiac sounds were very distinct, but free from murmur. The radial pulse numbered 92, was weak, regular, equal in the two wrists. The respirations numbered 20. The temperature was normal. There was no excess of the white blood-corpuscles. The red corpuscles did not form *rouleaux*, but adhered wherever they came into contact. The urine contained an excess of phosphates. The other organs were normal.

The subsequent progress of the case was as follows.

October 17th. His mental condition was much worse. The paralysis of the arm and leg was now complete. There was also distinct loss of power in the muscles of the right side of the face. The heart was situated more to the left side. The apex was now an inch outside the left nipple. The dullness over the upper half of the left lung was more absolute and extensive.

October 19th. A well-marked pericardial friction-murmur was heard over the greater part of the left chest anteriorly; it was very abruptly defined. The cardiac sounds were heard, free from murmur, in the axillary region.

October 21st. The left chest now measured an inch and a half more than the right.

October 28th. He was very much better, and was gaining power in the right arm and leg. The friction-sound was now almost gone.

November 4th. He could move the arm and leg freely.

November 5th. He had again lost all power in the right arm and leg. His face was very much congested; breathing very difficult. He had been several times severely purged without medicine.

November 6th. He was again severely purged. He died at 9.30 P.M.

**Temperature.**—The temperature never exceeded 100 deg. Fahr. until November 5th; on that day, it reached 101 deg.; and on November 6th, 102 deg.

The post mortem examination was made eighteen hours after death. The body was much emaciated. Rigor mortis was well marked. The left pupil was dilated; the right contracted. Both lungs were firmly adherent throughout. The left was scarcely visible on opening the chest, its anterior edge being much retracted. Between the sternum and subjacent parts, there was a quantity of recent lymph. The pericardium was adherent over the greater part of the heart. Along the right border and at the apex, it was free. The adhesions were recent and thick. Around the great vessels, the pericardium was dilated and formed a sort of cyst, which projected to the left side. The sac was about the size of an orange, and was filled with pinkish semifluid matter. The heart weighed twelve ounces. Its valves were healthy. The outer coat of the aorta and pulmonary artery, where surrounded by the cyst, were roughened and coated with lymph. Around the root of the left lung, and extending into the substance of the organ, was a growth of brain-like consistency and consisting of numerous nodules. The growth radiated into the lung-substance in all directions, and seemed to follow the course of the bronchi, the walls of which were much thickened. The terminal portions of the aortic arch and pulmonary artery were surrounded by the growth, which passed over to the right side. On section, the nodules were of a pink colour; one was caseous. The left lung was of a jet-black colour. The black fluid which escaped did not stain the fingers. After the black fluid had been washed out, the lung-substance was tough and non-crepitant, resembling the compressed lung from a case of copious pleuritic effusion. The right lung was congested, otherwise healthy. There were no tubercles. The mesenteric glands were much enlarged, of a dark purple colour, and studded here and there with white nodules. A chain of enlarged glands surrounded the abdominal aorta. In the lower part of the ileum, there was an oval nodule of fully the size of a large walnut; it formed a well-defined tumour; its free surface was of a yellow colour, evidently stained by fæces. Several Peyer's patches were enlarged, but none were ulcerated. The left suprarenal capsule was about twice the natural size and transformed into a cheesy putty-like mass. The right suprarenal capsule was normal. The surface of the brain was considerably congested. An abscess of the size of an egg was situated in the middle of the left frontal lobe. The white matter was extensively destroyed. At one point corresponding to the middle of the superior frontal convolution, the grey matter was invaded and partly destroyed. The abscess contained a grumous yellow liquid of the consistency of thin cream; it was lined by a ragged membrane. Both lateral ventricles contained an excess of fluid. A clot was found in the left middle cerebral artery just at its commencement.

On microscopic examination, the intrathoracic growth was found to consist of—1. Cells, round and angular in form, about the size of white blood-corpuscles, and containing numerous highly refractive granules; 2. Free nuclei and granules; 3. Fibrous tissue; many of the fibres were nucleated. The pericardium, the cerebral abscess, and the lymphatic glands, contained the same corpuscular elements as the tumour.

**REMARKS.**—It may, perhaps, be objected, that the discoloration of the skin was due to some other cause than the lesion of the capsule; in short, that it was not the bronzing of Addison's disease at all. It must, however, be conceded that the condition of the capsule was such as not unfrequently results from the "peculiar quasi-tubercular change which produces the symptoms of Addison's disease". It is an unfortunate fact that there is not in my case-book a more minute description of the discoloration, and I cannot at this distant period trust my memory to fill in details. I cannot, for instance, say whether the discoloration was more marked in the axillæ and genitals than elsewhere. There certainly were no spots on the buccal mucous membrane. I do not make any mention of the constitutional symptoms, the anæmia, etc., which are characteristic of Addison's disease, the case being so very complicated. The emaciation is fully accounted for by the complication.

The case was interesting in its other diagnostic features. Dr. G. W. Balfour, in his *Annals of Clinical Medicine*, in a paper on the Heart (page 340), says: "There is only one phenomenon positively characteristic of thoracic aneurism, and that is the existence in some part of the thorax of a pulsating tumour other than the heart, which beats isochronously with the heart and at least as forcibly, and which at each pulsation expands in every direction." All these conditions were present in this case, and yet there was no aneurism, the pulsating tumour consisting of a lateral expansion of the pericardium overlying a tumour of the root of the lung. I am not aware that such a condition has been described before. It closely resembled a limited empyema



in contact with the heart, "in which", says Dr. Balfour, "the pulsation, though expansile from being communicated through fluid, is less forcible than that of the heart." In this particular case, the pulsation was fully as forcible as the apex-beat; but the apex-pulsation was feeble. Dr. Balfour's proposition is not, therefore, invalidated, provided that the cardiac pulsation is of normal force.

In spite of the great similarity to aneurism, the diagnosis of intrathoracic tumour was arrived at for the following reasons.

1. *The extensive nature of the dulness.* An aneurism sufficiently large to cause such dulness would have produced more active pressure-symptoms—notably pain. There had been slight pain in this case at the commencement of the illness.

2. *The great emaciation.* There was no obstruction of the œsophagus, no prolonged suffering—conditions which cause emaciation in aneurism.

3. *The associated paralysis and its very gradual commencement* favoured the idea of a secondary deposit in the brain.

4. *The position of the pulsating tumour.* It is rare for an aneurism to point an inch and a half above the left nipple.

I was aided, too, in the diagnosis, by the experience gained in the case published in the *JOURNAL* of January 6th, 1877. The first attack of paralysis was obviously caused by the cerebral abscess; the second by the embolism. The origin of the cerebral abscess is not quite clear. There was no purulent discharge from the ear, nose, or other portion of the skull. It may have been a secondary deposit in the brain which had softened and liquefied, or it may have been the result of a previous embolism. The former view is probably correct, because, first, only one embolism, and that a recent one, was found; second, the gradual way in which the lesion produced mental changes, then aphasia, then paralysis of the arm, then of the leg. The first attack of hemiplegia was probably due to pressure, and not to direct lesion. Had all the conducting fibres from the centres for the arm and leg been destroyed, it is difficult to suppose that the recovery could have been so rapid and complete. This view is quite in accord with the localisation of Ferrier and Broca. The fact that the temperature did not exceed 100 deg. during the attack of pericarditis, is perhaps worthy of remark. The large nodule in the lower part of the ileum was pathologically interesting. The enlargement of the mesenteric and postperitoneal glands in the neighbourhood of the capsules and of Peyer's patches is frequently seen in Addison's disease.

#### CASE OF POISONING BY A LARGE DOSE OF TINCTURE OF ACONITE: REMARKABLE SYMPTOMS: RECOVERY.

By L. HERBERT JONES, M.R.C.S., Harrow Road.

A GENTLEMAN, staying at my house on a visit, on the morning of January 16th, went down to my surgery at eleven o'clock, and there, mistaking a small bottle of tincture of aconite for one of succus limonis, drank off two ounces. A few minutes afterwards, I met him in the hall, and, to my hurried glance, he appeared strange. In answer to a passing question, he said he should not be back to luncheon, as he was going to call upon a friend two miles and a half off. I saw no more of him until he was admitted by the servant at 2.30; he went straight to his room, and, as he did not soon put in an appearance, I went up and found him in bed, and, by his appearance, thought he was under the influence of drink; happily, I was wrong in my conclusion. He was semidelirious, very flushed in the face, suffering intense dyspnoea, bathed in an icy-cold perspiration, with pupils widely dilated. I could at first get nothing out of him, but finally ascertained that he had walked to the friend's house, had partaken of a glass of wine and some biscuits, and, feeling faint, he returned home, walking. On his way, he felt "as if his legs would give way under him", and within about half a mile of my house he vomited freely. I ordered hot bricks to be put into the bed, gave him a strong glass of brandy-and-water, put extra blankets on, and ordered strong coffee to be got ready. The pulse was not perceptible at the wrist, and the heart-sounds could faintly be heard. At 3.30, violent vomiting came on; and, acting upon the dictates of nature, I gave him half a drachm of sulphate of zinc, which had the effect of bringing away a large quantity of dark grumous fluid. He at this time casually mentioned that he hoped he had not mistaken one bottle for another in the surgery. I knew he was fond of the succus limonis, and, in going down to my room, I found, to my horror, that he had mistaken one bottle for the other.—At 4 o'clock, the delirium still continued. There was great muscular prostration; no pulse at the wrist. Temperature 89 deg.—At 4.30, I gave him two ounces of castor-oil, which soon had the desired effect.

The pupils were widely dilated, but there was great dyspnoea, which almost suffocated him. I became somewhat alarmed. By applying mustard sinapisms to the calves of his legs, hot bricks to his feet, and rubbing him over with rough towels, and sedulously giving him brandy-and-water (six ounces to the half pint), he partially rallied.—At 5.30, tonic spasms occurred, lasting a considerable time. Temperature 84 deg.; pulse at wrist imperceptible. The hands, including the nails, were in appearance slate-blue. Hot coffee (strong) and brandy-and-water were given every half hour up to twelve.—At 12 o'clock, the heart-sounds were more distinctly heard. There were marked diplopia, and intense thirst. Temperature 89 deg. He had no power over the lower extremities. There were great tingling and numbness in the arms, and he said he felt inclined to sleep.

January 17th, 4 o'clock. I saw him again. The pulse was perceptible at the wrist; the dyspnoea was disappearing. He had great palpitation; temperature 95.4 deg. He took a boiled egg and a strong cup of coffee.—At 9 o'clock, he had had some refreshing sleep. He was quite conscious, and complained of seeing double; the pupils were widely dilated. He ate an egg and a little toast. I kept him in bed for two days, by which time he had quite recovered, with the exception of great muscular weakness and occasionally severe attacks of palpitation.

My first impression was that the drug I had was innocuous; but I had the positive assertion of the wholesale chemist who supplies me, that the drug was prepared according to the *British Pharmacopœia*, from the root. My late lamented tutor, Dr. Fleming of Birmingham, ascribed great powers to aconite, and was often in the habit of remarking the lowering of the temperature of the body by aconite. Among recent writers, Ringer predicts a great future for aconite. I did not notice any vesicular rash, which, he says, sometimes occurs during the administration of this drug.

I think I am not wrong in stating, that this is the largest dose of the tincture that has been taken without causing death. Quoting from *Taylor's Medical Jurisprudence*, I find "considerable uncertainty appears in the operation of this poison under the form of tincture". Again, "a man recovered in three days after having taken upwards of ten drachms of the tincture". It is interesting to observe that the effect of this drug differs. It has been known to contract the pupil. In my case, the pupils remained widely dilated for nearly three days, showing that its power over the nervous system varies.

My apology for sending this interesting case is, that it may be of some use in a medico-legal point of view.

#### SURGICAL MEMORANDA.

##### ABSCCESS IN THE KNEE-JOINT.

TOWARDS the middle of last January, I saw, with Mr. Wigmore of Inverness Terrace, a married woman, 39 years of age, of a decidedly phlegmatic temperament, who had been confined to bed for some time past with rheumatic fever. All her joints had been attacked in turn, and the effusion in her left knee, though lingering for a time, had at last become absorbed under the administration of quinine and iron and the application of blisters. To this treatment, however, the right knee would not yield; it persistently increased in size.

When I first saw her, she was lying supine, with the right leg slightly flexed and abducted, the knee, well wrapped in flannel, being supported on the outer side by a pillow. The synovial membrane bulged up under the quadriceps extensor and on either side of the patella and its ligament. The slightest shake or movement gave rise to intense pain in the joint. The surrounding skin was red and hot. The pulse was extremely weak and frequent, and the appetite and power of sleep were well-nigh gone. Although she sweated profusely, she had had no shiverings. Next day, however, she had a severe rigor, and her physical condition was worse in every respect. Further temporising being out of the question, a free incision was made along the prominent and fluctuating swelling on the outer or dependent side of the joint. Several ounces of a thin and streaked synovia at once escaped, and with it a considerable quantity of pus. Then, by gentle pressure with the hands, the joint was as completely emptied as possible, and some tenax was loosely bound over the wound. Two days afterwards, when this dressing was removed, it was found that there had been no subsequent discharge, and that the edges of the incision were completely and soundly united. Moreover, all pain had left the joint, and anxiety and distress had given place to tranquillity and repose. The appetite returned, and with it the power of movement at the knee. The last report of Mr. Wigmore (February 18th) says: "The patient is now

nearly convalescent; her general condition is much improved. There is not yet quite free movement in the joint, but she gets about tolerably well."

The case is of interest, in that it is an instance of suppuration in a joint following immediately on the synovitis of acute rheumatism; that the abscess, though in the knee-joint, ran so favourable a course in a flabby patient far advanced in pregnancy; and, lastly, that the happy termination was reached without the joint having been dealt with in any special and peculiar manner. Indeed, had the patient been treated otherwise, the case might possibly have been held more worthy of being placed on record.

EDMUND OWEN, F.R.C.S., Seymour Street, Portman Square.

## THERAPEUTIC MEMORANDA.

### TREATMENT OF RINGWORM BY THE TINCTURE OF PERCHLORIDE OF IRON.

THE treatment of the above disease with the tincture of the perchloride of iron, as noticed in the JOURNAL of February 10th, by Dr. Dobbie, is undoubtedly a very simple and effectual plan, and one I have frequently adopted for some time past. The tincture can be applied several times without producing irritation, and, after its application, a little glycerine painted on its surface will prevent drying, and lessen the chance of the fungus becoming scattered in other directions. The remedy is especially suited for private practice, there being also no unpleasant smell attending it. For hospital practice, however, when patients frequently do not present themselves for treatment more than once or twice, I am aware of no more reliable remedy than the so-called "costers'-paste", composed of two drachms of iodine dissolved in an ounce of colourless oil of tar.

J. HERBERT STOWERS, M.D., L.R.C.P.Lond., Lower Tulse Hill.

### TREATMENT OF RINGWORM BY THE TINCTURE OF PERCHLORIDE OF IRON.

I CAN testify to the satisfactory results obtained by the use of the tincture of perchloride of iron in ringworm, as stated by Dr. Dobbie in the JOURNAL of February 10th. Common ink has long been used as a remedy among the lower classes. I remember that such treatment was recommended and used by an old nurse on myself with the result of a complete cure. Many patients also have told me they have been cured by the same means. I have no doubt that it is due to the iron which the ink contains.

W. LEAVENS WHITE, M.B., Medical Superintendent.

## CLINICAL MEMORANDA.

### POISONING BY BELLADONNA.

THE patient, a man aged 70, had commencing orchitis, after the passage of a catheter. On February 6th, 1877, at 3 P.M., half an ounce of belladonna liniment was applied on lint and oiled silk to the scrotum. At 6 P.M., the patient was fast asleep, and continued so until 12.30 P.M., when I saw him. He was sleeping quietly, without stertor. The pupils were widely dilated. His face, neck, and the upper part of his chest were reddened and congested. The respiration and pulse were as usual. The tongue was dry and retracted. The extremities were warm. After the application of cold to the scrotum and spine, tickling and pinching the feet and legs, the patient at 3.30 A.M. became partially roused, swallowed a few teaspoonsful of water, and spoke a few words in reply to questions for the first time since the afternoon. He was then left to sleep, which he did quietly until the morning, when he woke of his own accord. He could not stand until the afternoon, and then could only walk with assistance. He appeared dazed, and was ignorant of what had occurred, like one who had had an epileptic attack. No rash. The scrotum was found blistered, and thus no doubt the toxic effect was produced. Dr. Ringer tells me he uses equal parts of glycerine and extract of belladonna to avoid this effect of the liniment. The orchitis was certainly relieved, and so also was some distress that had been complained of, consequent on the enlarged prostate. One may note the difficulty of diagnosis if called to a similar case and ignorant of the application of the drug; the absence of excited delirium and of rash.

H. FLY SMITH, M.D.

## REPORTS

OF

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### MANCHESTER ROYAL INFIRMARY.

##### TWO CASES OF SPINAL PARALYSIS.

(Under the care of Dr. LEECH.)

CASE I.—A boy, now aged 15, noticed, about three years ago, stiffness of the neck and pain and swelling over the upper cervical vertebrae, the probable cause being injury from a schoolfellow often seizing him by the neck and pushing him forward. An abscess formed at the affected part and discharged for about eighteen months through an opening to the left of the third cervical spine. Afterwards, the swelling returned, and he got partial loss of power in both arms. But, after a second abscess had formed and discharged and a piece of bone come away, he recovered sufficiently to work as a shoemaker. Two months ago, he noticed weakness and stiffness of the left hand and arm and some dragging of the left leg, and since then has gradually lost power in the right arm and slightly over the right leg. On admission, there was found still much swelling at the back of the neck, and there was still some discharge from a sinus there. Both upper extremities were now almost paralysed and opposed a curious rigidity to any attempts of flexion and extension. The legs were partially paralysed, and were at times affected with the same rigidity. There were sensations of numbness and pricking in the fingers; faradic contractility remained, reflex irritability was diminished, not destroyed; there was occasional difficulty in retaining urine. The symptoms seem to be gradually progressing.

CASE II.—A man aged 23 stated that he wrenched his neck two years ago, whilst carrying a sack of corn. The sack slipped, and, making a strong effort to prevent its falling, he got severe pain, which persisted for many weeks. After this, he was able to work, but some stiffness continued. Twelve months before admission, the neck became more painful, and he felt numbness in the right fingers. This passed away for a time, then returned, and shortly afterwards the left fingers became numb; then he gradually lost power in both arms, the loss in the right preceding that in the left; for a few weeks, the palsy was complete; three months afterwards, the left leg became numb and weak, but the sensation in the right leg has never been affected. At the present time, he can retain urine and move his right arm slightly; but, on the left side, he can only move his fingers. Sensation in both arms is deficient and altered, and also, he states, in the right side of the face. The legs are weak, but can be drawn up in bed; the left has at times the peculiar rigidity described in the last case. There is no pain nor swelling in the neck.

In both these cases, localised meningitis seems to have been followed by changes in the substance of the cord. The general rigidity noted especially in the first case is perhaps accounted for by descending degeneration of the lateral tracts, whilst, in the second case, ascending changes seem to be in progress.

#### ST. MARY'S HOSPITAL, MANCHESTER.

THIS very complete and well appointed hospital for women and children is largely indebted for its foundation to Dr. Radford, who has provided it also with his library and museum. The "Radford Library" and the "Radford Museum" occupy two fine rooms facing the entrance. The former contains about three thousand volumes, according to the catalogue just completed by Mr. Cullingworth, and the latter is remarkable for its pelves and its collection of forceps. On the day of our visit, we had an opportunity of seeing Dr. Lloyd Roberts operate for ovariectomy upon a patient aged 53. The enlargement, of five years' duration, had been very considerable, and was, therefore, lessened by the withdrawal of about eight quarts of the dark fluid-contents of the cyst. Bichloride of methylene was the anæsthetic employed, as it usually is by Dr. Lloyd Roberts, and it acted well. The operation lasted over half an hour. The incision was only moderate in length. The firm adhesions to the peritoneum in front were detached by the hand, a point being to keep the hand as close to the parietes as possible; and the very large cyst was then tapped, withdrawn, and clamped in the usual manner. Dr. Roberts either returns the pedicle or not, according to circumstances. He has had a goodly



number of cases at the hospital, and latterly a more than average success.

With Mr. Cullingworth we saw a case of suppurating ovarian cyst, from which he had removed forty ounces of pus by aspiration, with fair prospect of recovery.

Mr. Ewart has used Morton's plan of injecting iodine in twelve cases of spina bifida, and with some satisfaction; *i.e.*, one or two cases have recovered; in others, where there was no movement or sensation in the lower limbs, none has been restored, though the tumour has disappeared. On the other hand, some of the cases have had hydrocephalus, and one died of convulsions three hours after the operation.

## REPORTS OF SOCIETIES.

### PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, FEBRUARY 20TH, 1877.

CHARLES MURCHISON, M.D., F.R.S., President, in the Chair.

#### DISCUSSION ON VISCERAL SYPHILIS.

THE adjourned discussion on Visceral Syphilis was resumed.

THE PRESIDENT said that several specimens had been sent from the Museum of the Royal Hospital at Netley by Dr. AITKEN, to whom the Society was much indebted for the trouble he had taken. First, there were two specimens involving the brain. One of these was a portion of brain exhibiting a tumour about the size of a walnut, taken from a soldier affected with constitutional syphilis. He had been repeatedly salivated, and was five times in the hospital for syphilis in 1861; he was also forty-five days in the hospital for nodes. A year afterwards, a large herpetic ulcer appeared in the right arm, followed by smaller ones. He fractured his arm while he was cleaning his musket. Two bad sores appeared in the left eyelid; and then came the history of epileptiform attacks. The second specimen was from a man aged 27. In January and July 1860, he had primary syphilis; he was treated first for nineteen, and subsequently for forty-seven days in the hospital; he was also very intemperate. In 1867, he had an epileptic fit, followed by paralysis, loss of vision, and death. The *post mortem* examination showed the cicatrix of an ulcer on the penis; the calvarium was extensively diseased; the dura mater over the anterior lobe of the left hemisphere was thickened, and adherent to a gummatous tumour below and to the bone above. The whole lobe was soft, surrounding two tumours, each of the size of a walnut. The central ganglia of the left side were very much softened. There were large depressed cicatrices over the ulcer, with fibrous bands radiating into its parenchyma, and solid yellow gummata interspersed through the liver similar to those in the brain. Another specimen was a section of the hypertrophied walls of the left ventricle of the heart, in the muscular structure of which were numerous firm yellowish nodules, and bands of similar material. The nodules were circumscribed, varying in size from a marble to a walnut, and situated beneath the endocardium. Similar masses existed in the testicle and in the brain. In 1861 and 1862, the patient had secondary syphilis. In 1869, he had fungus of the testicle. Death occurred suddenly while he was on duty. Two other specimens were from cases of disease of the aorta. In one of these, a portion of the thoracic aorta showed a thickened patch, with a puckered cicatricial centre. Death occurred from phthisis. The evidences of syphilis were: a cicatrix on the penis, cicatricial loss of substance, and contraction of the mucous membrane of the pharynx and tonsils, with induration of the liver and lardaceous spleen. In the other case, the thoracic aorta was laid open, exhibiting a large dilatation of the ascending portion commencing immediately above the valves, with extensive atheromatous degeneration of the entire inner coat. There were nodulation and cicatrices of the transverse portion, with an ulcerated patch of the size of a bean; and circumscribed smooth elevation of the subjacent morbid material in the descending portion. The aortic valves were somewhat thickened and opaque. This specimen was from a soldier, who died at Netley of paralysis. There was a history of syphilis, followed by paralysis; deposits and yellow gummata were found in the central ganglia, also in the liver and spleen. Another specimen was a portion of lung containing a well-defined deposit of medullary matter about the size of a hen's egg, of a soft pulpy texture, approaching the appearance of foetal brain, possessing no capsule, but appearing to be in immediate contact with the contiguous healthy pulmonary tissue. There was a history of syphilis. The next specimens were two portions of the right lung; one exhibiting a circumscribed irregular nodular growth about two inches in length, with pigmentary deposit; the other showing a circular

deposit. There was a syphilitic history. Gummatous deposits were found in the liver, also in the cranial bones and spleen. Another specimen was a portion of the left lung, with two isolated deposits, taken from a medical officer aged 27, who for several years had suffered from secondary syphilis. A sloughing ulceration into the centre of the right arm opening into the vessels necessitated the removal of the arm. When the stump was nearly healed, the patient died, greatly emaciated. There were also two specimens of diseased liver. The first of these was a portion of liver exhibiting on the surface extensive cicatrices, with loss of substance and numerous nodular deposits of gummatous. There was a distinct syphilitic history. The patient from whom the next specimen was taken had contracted syphilis in the West Indies, for which he had used much mercury. The bones of the cranium were carious; there was a distinct cicatricial depression upon the surface of the liver. The next specimen exhibited a disease of the calvarium, a portion of the frontal bone showing ulceration and gummatous deposit in different parts. There was a well-marked syphilitic history. There were also three specimens of disease of the testicle, in all of which there was a syphilitic history, and evidence of syphilis in other parts of the body.

Dr. F. C. TURNER (for Dr. SUTTON) exhibited various specimens and drawings. The first was a case of syphilitic disease of the brain. J. C., aged 28, was admitted into the London Hospital under the care of Dr. Ramskill on May 2nd, 1876, and died on June 11th. She stated that she had had good health up to the time of her marriage, ten years before. Six months after marriage, she had a sore-throat and lumps in her neck, but no rash or sores in her skin. She had never been well since this time. Three years before her admission, a swelling came over her nose, which broke, and discharged a piece of bone. Six months before admission, according to her own account, she began to suffer from pain in the legs, and great weakness, so that she was unable to stand, with distracting headaches, which prevented her from sleeping. Four months before her admission, she became insane, and had no recollection of what happened until about a month before she came in. About that time, she awoke in the night with a strange feeling, and with her face drawn to the right side; she then became unconscious, and had a fit. Fits occurred frequently after this time, about three in the twenty-four hours. The violent headache continued, and she vomited frequently without any assignable cause. There had been no fits for a fortnight, during which time she had been attending as an out-patient for a sore-throat. On the day of admission, she observed the sight of the left eye to be failing, and by the evening it was almost lost. The sight of the right eye was also failing. According to her husband's account, she had been observed to be vacant for the last twelve months; and for some time her memory had been failing, and she had complained of her sight becoming weak for the last fortnight. When she was admitted, ophthalmoscopic examination revealed nothing abnormal in the optic discs. In the wards, she had frequent fits. They were preceded by the appearance of a purple patch on the forehead, and by drawing the face to the left, and loss of speech. On May 7th, the edges of the optic discs were blurred. On the 15th, she had partial ptosis of the left side, the left pupil being dilated and insensitive. The edge of the left optic disc was more blurred than that of the right disc. On May 27th, the external rectus of the right eye was weak. The fits became more frequent, and the patient more or less unconscious. During the twenty-four hours previous to her death, she had more than thirty fits. At the *post mortem* examination, the brain was sunken in appearance. There was a node on the left parietal bone, consisting of thickened periosteum and very hard bone. On the summit of the right hemisphere, the dura mater was firmly adherent to the bone, and thickened considerably by some leathery looking substance in it. This gummatous substance was surrounded by fibroid material which invaded the pia mater, and the whole was united with the brain-substance. The outline of the convolution to which the gummatous substance was adherent was lost; a greyish-pink substance spread through the convolution destroying its outline, and the convolution for a distance of about an inch was very hyperæmic, and infiltrated with a pinkish-grey material, its outline also being effaced. A similar change in a minor degree was seen in a convolution in the middle lobe of the left hemisphere. The right optic nerve in front of the optic commissure was surrounded and invaded by a grey substance, by which it was greatly thickened. The left third nerve, as it left the crus cerebri, was much thickened by a pinkish-grey substance, it was more than twice the size of the right. The right sixth nerve, just after leaving the pons Varolii, was similarly thickened. The rest of the brain showed no very marked changes. One optic disc had not a distinct edge; its outline was lost, and very strikingly different from the defined outline of the other disc. The surface of the liver was puckered, especially below; the capsule was thickened. At the points of de-



pression, fibroid tracts extended into the liver-substance, some of which contained minute gummatous nodules. There was one distinct gumma seen in the organ. The other organs presented no syphilitic changes. Dr. Turner also exhibited three drawings representing the aorta, the lungs, and one testis, from a case of congenital syphilis. The patient, a boy aged about 12 or 14, was admitted into the London Hospital by Dr. Sutton on account of symptoms of compression of the left bronchus. He had the characteristic teeth described by Mr. Jonathan Hutchinson, and correlated prominent forehead. One drawing, representing the back view of the thoracic viscera, showed a mass of enlarged glands in the posterior mediastinum, which had compressed the left bronchus. Another drawing showed a section of the left lung, in which were seen yellow masses, which seemed to be the product of an ordinary non-specific bronchopneumonia in a state of caseous degeneration. In another drawing, the interior of the aorta was represented, showing two defined and considerably elevated patches of disease. These were especially characterised by the very white appearance of their surfaces and by the slight nodular elevation. These indicated that the areas of disease had been formed by the coalescence of groups of separate nodules; and in the smaller and less advanced patch it was seen that these had originated in the deeper layers of the arterial wall. The sharply defined irregular crescentic margin of the larger patch of disease was also noticeable, as was also the fact that the disease was limited to a few spots only, and that there were no patches of atheroma to be seen. In some cases of this form of disease of the aorta, Dr. Sutton had found cicatrices of previous disease side by side with its recent manifestations. Another drawing showed the great enlargement of one testis from the development in it of a gummatous mass. Another drawing represented the appearances seen in one lung of a patient who was in Guy's Hospital with syphilitic disease of the larynx in the year 1866. The laryngeal symptoms were very urgent, and tracheotomy was performed by Mr. Durham. After this, the condition of the patient improved, and she seemed to be going on very well, when cough and dyspnoea set in. Sir W. Gull thought that the left pleura was full of fluid. The necropsy showed that the left lung was consolidated, and had the peculiar greenish-grey appearance shown in the drawing. The ulcer in the larynx was completely healed. Another drawing showed tertiary syphilitic disease of the larynx attended by very extensive thickening and ulceration of the mucous membrane of the aryteno-epiglottidean folds and parts adjacent both above and below. There were also three drawings of syphilitic disease of the liver. The two large drawings were intended to show that that organ might be deeply scarred and lobulated by tracts of contracting fibroid tissue, but little in the appearance of gummatous tumours; while, on the other hand, an organ presenting numerous gummata might be fissured to a comparatively slight extent. The smaller drawing showed the small gummatous nodules which were seen in the fibrous tracts traversing the deeply fissured and much lobulated organ. Then there was a drawing showing syphilitic deposit in the kidney, and a round gumma of typical appearance was shown at the surface of the kidney. The organ was enlarged and of a red colour, presenting spots of grey material throughout. It was in a condition intermediate between the congested chocolate kidney and the pale mottled kidney.

The PRESIDENT asked if there was any account of the clinical symptoms in the last mentioned case.

Dr. TURNER said he had not been able to obtain any account of the symptoms.

The PRESIDENT said that the second case mentioned by Dr. Sutton appeared to be one of extreme interest from the circumstance of its having been obtained from a patient who had inherited syphilis, and also from the remarkable appearance presented by the tumour, which was very different from anything seen in ordinary atheroma.

Dr. GREEN, in exhibiting a specimen of disease of the lung, said: This specimen was taken from a young man at Charing Cross Hospital, who, in addition to the disease shown, had marked gummata in his liver. I only saw him on the *post mortem* table, and was unable to ascertain the clinical history, the notes of the case having been lost. The lower left lung is occupied by a mass of induration about the size of a small orange, passing gradually into the surrounding tissue. It does not involve the extreme base, and does not reach the surface anteriorly; posteriorly, it reaches the surface of the lung, and here the pleura over it is much thickened and puckered. Where the mass of induration had a greyish red colour and had a marked fibrous look, it obviously originated from three or four separate centres; it was firm, fibrous, and consistent, and scattered through it were three or four yellowish patches about the size of a fourpenny-piece. Under the microscope, it presented the ordinary appearances met with in syphilitic growths. In the peripheral portions, the tissue contained a

large number of new vessels; and, from the sections taken from the periphery, the new small-celled growth appeared to originate around the interlobular vessels, and not in the walls of the air-vesicles, and it involved the walls of the alveoli. The alveolar walls, as far as we can make out, were not primarily affected. I cannot help thinking, from the naked-eye appearance of the specimen, and from the fact that it was associated with syphilitic disease of the liver, that it is an example of syphilitic disease of the lung. We know that there are cases of syphilitic disease of the liver in which a growth precisely similar to that occurs in a more localised form, and usually in a multiple form, giving rise to disseminated fibroid changes in the lung. Examples of these changes have been brought forward by Dr. Goodhart and others. I exhibited at the last meeting two microscopical sections of such disseminated fibrous changes of the lung, probably the result of constitutional syphilis. I think, from the microscopical characters and the mode of origin, that these more localised and disseminated changes are precisely similar to what we know as large syphilitic gummata associated with fibroid change. Of course, the question which one has to answer is how far these fibroid changes in the lung are due to syphilis, and how they are distinguished from other forms of fibroid induration in the organ. It would seem that, in our present state of knowledge, we must be guided by the general naked-eye appearances of the induration, by its distribution, and by the collateral circumstances rather than by the histological characters. These presumably syphilitic growths in the lung appear to be histologically undistinguishable from what one meets with in other forms of pulmonary fibroid induration; they are similar, as far as I can see, to what one finds in chronic cases of phthisis, in chronic pneumonia, and other forms of pulmonary fibrosis. And I presume that this absence of anything especially characteristic in the histology of new growths in syphilis holds true of other organs. If there be anything histologically characteristic of syphilis, perhaps it is the change of the inner coat of the arteries of the brain described by Heubner, and brought prominently before the Society by Dr. Greenfield. At present, there is no evidence to show that a similar change occurs in the small arteries of the lung. What appears to me of much greater value than the character of the tissue-elements as far as the lung is concerned as indicating the syphilitic nature of the fibroid growth, is the mode of origin. In that specimen, and in two or three others which I have had the opportunity of examining, and, I think, in those brought forward by Dr. Goodhart and Dr. Greenfield, it appears that the new growth at all events originates in the interlobular septa. As far as I can see, it originates around the small arteries, and not around the bronchi. I would not speak certainly of this, but it appears to me that the growth originates chiefly around the arteries, and then the adjacent bronchi become involved. Now, if this be true, I think it distinguishes these lesions from other forms of pulmonary induration. I think that it will be admitted that the fibroid change which occurs in phthisis occurs also in the interlobular septa, and it occurs secondarily in the alveolar walls. The primary change begins in the cells of the air-vesicles, and it is only as the process becomes chronic that the interlobular connective tissue becomes involved. There is a marked difference between the interlobular growth in phthisis and that which appears to result from syphilis. In chronic pneumonia, the difference is not so marked; but here also, as pointed out by Dr. Wilson Fox, the change begins, in the majority of instances, in the walls of the alveoli; it is true that the interlobular tissue is involved, but there is nothing to show that the change spreads from it to the alveolar walls. In a few cases of chronic pneumonia that I have myself examined, I should certainly agree that the change in the alveolar walls is the principal change; at all events, that they are not involved secondarily to the interlobular septa. Then, sometimes, in cases of chronic bronchitis, there is fibroid thickening around the bronchi, extending to the air-cells and producing disseminated tracts, sometimes tolerably large tracts, of induration. Here, the change begins evidently around the bronchi, extending from the bronchi to the alveolar walls. Hence, as far as the histology of the fibroid induration in the lung is concerned, I should be inclined, in our present state of knowledge, to regard the fact of its originating around the interlobular vessels, and not in the alveolar walls, as, perhaps, on the whole, the strongest histological evidence we have of its syphilitic character. No doubt, the increase of vascularity of the new tissue mentioned by Dr. Greenfield is very valuable as distinguishing syphilitic from phthisical lesions. Phthisical and syphilitic lesions, however, are so distinct that it is difficult to confound them. But, after all, as far as the lung is concerned, I think we must be guided quite as much by the distribution of the growth, by its naked-eye appearances, and by the absence or presence of syphilis in other organs, as by the use of the microscope. Is there such a thing as syphilitic phthisis? In very exceptional circumstances, constitutional syphilis gives rise to the development of masses of induration in the



lung, which you may call gummata, and these gummata may occasionally undergo a certain amount of retrograde change. If this is to be called phthisis, we must admit that syphilis is a cause of phthisis. Then, I presume that syphilis may give rise to more disseminated fibroid changes in the lung, and that these fibroid changes may lead to secondary ulceration, induration, and possibly to gangrene. Here, again, however, I think we have something quite different from phthisis. That syphilis ever gives rise to progressive disintegrative consolidation, such as one meets with in phthisis, we have, I think, not the least evidence to show. Syphilis, it would seem, can only be the cause of what we understand by phthisis by damaging the general health of the individual who is subject to it. I see no evidence to show that such phthisis differs histologically, or to any great extent clinically, from the ordinary phthisis. Two or three years ago, I brought forward a specimen of phthisis from a child who was the subject of marked syphilis. It was the most typical specimen of chronic phthisis that one could see. It was precisely similar histologically to the ordinary cases of phthisis.

Dr. PYE-SMITH, in exhibiting a drawing and specimens of syphilitic disease of the lungs, bronchi, and dura mater, said: Last summer, I had an out-patient who came to me with what appeared to be very ordinary symptoms. He was a man aged 42. He had suffered about two years from cough and wasting. When he came, he was pale, thin, and cachectic, with curved nails, and with what one might call a phthisical aspect, with loss of appetite, constant coughing, and mucopurulent expectoration. On examining the chest, there was more or less dulness in both lungs, not extreme anywhere, but more upon the left than the right; and there was evidence of bronchial irritation. I put it down as an ordinary case of phthisis. The only peculiarity about it was that the man, seven years before I saw him, had been subject to rheumatism, which had left its traces in an affection of the heart, giving rise to loud apex systolic *bruit*. I supposed that this probably acted, as it often does, in moderating the progress of the phthisis, in producing more fibroid change, and in lengthening out the whole morbid process in the lung. After he had attended for some time, he had an abscess in the left forearm, and, when this was opened, I found that some tendons were sloughing. He was suffering so much that, at his urgent request, I took him into the hospital. In due time, the slough separated, the wound healed up; but his chest-symptoms remained much the same. His health improved considerably, and an order was made out for his removal to a Convalescent Home. The only change that occurred during the three or four months that he was under my care was that he had an attack of pericarditis, which one attributed to a slight return of his rheumatism. He had also had synovitis in one knee and then in the other; it was of a somewhat passive kind and disappeared under blistering. He was under Dr. Wilks's care for a time, and when I resumed the care of that ward I found my patient still there. The sloughing abscess had again opened; there was fresh sloughing, a counter opening had been made, and, in spite of all that could be done by surgical treatment, this increased rapidly; his cough also became worse and he had some hectic, and one feared that it would go on to produce, if not death, lardaceous disease. Under the circumstances, I asked Mr. Bryant to examine him, with a view of determining whether an operation would be justifiable to relieve him of this drain in the arm. He agreed that that was the best chance for him. His arm was, therefore, amputated, and he did exceedingly well. He slept better then he had done for a long time, and one thought that the objects of the operation would be secured; but a fortnight after the operation, he was suddenly attacked with a fit, he lost consciousness, and there was twitching upon the left side of the body; this was repeated several times; he never entirely recovered consciousness, and he died ten days after the attack. At the necropsy, we found not in the least what had been expected. We found that there was a chronic interstitial pneumonia, which, I believe, was of syphilitic origin; that there were contraction, from ulcers, of both bronchi, general peribronchitis, with dilatation of the bronchi, two small fibrous nodules in the heart apart from the rheumatic lesions, a condyloma upon the dura mater, disease of the bone adjacent to it, caries of the ulna, and ordinary interstitial orchitis, in both testes, of a syphilitic kind. The points of interest in this case are the following. First, with regard to the condyloma or node on the dura mater and the disease of the bone: this, coming on as it did suddenly, without any warning or headache, or any symptom pointing to the brain, is somewhat in opposition to the view that was put forward by Mr. Hutchinson, which I have no doubt is in accordance with general experience, that these surface-nodes are usually preceded by severe pain and headache. In this case, it was not so. On the other hand, the brain was perfectly healthy, and the arteries at the base of the brain were unaffected. There is, however, a traditional remark of Dr. Bright's that, when a patient dies suddenly

in an epileptic fit without previous symptoms, you will generally find a lesion upon the surface of the brain. Then, with regard to another point brought forward by Mr. Hutchinson, namely, that the most severe cases of visceral syphilis are those in which there has been the least external manifestation of the disease; that was strikingly the case in my patient. When he came into the hospital, as a matter of routine, it was stated in the clinical clerk's report that he said he had once had gonorrhoea, but he denied any chance. In looking carefully over the body, I did not suspect syphilis; there were no scars, no enlarged cervical glands, and no nodes upon the bones within reach. The only organs at all within reach were the testes, and they were not enlarged by syphilis, and would offer no evidence of the existence of the disease. There was not the slightest evidence of any syphilitic symptoms that could be recognised. No doubt he might have had syphilitic rash or slight sore throat, but that had passed off and there was no trace in the parts of the body accessible to the sight. Then, the next point is the curious condition of the bronchial tubes; they are puckered and contracted. This is a condition of which there are several cases on record. There is one which I brought from the museum at Guy's Hospital, described by Dr. Wilks several years ago, and several other cases have since been recorded, some of which are in our own *Transactions*. There was a case that I had myself about two years ago, in which the patient suffered terribly from dyspnoea, without any cause that could be discovered. On examining the larynx, it was found to be perfectly healthy; there was no evidence of syphilitic disease of the larynx, and no evidence of aneurism or obstruction lower down, so that one could not tell what was the matter. I felt that the mischief was not high enough up to be remedied by tracheotomy; and, therefore, I allowed the patient to die suffocated. On *post mortem* examination, I found the trachea and the two bronchi contracted and puckered. That remarkable contraction is in itself almost characteristic of syphilitic lesion. The last point of interest is the condition of the lung. There is what has been variously described as chronic interstitial pneumonia or fibroid phthisis, there are no gummata, and there is nothing that could be said to be distinctly unmistakably syphilitic; but, on looking at it in connection with the other lesions, I think there can be no doubt that it is a truly syphilitic disease. The points which seem to me to lead to that conclusion are, first, the association with other lesions which are distinctly syphilitic; and secondly, from the state itself one might almost guess it to be syphilitic. Here we touch upon a question to which Dr. Green has referred—the question of syphilitic phthisis. I agree with him that, in its proper sense, there is no such thing as syphilitic phthisis; that is, that syphilis never produces what is structurally and truly known as pulmonary tubercles, with caseous pneumonia affecting both lungs, and travelling downwards from the apex. This does not conform to the type; and I am sure that one ought not to call things of this sort syphilitic phthisis for this reason. I think if I had made a proper diagnosis early enough, it is quite possible the man's life might have been saved; therefore, it is of capital importance to distinguish such cases, if possible, from those of really true phthisis. It is only, I think, misleading ourselves if we call such things by the substantive phthisis, and content ourselves with adding the adjective syphilitic. One ought to apply the same rule as you apply in regard to skin-diseases; we should not take the word psoriasis, and then simply explain it by the word syphilitic. These cases, then, are cases of syphilis of the lung, and not syphilitic phthisis. With regard to the special forms of disease which do affect the lung here, I should be disposed to echo what Dr. Green has said; because here also, I believe, it is quite clear that a disease beginning in inflammation of the trachea and bronchi, leads to peribronchitis; and then, secondly, to pneumonia. That is confirmed by microscopical examination. There are some slides which I have brought, and which show well the characters of the disease. There is nothing very special about it; there is abundance of pigment and of fibroid tissue, and there is more of alveolar catarrh than I expected; but still the histological characters are similar to those of ordinary fibroid phthisis. It is to the distribution and the connection with the primary affection of the larynx, the trachea, and the bronchi, it is most of all to the relation to these visceral lesions, that I think we must look in order to determine the nature of this disease.

Dr. DOUGLAS POWELL exhibited for Dr. SHEPHERD a drawing showing syphilitic disease of the lung. The clinical history of the case, he said, was one of fibroid phthisis, in which the principal point was the fact that the expectoration was exceedingly scanty in proportion to the cough. The lung was almost everywhere indurated, and there was slight induration of the bronchi.

Dr. DRYSDALE: Allow me to say a few words upon the subject of syphilis of the lung. In 1845, a lecture on the subject was delivered by M. Ricord. He distinctly laid down the idea that there was a syphilitic phthisis, in which the patient exhibited the same symptoms



as ordinary phthisical persons. I have always kept that in mind, and the specimens exhibited this evening, and the observations of Dr. Pye-Smith and Dr. Goodhart, have confirmed me in the idea that there is a disease that may be legitimately called syphilitic phthisis. I do not mean cases where syphilis weakens the constitution and produces ordinary consumption. I refer to diseases where there are gummy tumours which soften and are expectorated, leaving cavities in the lungs. There have been several cases like that in medical literature. The first case that came under my own notice, which I believe was a veritable case of syphilitic phthisis, occurred in a young girl aged 13. She had the teeth described by Mr. Hutchinson and a sloughing throat, and the soft palate had been eaten away; also stenosis of the trachea and great dyspnoea, to which she almost succumbed. She had for a time ulceration of the leg, which rapidly healed up under the use of iodide of potassium. Simultaneously with that, in one of her lungs, at the apex and at the supraspinous fossa, there was cavernous breathing, with gurgling and signs of a cavity. Iodide of potassium was given, and the symptoms of phthisis disappeared entirely; there was no more gurgling heard. The next case that came under my care was that of a man who was sent to the North London Consumption Hospital with a diagnosis of phthisis. He was a very powerful man, with large muscles, and having no aspect of phthisis. I thought perhaps it was a case of alcoholic phthisis; but, on examination, I found syphilitic symptoms on different parts of the body. There was a distinct syphilitic history of about six years back. There was dulness on percussion in the left clavicular region, extending to the middle of the nipple, and there were also signs of cavity; there were cavernous breathing, bronchophony, and *râle*. A month afterwards, he was put on large doses of iodide of potassium, and he left the hospital in excellent health.

Dr. WILSON FOX: My knowledge of syphilitic disease of the lung, which I have been able to recognise as such, has been limited to two cases, one of which Dr. Gowers has exhibited. I especially wish to urge a little caution in the recognition of syphilis as largely predominant in the production of disease of the lung. A few years ago, I wrote an article on the subject, and, in going through the literature respecting it, I was obliged to summarise at least five forms of lung-disease which by different writers were stated to present indubitable characters of syphilitic origin. In the interesting discussion which has taken place to-night, there have been presented to my mind scarcely fewer varieties of more or less destructive affection presenting totally different characters, and, if I may say so, to some degree incompatible with one another. There is, first of all, the syphilitic gumma, a rare affection comparatively; and even on that point I have been somewhat surprised to see two kinds of gumma from Netley, one described as resembling foetal brain and the other resembling ordinary gumma. I should hesitate to offer much criticism on army medical returns, except that, in the Army Medical Reports, gummata are described with a frequency that is almost astonishing. For instance, in the report for 1870, out of forty-one cases dying of syphilis, there are said to be 31 per cent. of cases of gummata; while, in all Dr. Goodhart's one hundred and forty-seven cases of recognised syphilis at *post mortem* examinations, I believe there is no mention of gummata at all. In another report by Dr. Welch (whom I quote with great respect, as having written one of the most admirable articles on the lesions of phthisis), he returns no less than 23 per cent. out of sixty-seven cases dying of syphilis presenting gummata; while the whole returns of all the phthisis in the army for a definite period under his observation only give 5 per cent. On this point, then, the question arises whether we are not calling the same things by different names and reckoning them in different categories. Again, leaving the question of gummata, I have met, in Dr. Greenfield's description, with recognised syphilitic pneumonia in a new-born child, well known as a kind of syphilitic disease; and I have seen in Dr. Goodhart's account, and have seen exhibited to-night by Dr. Pye-Smith, various fibroid changes. I certainly recognise in Dr. Goodhart's microscopical preparations, and also in some of Dr. Greenfield's, a large preponderance of interstitial growth over what occurs in ordinary phthisis; but there the identification ends, as far as recognition by the eye or histological characters are concerned; and I think we must hesitate even yet in authentically putting down interstitial growth as characteristic of phthisis; nor, again, can we recognise it as specially arterial when this particular form of syphilitic growth has been described as peribronchial. Dr. Goodhart gives thirty-six cases of phthisis, destructive disease of the lung, out of one hundred and forty-seven cases of syphilitic disease, or about 24 per cent. Conversely, dealing with smaller numbers, out of twenty-seven cases of which I have tolerably accurate *post mortem* notes, I find that 15 per cent. had syphilis. Not one of these presented anything that I should call a syphilitic lesion beyond a considerable amount of fibroid induration;

and fibroid induration was nearly as much distributed among the non-syphilitic as among the syphilitic cases. Of forty-five cases with very little fibroid induration, the syphilitic were seven; while, of forty-two chronic cases with a great deal of fibroid induration, the syphilitic were only six. Thus altogether, as far as the data which I have been able to examine are concerned, syphilis has had but little effect in producing or modifying the course of ordinary phthisis towards fibroid change. Then, as to whether syphilis may not determine the first steps towards phthisis, I think I have seen that clinically, but I have not worked it out *post mortem*; for I think one must take it as pretty well established that syphilis may present on the mucous membrane and also on the lung changes that may help inflammatory processes analogous to those seen in external parts; at any rate, it is fairly well recognised that there may, during various stages of the exanthem, be a syphilitic bronchitis, and I think it must be admitted to some extent that during those stages there may be forms of pneumonia; and I cannot help thinking that, under certain conditions of predisposition or certain conditions of deteriorated health, those changes may set up a starting-point for destructive disease which is not essentially syphilitic, but which has its origin in syphilis. I am also prepared to admit that some of these forms of pneumonia may tend to become chronic and to produce fibroid induration; but, when I look at such a lung as that shown by Dr. Pye-Smith, I must recall to my memory, first, that in my *post mortem* experience such a lung as that is rare (I can only remember two); secondly, that, in literature, two other cases have been associated with contracted bronchi; and, thirdly, that the condition of bronchiectasis with indurated lung is one that can hardly attach to syphilis apart from other lesions. Therefore, the real question arises, Do we, when we find syphilis and destructive disease of the lung together, gain much by the knowledge of that fact in the treatment? I know that in some cases literature states that good has been done; but I think the general experience of all practical physicians would be that strong or modified antisyphilitic treatment has very little influence in producing any beneficial effect in the vast majority of cases of phthisis, even where there is a syphilitic history. If that be true, the history of syphilitic phthisis differs very markedly from the history of syphilitic lesions, even of the most advanced form, of other parts, especially of the brain, when they are recognised in time. And, lastly, I would draw attention to the fact that the only definite syphilitic lesion that we can name, the gumma, is very seldom, if ever, positively destructive to the lung. I know that which has been said of the cavities of the gumma. I know no mode of recognising the gumma during life, or the cavity which it leaves after death, unless there be such a thing as a cavity found alone in a syphilitic body. If such a thing were found, we might admit that a gumma had softened and had left a cavity, otherwise the gumma, as such, scarcely appears to me to be productive of phthisis. I have ventured to make these remarks, as showing that we are a long way removed from certainty in our definition of syphilitic lesions, which may be multiple perhaps, but not yet clearly defined. I think the question requires very careful consideration before we set down the lesions as syphilitic.

Dr. PAYNE: I think the Society is greatly indebted to Dr. Wilson Fox for the light he has thrown on this subject by his exceedingly valuable criticism; nevertheless, I think there is probably more in the subject than he feels disposed to admit; and I may venture to say that I do not feel entirely conquered even by the negative results of Dr. Wilson Fox's very large experience. I remember, with regard to syphilitic products in the liver, that, not many years ago, they were regarded with general scepticism; and I well remember a gentleman, who had been for a long time senior surgeon of the Lock Hospital, telling me that he did not at all regard these as syphilitic, because, as far as he knew, such deposits had never been met with in that hospital. I do not know whether that is still the case; but, knowing what we do now of the occurrence of syphilitic masses in the liver, they may possibly not be found in that particular stage of syphilis during which the majority of patients are admitted into the Lock Hospital. Without pretending that the question has arrived at any degree of certainty, I think the prospect of certainty only lies in connecting the few cases (which must be rare) in which we have a coincidence of symptoms and *post mortem* lesions. When the *post mortem* appearances are in that way more defined, I think we shall be able to recognise changes in the lung with as much certainty as we can now in the liver. Perhaps I may be allowed to sketch out briefly what I think to be the characters of certain appearances sometimes met with in the lung, which, if not certainly syphilitic, are, at all events, not easy to be explained as a part of any other morbid process. We do from time to time meet with masses of inflammation in the lung leading to consolidation, which are noticeable, in the first place, as being limited, not extending over the whole lobe, and not, therefore, having the character that we see in



syphilitic growth in other parts. Then the characters of the inflammation met with in these particular parts are, I think, interstitial chiefly, and sometimes to a great extent alveolar; but the characteristic of these kinds of structure is, that they are both met with together, and sometimes one and sometimes the other; which is in itself a very important fact. Then, with regard to the early stages of these masses, I cannot say that we know anything positive; but, since we do meet with masses of this kind which show a decided tendency to degeneration, becoming yellow and comparatively soft in the centre and hard towards the circumference, we may suppose that their ultimate history is of that kind; very much like the products connected with tubercle; that is, showing a tendency both to degeneration and fibroid change. If there be such things as these, is there any other thing which can produce them? We do not really know any other morbid process which gives rise to this localised inflammation affecting the different kinds of tissue. Now, it may be said, if this kind of thing occur, syphilis being common, it may be supposed that it would occur frequently. We must remember that the characters of the lung are different from those of any of the solid organs. If you find a mass, inflammatory or otherwise, for instance, in the liver, which in the end gives way and becomes partly degenerated, partly absorbed, and partly converted into fibroid tissues which contract, this may contract and shrivel, leaving a puckered depression on the surface. In the lung, there it is certain, for a variety of reasons, that the result will not be permanent. Anything that contracts near the surface of the lung, supposing the lung is not adherent, but is still capable of moving on the pleura, will not cause a permanent depression; it will cause, of course, a depression, but the surrounding portions of the lung will soon expand and occupy the place. It is not, therefore, surprising that a mass becoming absorbed does not leave so permanent a cicatrix in the lung as in solid organs. In fact, the only part of the lung where it would seem that any sort of cicatrix is really permanent is in the apex, where there is adhesion and imperfect expansion, and where the cicatrix cannot become obliterated. But I will venture to refer to one case that occurred some years ago at St. Mary's Hospital. It is the case of a young woman about twenty, who had been admitted from the Lock Hospital, and who died of pneumonia of one lung. The body was perfectly well nourished, and otherwise in a healthy condition. The one lung was perfectly consolidated, the other lung had scattered through it a considerable number of small granulations a good deal like tubercle; but, on the whole, one could only say that they did not give one precisely the impression of being like ordinary tubercle. Under the microscope, they were certainly decidedly different. Now, if we look at the records of the Lock Hospital, it is found that this patient had been admitted there for syphilis; there is not the least mention of tubercle or phthisis; the whole character of the body appeared to be against that. Perhaps, if cases of that kind were more often watched, we might be able to satisfy Dr. Wilson Fox that there is some syphilitic disease of the lung.

Dr. LONGHURST: I wish to say a word in reply to Dr. Wilson Fox's remarks on the correctness of the hospital returns at Netley, and also as to our experience of syphilitic disease there. I think it will be admitted that in the army we have very great facilities for ascertaining the presence or otherwise and the extent of syphilitic disease in soldiers. If there be any sign of syphilis about a soldier, he is rejected. If he be retained, the first attack he gets is noted, and so with each successive one; so that we have means of accuracy in our returns not found in civil life. I think if Dr. Wilson Fox had seen as much of syphilitic disease in the dead bodies of soldiers as I have, instead of being surprised at the amount of gummata in the lung in the proportion he named, 30 per cent., he would be surprised that the proportion was not 50 per cent., not only in the lung, but in every tissue of the body.

Dr. WILSON FOX: I did not impeach the veracity of the returns; I simply asked whether we were not calling the same thing by different names.

Dr. PYE-SMITH: Allow me to say a word in reply to Dr. Wilson Fox. The case which I mentioned to the Society, which I still think one of syphilitic disease of the lung, is, I admit, an example of a rare disease. If it were not rare, I would not have troubled the Society with it, and we should not be discussing its possible existence. I think we ought to bring forward all these cases that we can get; and, asking ourselves whether the origin is syphilitic, the question, as it seems to me, lies in this way. Certainly, looking at that specimen *post mortem* as a mere anatomical structure, it is not phthisis; there is nothing like tubercle, and there is no tubercle in any other organ. The parts which are more important than any others, the lymphatic glands which receive lymph from the organ, are not affected; and the bronchial glands are healthy. Looking at the glands, I think they

give us as good evidence as we can have of the nature of the primary disease. Then, looking to the other organs, while there was not a trace of tubercle in any part of the body, the mass of the body was full of syphilis. The heart, the dura mater, almost every viscus was full. Then, there is the condition of the air-passages. We know, of course, that the larynx is frequently the subject of syphilis; and no one can deny that those cases of stenosis, with deformity of the trachea, are syphilitic. Here we have a man who was thoroughly syphilitic, who had an undoubted syphilitic affection of the trachea and bronchus, who had no phthisis, and yet his lung is in a condition which we must call chronic interstitial pneumonia. Is it going very far to suppose that there may be some connection between the two? There is one criterion the most important of all—that of therapeutics. Dr. Wilson Fox asks whether this was a practical distinction. I did not enter upon the practical question, this being a meeting of the Pathological Society; but I may mention that I have had patients under my care whom I believed to be the subjects of syphilitic disease of the lung, not from any anatomical reason, but simply because of the effects of the remedies. One was a man under my care ten years ago, who had all the ordinary symptoms of phthisis. He was going on from bad to worse until I found a node, and then I gave him mercury, and he got well. Not long afterwards, another man came under my care in somewhat the same condition. I treated him with mercury and iodide of potassium, and he certainly improved, but he disappeared from my view. When we have cases such as I have described, and when we have undoubted cases of persons whose symptoms, like those referred to, have been cured by mercury and iodide of potassium, I think that is a strong line of argument to make us believe that there is such a thing as chronic inflammation of the lung which is truly of a syphilitic character.

Dr. GOWERS: The specimen I now exhibit is from a patient who died since the subject came under the attention of the Society, and it illustrates one or two interesting points as to the way in which syphilis produces affections of the nervous system. It is a specimen of the pons Varolii with one crus attached, and it contains a large gumma, extending into the optic thalamus. The fourth, fifth, and sixth nerves are matted together at the anterior part of the pons, and the syphiloma of the crus extends up to the surface at the point at which the nerves are matted. There is another syphiloma of smaller size in the anterior part of the interpeduncular space, in the position of the infundibulum. In the lower part of the cervical region of the cord, there is another syphiloma of some size in the left and posterior portion of the cord, and a smaller one a little higher up. The patient first came under my care as an out-patient at University College Hospital two years ago. He then suffered from affections of the fifth nerve only—hyperæsthesia at the skin, and weakness of muscles supplied by the fifth nerve. That went on to anæsthesia and complete paralysis and atrophy of the muscles. He then got a violent inflammation of the eyeball; it was at first thought to be spontaneous, until an abrasion was discovered on the cornea of the patient, who illustrated the way in which it was produced, by unconsciously passing his finger over the cornea, touching it without knowing that he had touched his eyeball. The inflammation was interesting in its intractability. It lasted several months with scarcely any diminution, then slowly subsided, but traces remained six months after the infliction of the injury. The patient continued with no other symptom than the affection of the fifth nerve, except a slight weakness of the external rectus on that side for nearly a year and a half; he then had slight weakness in the limbs on the opposite side. This increased slowly until, at the end of November last, the weakness was so considerable that he was taken to the hospital and placed under the care of Sir William Jenner. Before he was admitted, all the muscles of the left eye became paralysed; ptosis on that side occurred; the eyeball was immovable. After his admission, his mental state rapidly deteriorating, the weakness in the right side increased, and the muscles of both hands were noticed to be considerably wasted. Then, the left side of the body was found to be weak; the left arm and leg became rigid; reflex movements were excessive in the left leg, while they were diminished in the right. Those symptoms slowly progressed until the man died. At the *post mortem* examination, those changes were found which are now shown. I think two points are of interest in the case. One is the mode in which the syphilis had produced the symptoms. The nerves were matted together in indurated material, which had nothing specific in its appearance on the surface, but it was connected with or adjacent to a growth beneath. There were some traces of a similar indurated matting together of the structures in and around the optic nerves. Now, there can be no doubt that the surface-mischief had existed long before the growth into the deeper structures. I mentioned, in bringing forward the specimens of cerebral syphiloma at the first meeting, that, in all cases which I had examined, growths which were apparently in the cerebral mass could be traced to some



portion of membrane from which they had probably arisen. In examining this brain and finding this mass at the bottom of the optic thalamus, I concluded that it must be an exception; but, on cutting into it, it could be traced along the crus until it was continuous with the smaller portion of growth in the anterior portion of the pons Varolii above described. Another point of great interest in connection with the case is a clinical one. The patient was benefited in the early stages very distinctly and repeatedly by iodide of potassium. During the last two months of his life, he took iodide of potassium continuously, fifteen grains three times a day, and mercury in addition, but there was a steady increase in the symptoms. During this period, the syphiloma in the crus must have largely increased, and the syphiloma in the cord must have developed almost entirely, since before his admission there were no symptoms referable to the left side of the body, and those of the right seemed referable to the growth in the crus. So that it would appear as if a toleration of iodide of potassium had been established in the syphilitic tissues, in consequence of which they were no longer influenced by it. Possibly they might have been influenced by large doses; but certainly in the doses given, with the addition of mercury, iodide did not produce any appreciable effect. The history of syphilis was obscure. The man had gonorrhoea twice, twenty and twenty-five years previously. The character of the lesions was such as to leave no doubt, and the microscopic appearance was quite in harmony with, and indeed suggestive of, the syphilitic nature of the growth; and in the kidneys and testicle traces of old syphilomata were found.

Dr. MAHOMED, in exhibiting a specimen of aneurism of the aorta, said: I do not bring forward this case as one of aneurism due to a special or syphilitic arteritis, but as a disease of a not uncommon type. The relation between aneurism and syphilis is so important that I think it would be a matter of regret should this debate close leaving the question where it at present rests. The patient from whom this specimen was obtained was a man aged 39; he was formerly an artilleryman, a fact which introduces a further complication in the etiology of his disease. He had served in India; but, for many years past, had been a cab-driver in London. He had generally enjoyed good health, and had been temperate. He was married and had a large family of healthy children, and his wife is stated to have had only one miscarriage. He was taken suddenly ill on January 31st, 1877, when driving his cab, not having complained of any previous symptoms, except occasional vertigo, and was admitted to St. Mary's Hospital, delirious, with much struggling, and required restraint; he had a very small and feeble pulse, varying in frequency from 105 to 120, and died in the course of an hour or so. At the *post mortem* examination, the pericardium was found distended with blood, partially coagulated. The hæmorrhage had occurred from the posterior aspect of the aorta, through a hole about the size of a pea, which opened into an aneurismal sac of the size of half a Maltese orange. On opening the heart and aorta, the sac was found on the posterior part of the vessel, between the sinuses of Valsalva, corresponding to the left and posterior aortic valves, and a little above them. The right edge of the opening of the aneurismal sac into the aorta was remarkably ragged, thick, and irregular, as if it formed the edge of an ulcer; and in the wall of the aneurism, where it had burst, was another distinct ulcer, of the size of a threepenny piece, in the floor of which is the perforation. The aneurism appeared to have been originally produced in the floor of an atheromatous ulcer, and not by pouching of all of the coats; the position and size of the aneurism confirm this view. The rest of the aorta, throughout its whole extent, was extremely puckered, irregular, and fibrous. It was not dilated, but had evidently been affected by severe and general endarteritis. The arteries of the rest of the body were thickened, but apparently not atheromatous. No disease of the cerebral vessels could be detected by the naked eye. There was nothing worthy of remark here in his other organs, except the testes. In the left of these, was a patch of fibroid degeneration, such as that usually resulting from a gumma; while in the right was a recent vascular grey and elastic swelling in the lower part of the body of the organ, about the size of a small hazel-nut, not well defined, and evidently of very recent date. Upon microscopic examination, it presented all the usual appearances of a syphiloma, the intertubular structure being greatly increased by the small-celled syphilitic growth pressing upon the tubules, and displacing but only occasionally destroying them; while there was increased proliferation of the epithelium of the tubules, which were crowded with large and irregular shaped cells; the vessels of this part did not appear to be affected by the growth. Specimens of this growth are exhibited under the microscope. Microscopic examination of what appeared to be the most prominent patches in the aorta failed to discover any characteristic small-celled infiltration; the changes which were apparent were only those usually found in the degenerative period of endarteritis.

Microscopic preparations of the aorta are also exhibited. It is worthy of note that the disease, both in the aorta and testes, gave indications of two periods of activity, separated by an interval of abeyance, and that the periods were probably coincident in each, for the primary disease in the aorta is of old standing and apparently of the same stage throughout, the eruption on its internal coat having been probably general, while the first formation of the aneurism was probably at this period; on the other hand, there is a distinctly recent ulceration in the wall of the sac, and not a gradual thinning or erosion, such as more commonly occurs when an aneurism bursts, and this must be of quite recent date. So, in the left testis, is old disease, probably of the same date as that in the aorta; while in the right it is quite recent, and now, after preservation in spirit, hardly discoverable. The relation between aneurism and syphilis was first pointed out, and has received most attention, in the Army Medical Department; it has not, however, yet been placed upon a sure and undisputed footing. The small statistics that have been given indicate that syphilitic subjects are especially liable to atheroma, and hence with aneurism. But the most prominent supporters of this view also affirm a belief in a syphilitic arteritis, but this does not appear to have much foundation. Although now the part of the relation between them is at least admitted as probable by the majority, yet I think it is still regarded with considerable scepticism by many, and by some even denied entirely. Dr. Aitken states that, out of twenty-six cases in which well marked syphilitic lesions were found, seventeen had more or less severe atheroma of the aorta, and several of them had aneurismal dilations of that vessel. Dr. Davidson states that, out of one hundred and fourteen *post mortem* examinations, he found twenty-two cases of atheroma of the aorta; of these, seventeen had syphilitic history, one doubtful, and four no syphilis. Of the whole one hundred and fourteen, seventy-eight had no syphilis and four had atheroma, or 5.6 per cent.; while twenty-eight had syphilitic histories and seventeen had atheroma, or 60.7 per cent. These, and a few old cases, appear to be almost all the facts that have been recorded on the matter. Unfortunately, it is not easy to obtain statistics on this subject, for often, in cases of syphilis, the condition of the aorta has not been recorded; or again, in aneurism, the question of syphilitic infection has been ignored. Thus, in the last ten volumes of the *Transactions* of this Society, thirty-two cases of syphilis are recorded, but mention of the aorta is only made in seven of these, and in only four is it stated to have been affected by atheroma. At the commencement of this debate, Dr. Greenfield stated, in his careful account of twenty-two syphilitic subjects, endarteritis was present in several; and especially alludes to three females, aged respectively 23, 25, and 35 years. In six cases, which I have had the opportunity of examining at St. Mary's Hospital during the last two years, it was present in four, and in two of them to an extreme degree; the ages of these were 31, 39, 46, and 65 years. In one of these six cases, no special note is recorded about the aorta, and in one it was free from disease. From an examination of the records of *post mortem* examinations at Guy's Hospital, however, extending over the four years 1872-73-74-75, and including 1,797 cases, the following facts present themselves and are of great interest. These cases include fifty-six cases of syphilis, as indicated by the presence of gummata in the liver or testes, or classed under the head of syphilis. In these fifty-six cases, no special note of the aorta is made in twenty-three. In thirteen cases, severe atheromatous disease was present, in seven the aorta was but slightly affected, and in thirteen its condition is described as "good". If, then, we take the lowest estimate, and say that there was atheroma in thirteen cases only, concluding that in all in which it is not referred to the condition was normal, it gives us 23.2 per cent. of syphilitic cases as subject to atheroma. In the remaining 1,741, the aorta is especially mentioned as affected by atheroma. Endarteritis or aneurism occurred in 104, that is, only in 5.9 per cent. of all the remaining cases. This estimate is lower than any other previously given, yet it sufficiently indicates a strong predisposition to aneurism in syphilitic subjects. With regard to the form of endarteritis present in these cases, I have not been able to find any reliable histological observations. Even concerning the small arteries, to which attention has been more especially directed, opinions are divided as to the specific nature of the disease. In two aortas, which I have examined microscopically, the changes found were those usually existing in the degenerative or atheromatous stage of endarteritis. I have not had an opportunity of examining an aorta during the acute stages of the disease. It appears, from the cases recorded, that the endarteritic eruption may be general and extend throughout the aorta, or it may be local and confined to only a small portion; and again, that the aneurisms resulting may be globular, sacculated, and formed of only the external coat, or tubular, numerous, partial, and formed by all the coats. I think, then, we have undoubted evidence that atheroma is more frequent in syphilitic patients than in non-syphilitic; but I think we have scarcely a title of evi-



dence to prove that there is a special syphilitic arteritis, rather than aneurism, which occurs in syphilitic individuals, caused by ordinary endarteritis, to which such cases are specially prone.

The meeting then adjourned.

# ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, FEBRUARY 27TH, 1877.

Sir JAMES PAGET, Bart., D.C.L., LL.D., F.R.S., President, in the Chair.

ON NECROSIS WITHOUT SUPPURATION: WITH A CASE OF INTRA-OSSEOUS NECROSIS OF THE FEMUR, WITHOUT SUPPURATION, FOR WHICH AMPUTATION AT THE HIP-JOINT WAS PERFORMED. BY W. MORRANT BAKER, F.R.C.S.

THE author related the particulars of a case which was admitted into St. Bartholomew's Hospital under his care in August 1872, with the following history. The patient, a man aged 20, was quite well until about ten weeks before his admission, when he began to suffer from pain and swelling in the left thigh. Both pain and swelling gradually increased, until at length, being unable to continue his work, he was admitted into the Holborn Union Infirmary, under the care of Mr. Norton, at whose request he was subsequently transferred by Mr. Baker to St. Bartholomew's Hospital. Before he left the Infirmary, as he was walking in the ward, the left leg gave way suddenly under him, and he fell; and it was found subsequently that the femur had been fractured in its middle third. At the time of the patient's admission into the hospital, there were the following symptoms. The left lower limb, apparently shorter than its fellow by an inch or two, lay helplessly on its outer side, with the leg slightly flexed. In the thigh was a large tumour, hard and incompressible, which occupied the whole of the middle third of the femur, and extended below to within a short distance from the knee-joint, and above to the trochanter. In its middle third, where the swelling was greatest, the femur was considerably deformed by an ununited fracture. The integuments and other soft parts were quite natural. There was neither redness nor œdema; nor could fluctuation, as of confined fluid, be at any part detected; nor were there any constitutional symptoms indicative of inflammation or impending suppuration. The patient was said to have lost much flesh; and he was evidently in process of being gradually worn out by acute pain and sleeplessness. His temperature was below 100 deg. Fahr. The femoral glands were not enlarged. There was no doubt in the minds of all who saw the patient that the case was one of malignant tumour of the femur, and all were unanimous in the belief that nothing short of amputation would give him any chance of relief. The limb was accordingly amputated at the hip-joint. The patient rapidly recovered flesh and strength after the operation, and, in the course of a few weeks, left the hospital well. On dissecting the limb, it was found that the disease was not malignant tumour, but necrosis. Nearly the whole of the femur had perished; and at the seat of fracture there was but little union. But there was no sign of suppuration; and not a drop of pus could be anywhere detected, even after section of the whole length of the bone. In some parts, the dead bone was beginning to separate; while in others it was still immovable. A large quantity of new bone had been produced by both the periosteum and the medullary membrane; and the dead bone was "locked" in a manner which must have rendered futile all attempts to remove the disease by any other method than amputation. The author proceeded to the consideration of the questions which arose with respect to conditions so remarkable; extensive necrosis, without the formation of pus, being so rare as to be almost unknown to surgical pathology. The following were the conclusions to which the various facts and arguments brought forward by the author seemed to lead. 1. Nearly the whole of the shaft of a long bone may perish, and nevertheless, suppuration, after several weeks and months, and possibly even years, may be still absent. 2. Necrosis of a long bone may, in the absence of suppuration, closely simulate malignant disease, even to the extent of undergoing so-called spontaneous fracture; and the latter event may not, for at least many weeks, be followed by suppuration. 3. This apparently strange deviation from the course of the symptoms usually accompanying necrosis is probably due to the fact that the death of the bone is the last of a series of changes of which the earlier consist of chronic inflammation, with hypertrophy and sclerosis. 4. The symptoms of necrosis occurring in the course of chronic osteitis, more especially in adults, may be expected to pursue and do pursue a course which is different, in many respects, from that which is characteristic of the more common examples of necrosis. 5. Suppuration is not an early event, usually, in cases of necrosis from chronic osteitis. 6. In such cases of necrosis, the endosteum as well as the periosteum con-

tributes a large quantity of new bone. 7. It may be well, for distinction's sake, to term this variety of necrosis, in which the sequestrum is enclosed between periosteal and endosteal new bone, intra-osseous necrosis, whether with or without suppuration. 8. There exist cases of intra-osseous necrosis in which complete removal of the dead bone by a surgical operation is, from the nature of its connections, a practical impossibility; and for which, therefore, if the symptoms be sufficiently distressing, amputation is the best remedy. 9. In favourable cases, and when the disease is not extensive, the surrounding parts, after suppuration, may heal, although some dead bone is permanently confined within its new sheath; the separation of the dead from the living being indefinitely postponed. 10. The peculiarity of the case which forms the text of the paper is to be found rather in the variety of spontaneous fracture and of opportunities of examining the bone by section in cases of necrosis from chronic inflammation at an early stage before suppuration has occurred, rather than in the nature of the case itself. The paper was illustrated by drawings and specimens of intra-osseous necrosis, with and without suppuration; and also, for comparison, by illustrations of chronic osteitis, which had led to hypertrophy and sclerosis, but not to necrosis.

Mr. BARWELL had seen examples of the form of disease described by Mr. Baker. The diagnosis was difficult, particularly in the early stage; and the resemblance to malignant disease was very striking, especially when there was much pain and emaciation and the lymphatic glands were enlarged.—Mr. THOMAS SMITH said that some months ago there came under his care in the Children's Hospital a child supposed to be the subject of malignant disease of the femur, increasing rather rapidly. The swelling, however, diminished after rest in bed, but again increased when the child got up and moved about, until it became unable to walk. This alternation took place for two or three months. He showed the patient to Mr. Baker, who believed that the case was very probably one of chronic inflammation with necrosis. The child was sent home, and its father, an intelligent man, was making observations on the effects of rest and motion on the swelling of the limb. Mr. Smith was not inclined to operate in the case unless interference were urgently required. He believed that it would not be possible to remove more than a part of the necrosed bone; and, after all, amputation would probably be necessary.—Mr. JOHN CROSS asked Mr. Baker how he would explain the presence of pain and the formation of a cloaca in his case. He thought that there must have been some effusion.—Mr. BAKER said that no doubt there was some effusion; but not a drop of pus could be found. There was no cloaca in the ordinary sense of the word. There were, indeed, one or two holes, but these were produced in making a section of the bone.

## THREE HUNDRED ADDITIONAL CASES OF OVARIOTOMY: WITH REMARKS ON DRAINAGE OF THE PERITONEAL CAVITY.

BY T. SPENCER WELLS, F.R.C.S.

THE author had arranged in a table, similar in form to those in which he had brought five hundred cases of ovariectomy before the Society between 1859 and 1872, three hundred additional cases, representing the whole of his practice, from the five hundredth to the eight hundredth case; distinguishing the cases performed in the Samaritan Hospital from those in private houses and in nursing institutions. The mortality in the sixth series of one hundred cases was twenty-eight; in the seventh and eighth, twenty-four. This very nearly corresponded with the general mortality in the five hundred cases previously reported. But the author believed that the latter series comprised many more operations, in proportion, performed under very unfavourable or almost hopeless conditions. In many cases, where formerly he thought it right to put so very unfavourable a prognosis before a patient and her advisers that they probably did not desire or approve of operation, he had latterly been encouraged by recoveries in some cases apparently almost hopeless to express a more hopeful opinion; and, although in some cases very unexpected recoveries had been recorded, the result had often been what was feared, and the influence upon the number of deaths in proportion to the recoveries was quite appreciable. The author then discussed the influence of drainage of the peritoneal cavity—this most important of recent modifications of operative procedure—upon the results. He traced the history of the practice from the early days of ovariectomy, when drainage by the ligature securing the pedicle was the rule of practice, to its disuse when the extraperitoneal treatment of the pedicle and the intraperitoneal method by ligature or cautery were very generally adopted. He considered the occasional use of puncture and drainage, with or without simple or antiseptic injections, when called for after operation, to be no foundation for recent recommendations to prepare at the time of operation for drainage or injection in every case. Of the three hundred cases now brought before the Society, he had only made provision for drainage at the time



of the operation in eight; and in only eleven other cases did fluid afterwards escape by opening of some portion of the wound, or by vaginal puncture. In some few of the fatal cases, he thought either primary or secondary drainage might have been useful; but he believed drainage should not be a general practice in ovariectomy, but should be reserved for the exceptional cases where collections of blood or serum might be expected to follow the operation. Mr. Wells then described the different modes of draining, and of using simple or antiseptic injections, reserving for another communication the important question of the more complete adoption of antiseptic precautions before, during, and after ovariectomy.

MR. BRYANT had used drainage in five cases; in four the results was good, and in three of them he had no doubt that it was due to the use of the drainage-tube. There were in the three cases extensive adhesions, the removal of which was followed by much redness of the peritoneum and considerable oozing of blood. He had used a glass tube in three of the cases, and a hardened India-rubber tube in the other.—MR. BARWELL asked how it was known, when a tube was introduced into Douglas's space, that it had actually entered.—MR. THOMAS SMITH said that he could ask Mr. Wells a number of questions, but would confine himself to a few. It was possible that certain statistical results might be obtained at the expense of the sacrifice of the lives of those affected; and such statistics as those of Mr. Wells might lead more timid operators to refuse bad cases, and attempt to obtain favourable tables of statistics—an endeavour which he deprecated. On the other hand, the earlier ovariectomy statistics of the Samaritan Hospital had been compared with those of the large hospitals, to show that, while in the former the mortality had been 21 per cent., in the latter it was 76 per cent. But the success in the general hospitals was not so great then as now; and, further, there were two ways of estimating the fatal results of ovariectomy. In the general hospitals, all the deaths were put down as fatal cases of ovariectomy—there being included under this head three classes: 1, completed ovariectomy; 2, cases where the operation was proceeded with to a certain extent but not complete; 3, cases where only an exploratory excision was made. The statistics of the Samaritan Hospital included only cases of completed ovariectomy. He thought that the rate of mortality would be much increased by taking into account the incomplete operations and exploratory incisions. Again, the experience of one most skilled in the operation was compared with that of various men, some well qualified to perform it, and others as disqualified. There were some things which the general hospitals could do, and some which they could not. They could, no doubt, obtain as good sanitary conditions as at the Samaritan Hospital; but they could not obtain such good nursing and medical supervision. The success at the Samaritan Hospital was a personal success; it depended on experience, on a sound and quick exercise of judgment, on the possession of resources to meet emergencies and of courage to face dangers; and with these there was a modesty which did not seek to make success in ovariectomy an occasion of public display. To these qualities Mr. Wells owed his success; and he had probably done more to diminish suffering than any other man. He would ask whether Mr. Wells introduced the drainage-tube because much fluid was present or because much was expected; and how he would deal with a cyst behind the broad ligament.—SIR JOSEPH FAYRER would like to hear Mr. Wells's opinion on the use of antiseptics in the operation.—MR. HULKE said that some years ago several cases of ovariectomy were performed in the Middlesex Hospital, the patients being placed in the general wards; and all, he believed were fatal. Since the patients operated on had been placed in a special ward, the mortality had been much less; he had had four recoveries out of six operations.—DR. GRAILY HEWITT congratulated Mr. Wells on the success which he had obtained. He had himself done about twenty-five completed operations; but his results, though satisfactory, were less so than those of Mr. Wells. He thought that Mr. Wells was correct in attributing the comparatively high mortality in his last three hundred cases to the large proportion of bad cases sent to him. With regard to the management of the pedicle, he was in favour of bringing it outside the wound. Any room that might exist for improvement of the operation lay in the treatment of the pedicle.—SIR JAMES PAGET said that it was most gratifying to him that, on the last occasion of his presiding at an ordinary meeting of the Society, such a paper as that of Mr. Wells should have been read. He regarded ovariectomy, as practised by Mr. Wells, as one of the greatest achievements of modern surgery; it must be measured not only by Mr. Wells's own success, but by the greatly increased success of all other surgeons. The improvement in ovariectomy had made surgeons much wiser than they previously were on all matters relating to peritoneal surgery; and not only so, but the influence for good had been extended to surgery in general.—MR. SPENCER WELLS, in reply, said it did not follow that, because

a great deal of fluid escaped when a tube was used, as much fluid would collect if a tube had not been used. It was quite possible that the presence of a tube might lead to the secretion of the fluid which escaped, or at least increase secretion. He should not use a tube simply because ascites had been present, or ovarian fluid had been free in the peritoneal cavity. He should restrict its use to cases where the peritoneal cavity could not be completely cleansed, or where some bleeding might be feared after closure of the abdominal wall. If fluid collected some days after the operation, and formed a swelling between the uterus and the rectum, it could easily be removed by a trocar introduced through the vaginal wall. In cases of mesenteric cysts, or cysts of the broad ligament, the treatment by enucleation or by drainage must be decided by the peculiarities of each case. The publication of medical details, in the annual reports of hospitals circulated to the public, was open to very grave objection, and Mr. Wells had opposed the use of such details in the reports of the Samaritan Hospital; but he did believe that they had been of great use in stimulating the surgeons of general hospitals to a generous rivalry; and in proving that, if they did not wish to be outdone by smaller institutions, they must pay equal attention to the sanitary condition of the wards, to the nursing of the patients, and to all the details of management which could influence results. The success in the Samaritan Hospital could not be now, as it might have been before perhaps, what Mr. Smith called a "personal success"; for, out of the fifty-five operations performed in 1876, his colleagues, Mr. Thornton and Dr. Bantock, had contributed fourteen recoveries and only one death; whereas, of his own forty cases in the year, four had died. The practice of grouping together cases of completed ovariectomy with cases of incomplete operations, or of mere exploratory incisions, could not be justified. It would be absurd to say that a patient, who recovered for a time after an incision in the abdominal wall and the escape of some fluid from the peritoneum, was a successful case of ovariectomy—no ovarian tumour having been removed, or perhaps existed. And, whether the result in statistical tables was favourable or the reverse, an incomplete operation should be recorded in a separate list, and should not be allowed to lead to false estimates of the mortality of ovariectomy when completed. The important question of antiseptics in this operation must be left for further observation. Mr. Wells, on completing his eight hundredth operation, had almost decided to try one hundred cases in succession with every antiseptic precaution; and if he had done so, and had attained the same result as he had done without any alteration in his former practice, the conclusion would have been quite startling; for he had done twenty-seven cases since the eight hundredth, and so far not one had died. If this had happened under antiseptics, it would have been almost impossible to resist the conclusion that it was something more than a coincidence. Mr. Wells thanked the Society for the manner in which his paper had been received, and especially thanked Sir James Paget for his very kind remarks, which would more than repay any surgeon for years of hard work.

#### CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 23RD, 1877.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

*Congenital Dislocation of One Knee Forward.*—MR. R. J. GODLEE exhibited a child fifteen months old suffering from this affection, which had been first seen by himself thirteen months previously. The child was well-nourished and well-made everywhere, except at its left knee-joint. Here the ligaments were extremely loose, and the extensor muscles being spasmodically contracted, an actual dislocation of the tibia forwards upon the lower end of the femur had occurred, and great difficulty was experienced in producing any flexion at the joint. The left patella seemed smaller than the right. Mr. Godlee had regarded the case as a kind of talipes, and placed the limb at first on a straight posterior splint. Subsequently an apparatus was adjusted, consisting of a sheath to enclose the thigh, and another to enclose the leg, joined by a bar of metal jointed opposite the knee, and so arranged that the limb could not be quite placed in the position of normal extension. A weak accumulator was placed behind the knee to aid the flexors in overcoming the extensors. The mother was directed to apply friction diligently to the limb. The treatment had answered admirably. Gradually, the spasm of the muscles subsided, and the ligaments of the joint firmer, so that the possibility of hyperextension disappeared. Now, the joint was only a little too movable, and the limb rather weak, yet it was sometimes used as freely as the other leg. Mr. Godlee remarked upon the extreme rarity of this affection, he having only discovered one reference to a case at all similar; that was at page 430 of the first edition of Mr. Hilton's *Rest and Pain*. Mr. Barwell had also this



year a similar case under his care. As to the condition of the crucial ligaments, they were probably at first much extended, and had since undergone contraction. He thought some form of treatment should be adopted in the earlier stages, and that the condition was one of spasmodic muscular contraction.

*Hydatid of the Lung.*—Dr. GREENFIELD related a case which was cured by evacuation of the cyst through the bronchi. The patient, a girl aged 17, came under his care in March 1875, suffering from pulmonary symptoms of four years' standing, for which she had been at times under treatment, the symptoms being ascribed to phthisis. When first seen, she was complaining of return of cough, expectoration of offensive fluid, and pain in the right side, and had had slight hæmoptysis. The expectoration had come on suddenly four days previously. The physical signs pointed to a loculated empyema situated towards the lower part of the right lung, which had formed a communication with a bronchus. There were, however, none of the associated symptoms of chronic empyema. Dr. Greenfield proposed to perform paracentesis; but, before arrangements could be made, the patient, three days later, had a sudden attack of cough, followed by impending suffocation, and then brought up a large piece of hydatid membrane, forming an almost complete cyst, of the size of an orange, and then a teaspoonful of blood. She continued to expectorate pieces of membrane for about ten days, and then the physical signs of a large cavity in the region of the angle of the right scapula appeared. There was no subsequent rise of temperature; and the physical signs, with the exception of those indicative of a large cavity, entirely disappeared, the patient making a rapid recovery. Since that time until lately the patient had been in good health, but the signs of a cavity had persisted in a gradually narrowing area, corresponding with the upper part of the lower lobe of the right lung. Recently some indications of fresh enlargement and surrounding inflammation had been observed. Dr. Greenfield remarked that, though the occurrence of hydatid cysts in the lungs was comparatively rare, and, according to the authorities, the evacuation and cure of the cyst by perforation into a bronchus still more so, the number of cases recorded probably did not represent the relative frequency of the affection. The diagnosis between hydatid cysts in the lung itself and in the liver perforating the lung, when the cyst was in the lower lobe of the right lung, was in some cases a matter of difficulty; but he relied upon the general course of the symptoms, the position of the cyst as indicated by the physical signs, and especially on the complete evacuation and absence of bile-staining of the membrane. By an analysis of recorded cases, he showed that hydatid cysts of the lung were not most frequently found in the lower lobe of the right lung, but occurred with equal frequency in the upper lobes and in the left lung. The prognosis, after complete evacuation of the cyst, was generally regarded as favourable, but there was danger of the presence of another cyst, the recurrence of inflammatory changes around the old one, and possibly of the production of aneurism of the pulmonary artery by traction of the contracting cyst-wall or by the loss of resistance due to its presence. The fact that there were some indications of the possible presence of another cyst would lead him to watch the case carefully, and, if necessary, to try the effect of exploratory puncture.

Dr. DUFFIN said that Dr. Bird of Melbourne had recorded thirty cases, the majority of which occurred in the right lung, and simulated phthisis at the early stages. The disease, in fact, was so common in Australia that if, in a supposed case of phthisis, the apices of the lungs were found to be free from disease, the query was at once suggested as to whether the case was not one of hydatid. As regards the symptoms of hydatid disease of the lung, the dullness over the tumour was found to be tolerably sharply defined, and generally the upper border of the dull space was semilunar-shaped, whilst below there was usually a margin of good lung between the cyst and the diaphragm. Hæmoptysis, usually of pure unmixed blood, to the extent of two, three, or four ounces, in these cases was very common. The treatment usually adopted was early puncture with a trocar and cannula, in order to obtain some fluid for testing. Dr. Bird had punctured even when no hydatid was present, and had not produced any injury to the lung. He prevented the cyst from breaking into a bronchial tube, and establishing a communication with it. This treatment was as safe as puncture of the liver.—Dr. CAYLEY thought there was one reason for believing the hydatid had not sprung from the liver, viz., the fact that the liver was never found to be enlarged. He himself had seen three cases in which hydatids in the liver had escaped by the lungs, and in all those the liver was much enlarged.—Dr. CADDY related a case, narrated to him by a doctor in Rio Janeiro. It was a case of hydatid, in which the doctor cut through the abdominal wall and removed the hydatid. The patient subsequently was doing well, when he died of yellow fever.—Dr. BUZZARD had also read the pamphlet of his friend Dr.

Bird of Melbourne. He himself had seen one case in which the hydatid of the liver ulcerated through into the lung and was coughed up, and passed into the stomach and was vomited. The case was fatal. In reference to the question of early puncture, he advocated the use of a strong long trocar, of extreme fineness. The entrance of air by the side of the trocar must be avoided; and when the fluid in the cyst began to flow, the mere expansion of the lung caused the fluid to flow away through the instrument. With the aspirator, the force used was sufficient occasionally to dislocate the cyst.—Dr. COUPLAND said that Dr. A. W. Hearn of Paris, in a pamphlet published last year, analysed many cases. He was led to do this by having a case before him in which the patient, who was supposed to be phthisical, died from suffocation by the cysts. He advocated galvano-puncture, as recommended and accomplished by Fagge and Cooper Forster, in hydatid of the liver.—Dr. GREENHOW said cases of hydatid of the lung were very rare in this country. In reference to the membrane expectorated, he thought that it did not appear to have come from the liver, because it was not stained. He referred to the case of a girl who, having had hydatid of the liver which had been punctured, and who had recovered, returned several years afterwards to the hospital with supposed phthisis. She, however, spat up hydatid membrane, had hæmoptysis, and again recovered. He remarked that hydatid of the liver was almost always cured if punctured with a slight trocar. The simple pressure of the surrounding parts, when its own fluid was evacuated, seemed to be quite enough to kill the creature. But the girl he had mentioned had cysts in the lung, which were coughed up many years afterwards. If in the future the symptoms of limited dullness, of the sound breathing coming quite down to it, and so on (as had been detailed in Dr. Bird's pamphlet), concurred in any case to make him think he was dealing with hydatid of the lung, he should proceed at once to tap the cyst.—Mr. MAUNDER said that, as the physicians who had spoken regarded the subject under consideration as a rarity, and as he had come there to be confirmed or otherwise in his belief concerning the cause of death of a member of the profession, the late Dr. Day-Goss, he would occupy their time for a moment. The diagnosis had been spoken of as difficult; but, after listening to Dr. Greenfield's very exhaustive paper, as well as to the remarks of Dr. Duffin, he felt confident that Dr. Day-Goss had been the subject of hydatids of the right lung. He detailed the symptoms in support of his opinion; but, as Dr. Day-Goss had died two hundred miles from London, he had not had the opportunity of making a *post mortem* examination.—The PRESIDENT had chanced, six years previously, to cut out a hydatid from the pleural sac. Upon removing a piece of it carefully through the opening that had been made, the rest of it rushed out, the patient made an excellent recovery, and was now well. He inquired if any good explanation of the hæmoptysis had been given. Why, in such cases, did it occur? Was there any statement as to the comparative frequency of hydatids in the right and left lung respectively? This would be interesting in respect of the supposed origin of hydatids in the right lung from the liver.—Dr. DUFFIN said that the source of the hæmorrhage was to be found in the gradual expansion of the cyst itself, which produced stretching of the lung-tissue. The hæmorrhage was pulmonary rather than bronchial. Dr. Bird did not mention that the hydatid membranes, coming from the right lung, were more pigmented than those from the left lung.—Dr. GREENFIELD, in reply, said he had not been able to find a copy of Dr. Bird's pamphlet, although he had searched for it. These cases of hydatids in the lung were only common in Victoria, not in Sydney; whilst, even in Victoria, hydatids were far more frequently found in the liver than the lung. Although he himself had seen several cases, during the last four years, of hydatids of the liver breaking through the lung, he had not seen, in the *post mortem* room, a case of primary hydatid in the lung. In one case of cyst of the liver, the hydatid pressed up the diaphragm and right lung to such an extent that the patient died of want of breathing space; as in that case, the liver barely extended below the ribs, he could not agree with Dr. Cayley that, in hydatid of the liver, the liver was always to be felt enlarged below the ribs. In another case of hydatid, supposed to be an empyema, the cyst had burrowed down by the side of the kidney, and proved rapidly fatal. Hydatids of the liver did not necessarily depress the liver. When the hydatid was situated at the back of the organ, it pushed the liver forward, so that it became prominent. As regarded the colour of the expectoration, when the cyst was expectorated from the liver the membrane was bile stained. In the absence of a *post mortem* examination in the case mentioned by Dr. Greenhow, it was probable the second cyst was originally in the lung itself. In a case, under the care of Dr. Peacock, in which there had been previously a hydatid in the abdomen, and which was sent into hospital for supposed phthisis, accompanied by red streaked sputa, a cyst in the abdomen was discovered and punctured, and the patient recovered. Usually,



the membrane of a liver cyst, escaping through the lung, was spat up in a broken-down condition. As regarded the use of the aspirator-needle, or the trocar and cannula, Dr. Stone had described the tension upon the wall of hydatid and other cysts to be great, and quite sufficient to force the liquid from the cysts when once they were pierced. In any other case in which the symptoms of hydatid were marked, he would explore at once. He should be glad to hear if any members knew of cases in which aneurism of the pulmonary artery had occurred in the cavity remaining after the evacuation of hydatids of the lung.

*Aneurism of Popliteal Artery: Ligature of Femoral Artery: Recovery: Death on Twelfth Day after Operation from Embolism of Basilar Artery.*—The report of this case was read by Mr. A. T. NORTON. The patient, aged 40, had aneurism of the popliteal artery, for which flexion of the knee-joint and the application of a tourniquet to the femoral artery were tried as methods of treatment, but without success; the femoral artery was then ligatured at the apex of Scarpa's triangle with carbolised catgut, one end of the ligature being allowed to remain external to the wound. The wound healed by the first intention, with the exception of a small pin-hole aperture, through which two or three drops of almost clear fluid were pressed each morning; but altogether the discharge was not more than about a drachm, and no induration occurred along the course of the vessels. On the ninth day, there was natural pulsation at the ankle and foot. On the twelfth day, the patient was doing very well, and had enjoyed his breakfast, when, without warning, he became unconscious, and was found to be very pale. He soon became conscious, spoke, and turned in bed, so that he was not paralysed. However, he again relapsed into pallor and unconsciousness, and died. The whole period of time from comparative health to his death was only a few minutes. From the nature of the symptoms, Mr. Norton gave the opinion that a clot had been thrown into a cerebral vessel, hence the first attack of unconsciousness; that the collateral circulation was at once established—a proof that the clot had not passed beyond the circle of Willis; that, with the return to consciousness and consequently improved action of the heart, the clot was driven onwards to a position in which no collateral circulation could readily take place. At the necropsy, a whitish clot was found occupying the basilar artery to its bifurcation, and the right vertebral artery for about a third of an inch. The right vertebral artery was less than half the size of the left; the brain-substance was healthy, but all the large cerebral vessels showed patches of atheroma. The aorta was thickened and dilated, and had its inner wall roughened with atheroma. The mitral valve was thickly fringed and in part calcified. In the femoral artery, a clot three-quarters of an inch long was adherent above the ligature, and there was another half an inch long below the ligature. No particle of the ligature remained. The inner coats of the vessel had been ruptured by the ligature, but the outer coat had not sloughed through. The aneurism had diminished in size, and its interior was occupied by a firm clot. The femoral vein was healthy. The clot had evidently travelled upwards through the right vertebral vessel, which was small, and in which it lodged for a little while. Being then driven into the basilar artery, it blocked all its branches and caused instant death. The formation of the clot might be referred to the diseased condition of the mitral valve. The operation itself might be said to have been a complete success, as the patient had entirely recovered from its effects. The treatment throughout the operation was antiseptic, but the spray was not used during the dressings.

In reply to the President, Mr. NORTON stated that there was no clot in the femoral vein; and that the clot in the basilar artery bulged the wall of the vessel. In reply to Mr. T. Smith, he said that the inner coats of the femoral artery were completely divided; the external tunic was not divided; and he did not use the Lister spray at the time of the operation. No particle of the ligature was discoverable at the *post mortem* examination.—Dr. BARLOW inquired whether the plugging was really a thrombosis, or a clot collected upon an atheromatous patch in the vessel.—Dr. GOODHART inquired as to the condition of the femoral artery itself. In the literature of aneurism, one found several cases of the disease leading to embolism. What was the state of the brain, and of the popliteal vessels?—Dr. COUPLAND asked if embolism of other arteries, as of the spleen or kidney, was found.—Dr. GREENFIELD said the state of plugging and bulging of the vessel was more likely due to thrombosis than to embolism. Was the condition of the left auricular appendix examined? He had seen two cases in which embolic plugs had originally clotted in the left auricular appendix, whence they had been washed into the circulatory stream.—Dr. DUFFIN mentioned a case of embolism of the basilar artery in which the respirations were exceedingly rapid, viz., over 100 per minute. The man had complete coma, which supervened with extreme rapidity. His pupils were small, and he had lived twenty-four hours from the commencement of the seizure. If this very great rapidity of respirations were usually found in such

cases, it might, when present, enable one to localise the embolism or thrombosis.—Dr. GLOVER inquired to what the embolism was due.—Dr. DUFFIN stated that the patient had confirmed syphilis, and probably disease of the basilar artery itself.—Mr. T. SMITH thought the carbolised catgut ligature scarcely sufficient for such a case. The tail came away before five days were accomplished, and the coats of the vessel were not completely divided. He thought it was not an entirely safe material for the ligature of a large vessel. It had occurred to him, after ligaturing the femoral artery with catgut, to find, after forty-eight hours, the pulsation return in the parts below. It might be remarked that he had tied a "granny"; but if so, he had tied "grannies" on all arteries. But the truth was, surgeons did not tie "grannies". The knot had slipped. A patient of his had had one aneurism cured by ligature with catgut, and had had another aneurism arise at the site of the operation in the thigh.—Mr. NORTON said there could be no doubt that the clot was embolic, and not a thrombosis; for it bulged the vessel, the walls of which were not thickened, except in parts by atheromatous deposit, like all the other vessels. Furthermore, the clot was not attached to the vessel, for its walls could be freely moved over any part of the enclosed clot. He had not examined the appendix auriculæ. The femoral artery was thickened. He did not know if the respirations were increased before death.

#### HARVEIAN SOCIETY OF LONDON.

THURSDAY, FEBRUARY 15TH, 1877.

T. CARR JACKSON, F.R.C.S., President, in the Chair.

*Abdominal Tumour.*—Dr. DE GORREQUER GRIFFITH related three cases of abdominal tumour removed by laxatives and enemata. One occurred in an old lady aged 80. Very careful examination was necessary in these cases.—After some remarks by the President and Mr. Osman Vincent, Mr. MAUNDER stated that he first used forcible dilatation of the rectum in 1866 in three cases.—Mr. EDMUND OWEN deprecated the practice.—After some remarks as to the value of olive-oil as an enema, Dr. GRIFFITH replied.

*Knock-knee.*—Mr. OSMAN VINCENT read a paper on knock-knee: its anatomy, pathology, and treatment. He said it was never a congenital, but always an acquired, affection. It was most commonly found amidst the children of the poor, especially when a fat child was encouraged to walk before its limbs were strong enough. It also was produced by standing too many hours, and by carrying weights, as with bakers. It was not always found in both limbs. Some distortion of the spine was at times produced. The treatment divided itself into three parts: 1. The removal of the superincumbent weight; 2. The straightening of the limb; and 3. The constitutional treatment. For the first, confinement to bed was essential. This was often opposed from prejudice. For the second, outside splints to each limb, with a back strap to keep them in position, were desirable. The trough-splint for three or twelve months was sufficient for almost all cases. Some after-treatment might be indicated. For the third indication, sea-air, steel, phosphate of lime, fats, and especially cod-liver oil, were necessary. Section of the hamstring tendons was very rarely required. Steady pressure was always sufficient, if there were no nervous spasm present.—After some remarks by the President and Mr. Fisher, Mr. RAYNER said that the plan of tying the ankles together at night with a pillow between the knees was efficient. In one case, the opposite condition of "bow-leg" was thus brought about.—Mr. MAUNDER related a case where section of the femur by the chisel was successful in remedying an old-standing case of knock-knee. It commenced usually in some trick or habit.—Some remarks were then made by the President, Mr. Edmund Owen, Mr. H. Casson, Dr. Ashburton Thompson, and Dr. Griffith about the effects of imperfect nutrition from insufficient or unsuitable food in the production of this morbid condition; after which Mr. VINCENT replied, and the meeting adjourned.

#### PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, JANUARY 20TH, 1877.

THOMAS HAYDEN, F.K.Q.C.P., President, in the Chair.

*Puerperal Peritonitis, Pyæmia, Uterine Diphtheria.*—Dr. LOMBE ATTHILL showed the uterus of a well-nourished woman, who had enjoyed good health up to the day of her confinement. Labour came on after a violent rigor, which obliged her to go to bed. The case was one of breech-presentation; the labour was an ordinary one, but the child was born dead. One of the woman's ankles quickly became puffy and swollen, with slight redness. She died on the fourth day after delivery. At the necropsy, seven hours after death, a flaky



purulent fluid was found in the peritoneum, the uterus was congested, and its os patulous. A diphtheritic membrane lined the interior of the uterus. There were evidences of pyæmia.

*Double Aortic Aneurism.*—Dr. GRIMSHAW showed the spinal column, side, and thorax of a man who died on January 1st, 1877, after many months of illness. He had originally suffered from dysentery and ague. A pulsating tumour appeared under the left scapula, and a double murmur became developed in it. Ultimately, a mitral regurgitant murmur became audible at the apex of the heart. Œdema of the feet, hæmoptysis, and hæmorrhagic infarction of the right lung subsequently occurred, the double murmur in the aneurismal sac meanwhile subsiding in intensity. After death, the right lung throughout two-thirds of its extent was found in a state of hæmorrhagic infarction. The heart was much distended. The pericardium was adherent. There was no valvular disease. A large aneurism sprang from the descending thoracic aorta corresponding to the ninth, tenth, and eleventh dorsal vertebræ. A second smaller aneurism existed at the left end of the transverse portion of the arch. The aorta was lined with calcareous plates and projecting spicula. The sac of the lower and larger aneurism had almost made its way into the spinal canal. A large coagulum in the sac accounted for the lessening of the double murmur observed during life.

## REPORTS AND ANALYSES

AND

### DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

#### HOOPER'S ELASTIC WATER-MATRESSES, ETC.

MESSRS. HOOPER AND CO., Pall Mall, show inexhaustible ingenuity in providing for the wants of invalids by their elastic water-matresses, hydrostatic beds, and water-cushions. Many of these are now in universal use, and are so constructed that the mattress or cushion may be used on an ordinary bedstead, sofa, or couch, or in a railway- or invalid-carriage. In cases of paralysis, disease of the spine, or other injury from incapacitating accident, and also where the natural functions are performed involuntarily, their central-tube air- or water-mattress is especially useful. The latest of their improvements which has been brought under our notice is the lever invalid bed-lift, or elevating bed- and water-mattress. The bed on which the patient lies is easily elevated, since its framework moves upon parallel levers, without pulleys, cranks, or wheels; thus the invalid is, without fatigue to himself or the attendant, easily raised for the use of the bed-pan, for washing, or for ventilation and adjustment of the bedding. The back and head are also readily elevated when a change of position is desired. The introduction of these various contrivances into private and hospital practice has conferred a great boon on the sick.

#### OPIATINE.

UNDER the name of opiatine, Messrs. Gale and Co., wholesale chemists, 15, Bouverie Street, Fleet Street, London, E.C., have introduced a preparation, containing a combination of morphia and codeia, freed from the odorous and inert principles—the resin, oil, and impurities of opium—and in which the active constituents are in an uniform, concentrated, and reliable condition. Such a preparation has for the practitioner an obvious advantage. Crude opium and its various extracts are often found to produce much disturbance of the general system. This preparation, on the other hand, does not, it is alleged, cause headache, giddiness, constipation, or other objectionable symptoms characteristic of the ordinary preparations of opium. Nevertheless, it possesses all the anodyne, soporific, and anodyne properties of opium. Such a preparation has an obviously useful function, and is likely to be welcomed.

#### BRAVAIS' DIALYSED IRON (FER. BRAVAIS).

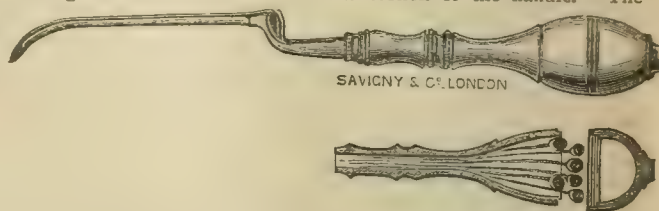
WE believe this to be a remarkably valuable, as it is certainly a highly ingenious and physiologically good, preparation. It has been introduced into practice by an accomplished physician, Dr. Gibert of Havre. It is a neutral solution of peroxide of iron in the colloid form, all acid having been abstracted by dialysis, and may be considered as the nearest approach yet made to the form in which iron exists in the blood. It is a strong solution of iron, and yet is almost tasteless, and has all the good effects of iron without producing constipation or disturbing

the digestion. It does not blacken the teeth. An eminent London physician writes to us: I have tried it extensively, and given it in cases in which no other form of iron could be taken. It is the best preparation of iron I have met with. The agents for it are Messrs. Burgoyne and Co., wholesale druggists, 16, Coleman Street, London; and Messrs. Roberts and Co., 76, New Bond Street, London.

#### NEW NEEDLE FOR CARRYING A DOUBLE WIRE SUTURE.

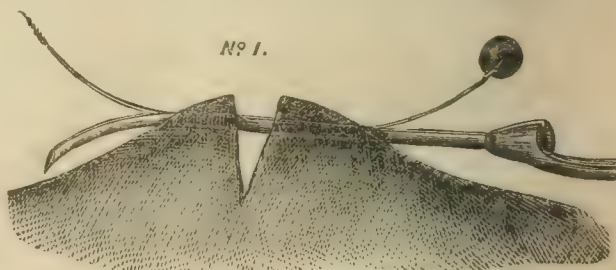
By RICHARD DAVY, F.R.C.S., Surgeon to the Westminster Hospital.

PRACTICAL experience for nine years in the use of the tubular needle in operations enables me to speak with confidence of it. My present object is to introduce a modification for the double wire suture, which some surgeons prefer for amputations, hare-lip, deep wounds, perineal operations, etc. I have used the present needle in a variety of operations for the last two years, and am pleased with it. This drawing illustrates the needle and a section of the handle. The



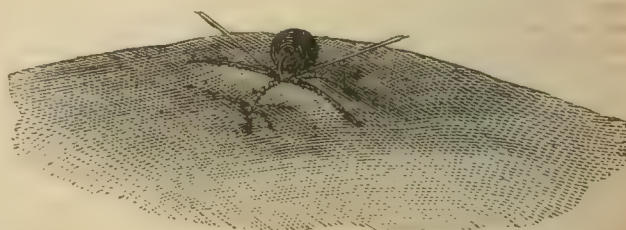
handle consists of a cylindrical box for the beaded wire sutures. The actual needle is slotted throughout its entire length. This slot is necessary for the transit of the bead along the needle, and for perfect washing after use. Complete tubes, especially if small, are difficult to clean thoroughly. The instrument makes an exceedingly good grooved director.

Each wire suture has at one end a black bead (actual size shown below). Through its eye is passed a stout silver or iron wire; a twist of the wires succeeds to the bead; then the two wires are separate and run parallel; lastly, there is another twist of the wires for a finish. The mode of inserting and fixing these sutures is shown in Nos. 1 and



2. By this mechanical arrangement, there can be no danger of the suture being buried by reason of subsequent swelling or scabbing; unfolding the wires permits tightening or relaxation, as occasion may require; the eye of the bead admits a tenaculum—by far the best

No 2.



suture-holder, when the stitch needs removal; and so coadaptation of parts or ablation of wires is easily carried out at the surgeon's discretion. Any variations of securing the wires may be left to the operator's ingenuity.

Messrs. Blaise and Co., of 67, St. James's Street, S.W., manufacture the instrument and sutures.

## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, MARCH 3RD, 1877.

### MR. HARDY ON THE ARMY MEDICAL DEPARTMENT.

A FEW evenings ago, the Right Honourable the Secretary of State for War, in reply to a question by Dr. Lush respecting the paucity of candidates for commissions in the Army Medical Department, remarked that he did not consider fifty-six candidates a small number to have presented themselves since August last. He added that thirty-three candidates had passed through the Army Medical School in the present month (February), and that twenty-three more were then under examination. Altogether, the tone of Mr. Hardy's reply to Dr. Lush led to the inference that he regarded the state of things in the Army Medical Department as sufficiently satisfactory. Three evenings before, in answer to Mr. Dunbar, Mr. Hardy had said that twenty-three candidates had presented themselves for fifty appointments offered for competition in the Army Medical Department, while forty-nine candidates had presented themselves for twenty-seven appointments in the Indian Medical Department.

It is not to be expected that a minister of state will publicly announce that affairs are in an unsatisfactory condition in a section of the department over which he presides, more especially when changes have recently been introduced by him into that departmental section to which possibly the unfavourable state of things may be chiefly due; but, when we examine Mr. Hardy's two replies side by side, the fact, nevertheless, is as apparent as if he had announced it. Fifty appointments in the Army Medical Department are offered for competition (how many vacancies there may be in the department is not mentioned), and only twenty-three gentlemen can be found to bid for the offer. Of course, competition is out of the question. On the other hand, twenty-seven appointments are offered in the Indian Medical Department, and yet, with all the drawbacks of continual service in a foreign country, and that a tropical one, forty-nine gentlemen seek to obtain them. Here there must be competition in reality. Surely, the unsatisfactory state of things in respect to the Army Medical Department is manifest enough. But it becomes still more obvious when we observe what the professional acquirements are of the gentlemen who are entering the respective branches of the public service, the Indian and Army Medical Departments, as shown by the results of the examinations to which they are subjected. The marks showing the results of the examinations in London in the autumn of 1876, and at Netley in the present year, of the thirty-three candidates who, Mr. Hardy mentioned, are about to receive commissions in the army were published in the JOURNAL of February 10th, and by their side were also published the marks gained by the candidates for the Indian Medical Service at the same examinations. On that occasion, the Indian Government had only twelve vacant appointments to offer for competition. A comparison of the marks allotted to the gentlemen entering the respective services shows that, whereas the average number gained by those of the Indian Medical Service was over 4,800, the average number gained by those of the Army Medical Service was only 3,570, or 1,230 marks less. This points to a very important difference in the manner in which the test by examination was responded to.

The inquiry naturally follows, Why does the Indian Medical Service not only attract the best informed young men of the medical profes-

sion, but also attract them in a greater number even than the demand, while the Army Medical Service cannot get what it requires even of a lower professional standard? We can readily understand why there should be a difficulty in finding surgeons sufficient for the naval medical service. The very nature of a sea-life and the confinement are objectionable to many men, particularly when they have not been trained to it from boyhood, as officers of the combatant classes in the navy are. But, between the Indian and Army Medical Services, all might at first appear to be in favour of the latter. The banishment, the prolonged tropical residence, the risks of sudden and fatal disease in India, are circumstances that cannot be overlooked by anyone who adopts the Indian service for his career. On the other hand, every one may observe how enviable a career in the home army, with its aristocratic and highly honoured associations, appears to be to some persons from the hundreds who are always ready to strain every effort in competing for the tens of combatant appointments which are offered from time to time in it. Why the difference in the medical service of the army? Mr. Hardy says that "India, being the best paid, of course, monopolises the largest share of medical men". No doubt, there are valuable prizes to be gained in India by those who show they have the ability and industry to obtain them; but we believe that, on the whole, what with expenses in India itself and the expenses too often incurred of families divided between India and England, the gain in pay is not found to be very great after all; at any rate, not more than will compensate for the different conditions of life and exposure. We are confident that mere difference in pay will not account for the different attractiveness of the two services. Some say the great drawback of the Army Medical Department is the discontinuance of the old regimental system; but there is no regimental system in the Indian Medical Service, such as there was in the English service when medical officers were commissioned for particular regiments and formed an integral part of them. It must be admitted, too, that material advantages have been gained for the medical department of late. The medical officers have been acknowledged to be staff-officers, and thus have obtained higher rates of allowances; the regimental mess and band contributions, which had come to be felt an injustice, have been abandoned; we are told that home and foreign service have been much more fairly distributed of late; promotion has been made certain after twelve years' service to the surgeons now in the ranks of the department, and generally accelerated by forced retirement of the seniors at earlier periods; and higher rates of daily pay have been offered to those who will join its ranks in the future. But another change has been made in the Army Medical Department which we have not yet mentioned, and this change now forms a most essential difference between it and the Indian and Naval Medical Services. It only offers a career for ten years; the others offer a career for life. Such a difference as this cannot fail to be considered by all thoughtful persons who are about to make their great professional start in life, and not only by them, but also by those who have had the expense and responsibility of preparing them for it. Is it reasonable to suppose that parents and guardians will advise young men whom they have provided with the necessary means for a lifelong career to enter a service from which they may find them thrown back on their hands at the end of a term of ten years? Although a bonus may be promised at the end of the period, who can say it will not be forestalled? And what young man of good acquirements, and ambition to rise in the sphere of life he has chosen, will be content to embark in a ten years' pursuit with the knowledge that, at the end of the time, he will in all probability have to make a fresh start in a new career?

As to the Army Medical Service itself, the plan seems a fatally damaging one. The ten years passed by a surgeon in it will inevitably be regarded as a period of transition, a mere passage to the place where the real work of life is to be done. He will find himself one of a society, but without any community of interests. The system ensures a complete break-up of all the fellowship and associations that have hitherto existed between the army and its surgeons. In only one



respect is there any gain, and that is the financial one; but, even in this regard, looking at the general results of the scheme, we believe the saving will be found to be in the end penny-wise but pound-foolish.

We have now pointed to what appears to us to be the chief cause of the dearth of applicants of merit and ability for appointments in the Army Medical Service, while more than sufficient are found to fill the vacancies in the Indian ranks. We do not say there are not other causes for the existing state of things, but we feel assured none are equal in potency to the unfortunate recent change in tenure of commission upon which we have animadverted.

### RESPIRATORS.

THE great drawback to respirators is their unsightliness. The black patch across the mouth cannot be rendered becoming by any artifice, and there are but few persons with whom it does not distinctly constitute a species of disfigurement. It is very unfortunate that such should be the case, for the respirator is an exceedingly useful little instrument. It is also unfortunate that respirators are associated in the minds of many with phthisis; and there exists with most people a strong objection to be thought the subject of that grave affection. Such are the two chief objections to the respirator; and they are both based on an æsthetic foundation.

The respirator must be worn to be appreciated. It will then be found to be a great protection against affections of the respiratory apparatus. The inference, that if it be desirable as furnishing some protection to lungs no longer in their integrity, therefore it will be useful in protecting delicate organs from becoming the subject of disease, is not a difficult one to draw. Nevertheless, many prefer to run the risk of bronchitis, and to take their chance of escape, rather than to resort to this ingenious but unsightly preventive agent. In the writer's own experience, the respirator has been the means of avoiding the persistent winter cough, with expectoration, which used to come on with the cold weather and stayed till the more genial temperature of spring. It was originally purchased during the course of a troublesome visitation of bronchitis in a subacute form, and in very severe weather. The relief experienced was immediate and pronounced. It was soon found, too, that resort to it very often kept off the exacerbations from transient causes, which would otherwise have been produced. For instance, on cold evenings, after leaving a warm fireside to take the train along a cold river side in order to reach home, an exacerbation very frequently was induced. The rapid change of temperature from the warm room to the cold outer air and the chilly railway carriage, caused a hyperæmia of the lining membrane of the air-tubes, which gave rise to an abnormal production of mucus, and this again to a series of expulsive movements to get rid of it. The respirator obviated all this by making the change of temperature less pronounced. The warm expired air heats the metal plate and the wires of the respirator, and on the inspiration of the cold air it becomes warmed by taking up this heat from the metal; and thus the extreme variation of temperature in the air inspired is obviated. This is one very important matter in the avoidance of winter bronchitis, as well as in the treatment of an established bronchitis.

Doubtless it will be objected to this, that it is not necessary to breathe through the mouth; that respiration should be conducted by the nose; but nevertheless it is a fact, that a great deal of respiration is carried on by the mouth, especially during conversation. If such were not the case, the respirator would be of little service—that is, the ordinary respirator, not that which covers both nose and mouth. For the purpose of warming the respired air, the nostrils contain each a plate of curled bone, covered with a highly vascular membrane, through which the air is drawn. The consequence is, that the air is warmed by contact with the arterial blood which courses along the vessels of the membrane, and which is of the temperature of the body, 99 degs. Fahr. So warmed, the air does not excite undue hyperæmia

of the air-tubes in the thorax. But if the respired air be taken in by the mouth, no such warming process is undergone by it, and then the temperature of the air in the air-tubes is lowered, and hyperæmia of the lining membrane of the air-tubes and their terminal sacs is set up; very frequently in the more or less persistent forms of bronchitis, or of pneumonia. The great danger of tracheotomy is the inflammation of the lungs excited by the air breathed through the tube inserted into the windpipe not being warmed, as it normally is in the nostrils; and, to avoid this disaster, the room in which the patient lies is kept at a high temperature, and the air is artificially moistened. Bronchitis commonly ensues when a child is taken out into the cold air, and from any cause commences to cry. It is very pitiable to see the little creatures drawing in at every inspiration the cold unwarmed air by their mouths, and to realise what the probable consequences will be. But the same dangers exist for adults; and a great deal of the thoracic disease of cold weather would be obviated and avoided if means were only taken to secure some heating of the air which is taken in by the mouth, so that its temperature might approach that of the air inspired through the nostrils. Healthy adults feel the advantages to be derived from resort to the respirator; and for elderly people, for children, and for invalids, is invaluable.

There are other conditions where the respirator is very useful as a preventive of disease. In fogs, the black carbonaceous particles are most irritant to the lining membrane of the air-tubes, and a secretion of mucus is Nature's method of sheathing the tender membrane against these irritant particles. Many of them are caught on the sides of the nasal air-passages, while others become entangled in the mucus of the bronchi and bronchiæ; as is evidenced by the black colour of the expectorated phlegm. In such fogs, many of those who do not resort to respirators, will be found with their handkerchiefs over their mouths, converting that useful article into a makeshift respirator. The particles are largely intercepted by the respirator *in transitu*, and still more if the respiration be carried on through it chiefly, and but to a small extent through the nostrils; and much annoyance can thereby be avoided.

The respirator is exceedingly useful, too, under the following circumstances. In cold winds—especially when facing them—the cold air finds its way into the mouth at every opportunity, and so communicating with the air respired, or the residual air in the thorax, lowers its temperature, and then hyperæmia of the lining membrane of the air-tubes is induced. The respirator will be found a great preservative under such circumstances, and will prevent many a cold, or sore throat, or hoarseness. In driving in cold weather it will be found to be very comfortable at the time, and desirable in its protecting power against unpleasant after-effects; also, in walking out with companions when talking is necessitated, the respirator will be found very agreeable by those who find the cold air, so breathed, to produce disturbances in the respiratory apparatus.

In addition to what has been written above, the respirator fulfils another function. It conserves a great deal of the heat lost in expiration. The air expired is at, or nearly at, the temperature of the body, and, if the respired air be at 30 deg. Fahr., the difference amounts to 65 or 70 degs. This means a considerable loss of heat, and in cold weather, with many organisms, it is very desirable to economise this loss, or to utilise the heat and prevent its being wasted. The respirator does this to a very considerable extent. The hot expired air raises the temperature of the metal work in the instrument, and thus conserves the heat and gives it off again to the cold inspired air. So much heat is thus economised, and the saving is equal to so much warm clothing, the purpose of which is to diminish heat-loss, or save so much more heat-production. The respirator, indeed, often confers as much sense of warmth as is given by a great coat of moderate dimensions. Especially is the functional usefulness of the respirator valuable for ladies driving out for an airing in cold weather. Accustomed as they are to live in highly heated apartments, they readily lose heat when exposed to cold, and no amount of warm clothing, car-

riage-rugs, furs, foot- and muff-warmers, will keep them comfortable when out driving. The loss of heat by the expired air exceeds that produced by the action of the heart and the muscles connected with respiration, and so they chill in spite of their numerous wraps, and the ancillary aid of artificial heat. Any amount of heat produced by the muscular efforts concerned in speech is as nothing to the local effects of cold air taken in by the mouth. For such persons, notwithstanding its unsightliness, the respirator is invaluable—if they could be prevailed upon to make use of it. Indeed, in cold weather, there is less loss of heat experienced in breathing through a respirator than through the nostrils, and so it becomes a direct advantage. In breathing through the nostrils, the heat given off from the warm blood to the cold air must be furnished by so much more oxidation in the system, and is, in so far, a direct expenditure, however useful; while in breathing through the respirator, the heat of the expired air—which otherwise is entirely lost or wasted—is caught by the metal work of the instrument, and given back to the system by the air inspired. For those, then, who are readily chilled on exposure to cold, and especially where great loss of heat is experienced while there is little production of heat, as where muscular exertion is wanting, the respirator will be found exceedingly useful and comfortable. How far its objectionable appearance could be mitigated by substituting some other coloured material for the conspicuous black hitherto used—say fawn or cream-coloured material—it is impossible to say. Something might be done in that way, and the makers of respirators are quite welcome to the hint if they choose to avail themselves of it.

MR. RICKMAN GODLEE's specimens of variola and vaccinia, and those of Sir William Gull and Dr. Sutton, will be on view at the rooms of the Pathological Society of London, in Berners Street, at 8 P.M., on Tuesday next.

At the meeting of the Obstetrical Society on Wednesday evening next, Dr. Edis will read a paper on The Forceps in Modern Midwifery; a subject of much practical interest, and likely to provoke discussion. Dr. Playfair will also contribute a paper on Fibroid Tumour complicating delivery.

THE Italian Scientific Association has conferred on Sir William Thomson, Professor of Natural Philosophy in the University of Glasgow, the prize instituted by Carlo Matteucci, for the Italian or foreigner who, by his writings or discoveries, has contributed most to the advancement of science.

At Birmingham, on February 27th, Jesse Key was summoned under the fortieth section of the Medical Act, for falsely assuming the title of a legally qualified medical practitioner. The case was proved by detective-sergeant Black. The defendant was fined the full penalty of twenty pounds.

At the Bow Street Police-Court, on February 27th, John Thomas Faulkner Colegrove was charged on remand with procuring his registration under the Pharmacy Act by false representations; and Andrew Ritchie Hunter, formerly a clerk in the Post-office Savings' Bank, and John Hinks, of Ravinston Street, Kensington, a medical student, were charged as aiding and abetting Colegrove to obtain such registration. Mr. Flowers committed all the prisoners for trial, but admitted them to bail.

#### PRESERVATIVE PROPERTIES OF POTASSIC XANTHATE.

A SMALL addition of this salt is found, it is stated, sufficient to prevent decay and fermentation in organic bodies for an indefinite period. The juice of the grape and other fruits can be preserved in this way perfectly fresh, even when exposed to the air. On account of its cheapness, easy application, absence of dangerous properties, and the small amount required, potassic xanthate can well replace many preservative substances at present in use.

At the Hull Town Hall, on February 27th, two herbalists and medical practitioners, named Armstrong and Rayner, were prosecuted for breach of the Medical Act, by wilfully and falsely acting as medical men. The defendants denied any deception, and submitted that they were justified in acting under Philadelphian diplomas. The decision was postponed in each case.

#### ROYAL COLLEGE OF SURGEONS.

PROFESSOR PARKER will bring his course of lectures to a close on Wednesday next, and will be succeeded by Professor Flower on the 7th instant, who will commence his course of nine lectures on the Comparative Anatomy of Man. The following is his syllabus, viz.: Introduction; History and Aims of the Study of Physical or Zoological Anthropology; Materials available for the Investigation; John Hunter's Anthropological Collection; Present Extent and Range of the College Collection. Variations of Man in External Characters—Stature, Proportions, Physiognomy, Colour, Hair, etc. Dental Characters; Comparison of the Teeth of Man with those of the most nearly allied Animals; Variations in the different Human Races. Osteological Characters; Variations in the Form and Relative Dimensions of the Bones of the Limbs in different Races. The Pelvis. The Skull; Methods of estimating the Variations of its different Parts, and their Significance as Race Characters. Determination of Age and Sex of Skulls. Pathological, Artificial, and Posthumous Deformation of Skulls. Special Characters of the Human Skull from an Anthropological Point of View; Relation of the Various Parts of the External Surface of the Skull to the Brain. Craniometry; Determination of fixed Points for Mensuration, and of the Horizontal Plane for Craniography; Methods and Results of Measurement of the Internal Capacity (Stereometry) of Skulls; Diameters; Curves; Angles; Sections; Indices. The Lower Jaw. Remaining Anatomical Characters; The Brain, etc. Illustrations of the more marked Types of Mankind as distinguished by their Physical Characters.

#### THE PUBLIC HEALTH.

DURING the week ending Saturday, February 24th, 5,875 births and 3,552 deaths were registered in London and twenty-two other large towns of the United Kingdom. The mortality from all causes was at the average rate of 23 per 1,000. The annual death-rate was 20 per 1,000 in Edinburgh, 26 in Glasgow, and 27 in Dublin. The annual rates of mortality per 1,000 in twenty English towns were as follow: Portsmouth, 15; Nottingham, 18; Norwich, 19; Plymouth, 19; Bristol, 21; Brighton, 21; Birmingham, 22; London, 22; Leicester, 22; Leeds, 23; Liverpool, 23; Sunderland, 23; Sheffield, 23; Hull, 23; Oldham, 23; Salford, 23; Bradford, 24; Newcastle, 25; Manchester, 28; and the highest rate, 33, in Wolverhampton. Scarlet fever showed an increased fatality in Manchester and Leeds. The deaths from small-pox in the twenty towns, which had been 130, 109, and 95 in the three preceding weeks, rose again last week to 118, of which 104 occurred in London, 7 in Liverpool, 6 in Manchester and Salford (exclusive of 2 fatal municipal cases in the Monsall Hospital), and 1 in Oldham. In London, 2,450 births and 1,495 deaths were registered. Allowing for increase of population, the births were 62 and the deaths 221 below the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the three preceding weeks had been equal to 22.6, 22.2, and 21.6 per 1,000, rose to 22.1. The 1,495 deaths included 104 from small-pox, 14 from measles, 16 from scarlet fever, 5 from diphtheria, 38 from whooping-cough, 17 from different forms of fever, and 14 from diarrhoea. The deaths from small-pox, which had been 103, 100, and 72 in the three preceding weeks, rose last week to 104, which was, with but one exception, the highest weekly number recorded during the present epidemic; 42 were certified as unvaccinated, 25 as vaccinated. In the remaining 37 cases, the medical certificates did not furnish any information as to vaccination, or contained statements that the medical practitioners were unable to certify whether the de-



ceased had or had not been vaccinated. No less than 16 deaths from small-pox, of children aged under five years and certified to be unvaccinated, were registered during the week. Of the deaths from small-pox, 41 occurred in the Metropolitan Asylum Hospitals, 5 in the Highgate Small-Pox Hospital, 1 in the Model Prison at Holloway, and 1 in the North Street Infirmary, Poplar; the remaining 56, or 54 per cent. of the total cases, occurred in private dwellings. The largest increase during the week occurred in the north and south districts, but the disease again showed the greatest proportional fatality in East London, especially in Bow and Poplar. The Metropolitan Asylum Small-Pox Hospitals contained 916 patients on Saturday last, including 112 convalescent cases at Limehouse, against 834, 811, and 901 at the end of the three preceding weeks. The new cases admitted during the week were 205, against 194 and 238 in the two previous weeks. Two deaths were referred to hydrophobia. In greater London, 2,957 births and 1,728 deaths were registered, equal to annual rates of 35.3 and 20.6 per 1,000 of the population. Eight fatal cases of small-pox were registered in the outer ring, including 3 in Stratford, and 1 each in Croydon, Mitcham, Acton, Tottenham, and West Ham subdistricts.

#### SPONTANEOUS GENERATION.

THE discussion on this subject has lately been transferred to the French Academy. The issues are now narrowed to the question of the results obtainable from one particular form of experiment, admitted to be of a crucial character. It is alleged by Dr. Charlton Bastian, that a sterilised, acid, organic fluid, may be caused to ferment and swarm with bacteria, by the addition thereto of a suitable quantity of boiled liquor potassæ. M. Pasteur admits the fact, but declares that the above-mentioned results are due to the presence of unkilld germs in the boiled liquor potassæ. In support of this view, he contends that fermentation and living organisms will not manifest themselves in the sterilised fluid if the added liquor potassæ have been heated for twenty minutes to 230 deg. Fahr. instead of to 212 deg. Fahr. As he admits that all germs are killed by this higher temperature, Dr. Bastian, whilst rejecting M. Pasteur's interpretation, has more than accepted his challenge. He repeated his own experiments with liquor potassæ, which had been heated in closed tubes to 230 degs. Fahr. for twenty hours instead of twenty minutes, and found that (when added in suitable quantity) it was still capable of fertilising the previously barren fluid. The announcement of these results to the French Academy caused M. Pasteur to ask for the appointment of a Commission, to whom the matter in dispute between himself and his brother investigator might be referred. Accordingly, at the sitting of the Academy on February 19th, it was made known that MM. Dumas, Milne-Edwards, and Boussingault had been appointed "to express an opinion on the fact which is under discussion between Dr. Bastian and M. Pasteur". We presume, however, that no opinion will be expressed by the Commission till it has had an opportunity of witnessing Dr. Bastian's experiments as well as those of M. Pasteur, especially as we understand that Dr. Bastian has already signified his desire to repeat them before the Commission.

#### BEARING-REINS FOR HORSES.

WE are reminded, by the recommencement of a season in London, to say a few words by way of directing attention afresh to the powerful and humane pleas of Mr. Flowers against the cruel practice of driving horses with bearing-reins. It is a pleasure to notice that by far the larger number of the leading medical practitioners in London have discontinued altogether the use of bearing-reins; and we hope that the day is not far distant that we shall be able to point to the equipage of every medical practitioner in the country as a practical protest against the use of this most unnecessary, painful, and mischievous appendage to driving-reins. Physiology protests against the strained and artificial attitude which the horse is compelled to assume, and which must certainly lessen his power of drawing weights. Humanity and common

sense protest against the infliction of this constant gagging strain upon the sensitive mouth of an animal, whose mouth is used by the driver as the principal means of guiding and directing him. Nor can any one who has any real knowledge of or pleasure in the study of animal forms feel otherwise than gratified at the free and unconstrained attitude of a horse driven without bearing-reins. Their use is a mere matter of senseless fashion. No good coachman uses bearing-reins for a horse from which he desires to get the full amount of work, or which he desires to leave at ease. Their employment is, indeed, merely a senseless fashion, which has absolutely nothing to recommend it; and in favour of their abolition there are reasons so many and decided that we hope not many years will pass before they are not only disused, but forgotten. The members of the medical profession owe much to horses, and they can so well appreciate the reasons for disusing bearing-reins, that we may fairly look to them to set an universal good example in this matter; and now that London is filling with fashionable people, whose horses are much disfigured by this cruel instrument of torture, we hope that before the season is over we may be able, in directing attention to this subject, to say no medical man in London uses bearing-reins for the horses which he drives.

#### SMALL-POX.

LATE official advices state that the most terrible outbreak of small-pox ever known in the history of the Northwest is desolating Gembic, an Icelandic and Mennonite settlement of about 7,000 souls, on the east side of Lake Winnipeg. The deaths average 180 daily. No medical men are on the spot, but the Manitoba government is endeavouring to send doctors. The scourge is also raging with terrible fury on the west side of the lake. The Fort Thunder Indians have been decimated, and hundreds have died in settlements on the Qu'Appelle river. Indians are fleeing south toward the boundary line. The fur trade is stopped throughout the Northwest by order of the authorities.

#### LIVERPOOL SAILORS' HOME DISPENSARY FOR SEAMEN.

THE Committee of the Liverpool Sailors' Home have opened a dispensary for seamen, which is to be conducted on the self-supporting system. Suitable premises have been secured near the "Home", and the services of two medical practitioners have been obtained. It has been decided to limit the practice of the Dispensary to the treatment of venereal diseases, and to charge one shilling for each attendance. Though under the management of the Committee, it will be open to all seamen, whether inmates of the Home or not. The Committee deserve the greatest credit for this laudable effort to rescue the seamen from the advertising quacks, as they have already rescued them from the boarding-house crimp, a much less dangerous and voracious animal; and we shall hope very soon to be able to record the complete success of the Liverpool Dispensary for Seamen, as an encouragement for the managers of Sailors' Homes elsewhere to adopt similar wise measures towards promoting the health of their inmates.

#### LAWS OF HEREDITY.

AN evening lecture was lately delivered at the Royal Institution, by Mr. Francis Galton, F.R.S., "On the Typical Laws of Heredity". The purpose of the lecture was to show more forcibly than on a former occasion that heredity was governed by distinct laws, and was not a mere matter of chance. In races both of animals and plants, and for generation after generation, thousands were produced in which the similarity was so great that the search was vain for distinguishing marks; there being perfect statistical resemblance. It might be said that individuals tended to leave their likes behind them, but there was no real warranty for this assertion, but rather the contrary. In every generation there was a certain proportion of giants, a certain proportion of small, and a relative proportion of medium-sized men. The giants did not reproduce giants in the same number as the medium men; they had fewer children; many no issue at all. Of the few born, all, as a rule, were of lower stature. A variety of causes induced to this, and yet in the second generation there were as many giants as in

the first, and so in the following generations they existed in like proportions as before. The lecturer's researches had been directed to ascertain the laws which govern heredity, and these he had determined to be two: those of deviation and reversion. It being necessary to select some special population for experimental purposes, Mr. Galton took the sweet pea as the simplest, because it was exempt from the complications of cross fertilisation; and, ten examples of specified sizes and weights from the average to the largest and smallest being selected, these were grown under like conditions, and the progeny subject to examination. These were sifted through an ingenious instrument which Mr. Galton had constructed, and fell down into their settled places; a curve of deviation was constructed with so much accuracy that, taking the American soldiery as an example, by knowing the average height the curve could be placed against the standard, and the exact proportion of the numbers of men of each particular height within each successive quarter of an inch could be read off at once on the scale. This law of deviation seemed to be persistently counteracted by the law of reversion, or the tendency to come back to the original elements; and in all geological ages, the action and counteraction of the two laws appeared to be manifested; everywhere the reproduction taking place from the centre of the group and the dying out on the margin.

#### MILK-TYPHOID.

DR. STEVENSON reported last week that there had been a sudden outbreak of typhoid fever in the north-east of St. Pancras and in the adjacent parish of Islington. For some time this portion of the parish, so far as he knew, had been entirely exempt from the disease. As not many days had elapsed since he was first made aware of the outbreak, by receiving almost simultaneously several letters respecting it, he had not been able to learn particulars of the facts of the cases. There appeared to be *prima facie* evidence to connect the disease with a milk-supply. The evidence of this was of a twofold character. All the persons attacked appeared to have obtained milk from a certain milk-vendor, and he had been unable to ascertain the existence of more than a single case of typhoid fever in the same area where the milk was supplied by any other milk-dealer, and that case was imported into the parish from a distance. The milk was supplied to a local dealer from three separate farms in the country. Two of these farms had been inspected for him by the local medical officer, and at both impure water appeared to have been used for the rinsing the milk-cans and pails. He had not yet received the report of the local medical officer of health on the inspection of the third farm. He had ascertained the existence of fourteen cases of typhoid in this outbreak.

#### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

DURING the present week, two meetings of more than usual interest have been held by the Royal Medical and Chirurgical Society. On Tuesday evening, Mr. Spencer Wells laid before the Society an account of three hundred additional cases of ovariectomy—making in all eight hundred communicated by him. An abstract of the paper and discussion will be found on another page. On Thursday evening, March 1st, the annual meeting of the Society was held; a large number of members being present. Sir James Paget, who has held the office of President for the usual term of two years, retired, and is succeeded by Dr. West. Sir James delivered an eloquent and characteristic address, in the course of which he reviewed the lives and labours of the members who had died during the year. The obituary list included an unusual proportion of well-known names in the profession—those of Stromeyer, Ehrenberg, George Southam, De Méric, Sibson, Laycock, Rumsey, Robert Lee, Sir Wm. Fergusson, etc. The ordinary business was transacted; and thanks were voted to the retiring President, Vice-Presidents, and Members of Council. We shall give a more complete account of the proceedings next week.

**DONATION.**—Earl Manvers has sent £500 to the funds of the General Hospital at Nottingham for the building of a new wing.

## SCOTLAND.

THE Glasgow Association for the Relief of Incurables is doing good work. The reception of patients at the new house at Broomhill commenced in September last, and at the close of the year thirty-two adults and six children had been admitted; eighty-five new out-door pensioners had been placed on the roll, and the number at the close of the year was one hundred and six. The revenue amounted in all to about £3,500; the expenditure slightly exceeded this.

#### ROYAL MEDICAL SOCIETY OF EDINBURGH.

ON the 21st ultimo, the annual dinner of the Royal Medical Society of Edinburgh was held at the Douglas Hotel—Dr. J. G. Brown, the senior President, presiding—when there was a large gathering of past and present members. In speaking to the toast of "Success to the Royal Medical Society", the Chairman stated that it was the oldest scientific society in Edinburgh, being now in its one hundred and forty-third year, and that the present session was a highly successful one, upwards of fifty new members having joined, and the average attendance on debating nights exceeding seventy.

#### NOTICE OF INFECTIOUS DISEASE.

THERE has just been sent to all the medical practitioners in Edinburgh and Leith a circular, from the Public Health Committee of the Edinburgh Town Council, together with a report of Dr. Littlejohn, in regard to the steps that should be taken in dealing with infectious disease. The report urges that, if the condition of our cattle, when infected with contagious disease, is so narrowly watched, and penalties attached to delay in giving timely notice of illness, it is not too much to expect that prompt information of the occurrence of such diseases among ourselves should be demanded, under stringent penalties. The reporter suggests, as to the mode in which intimation should be made, that every practitioner should be furnished with printed slips and stamped envelopes directed to the Local Authority. In cases where no medical man had been called, he would punish the offending parent or relative in charge, unless it could be clearly made out that no special blame attached. After a careful discussion of the question, the reporter considers that the medical man, and not the head of the family, is the proper person to send such notice. In their circular, the authorities intimate, in view of a possible outbreak of small-pox, that a hospital is now ready for the reception of patients; that, on intimation being made, a conveyance will be sent at any hour, with attendants; and every facility will be given for the removal of patients and the disinfection of houses, clothing, and bedding. In the case of a death in a private house, the authorities will aid in removing the body to a special mortuary, and thence to the place of interment, at any time arranged by the friends.

## IRELAND.

THE last of the series of scientific lectures at the College of Physicians was delivered by Dr. Foot on Monday, the 26th ult., being his second lecture on "Tuberculosis".

DR. REYNOLDS having resigned his seat on the council of the Pharmaceutical Society of Ireland, a special meeting was held at the College of Physicians on last Saturday, when Mr. M. Oldham was declared elected in his place.

#### QUEEN'S COLLEGE, GALWAY.

THE medical students of this College held a meeting last week, for the purpose of arranging a petition to be sent to the senate of the Queen's University, requesting them to reconsider a regulation passed last year, [in reference to the June examination, by which unsuccessful students at the second and final examination are prevented from going on until the following September. This is the grievance complained of, as it keeps them back a year in their studies.



A WOMAN named Hoare died at Parsonstown last week, aged 102 years.

THE deaths in Dublin during the week ending February 17th represented an annual mortality of 26.1 in every 1,000, an improvement on the previous few weeks, but still the deaths outnumbered the births by 14. Of the 24 deaths from zymotic diseases, 5 were due to small-pox, the majority of the cases either not having been vaccinated or showing no marks of that process.

#### WATER-SUPPLY OF ATHY.

DR. CAMERON, city analyst for Dublin, in reporting lately upon the purity of several samples of water sent for analysis, and taken from the private pump-supply of this town, states that they contained an enormous amount of mineral matter and an immense quantity of sewage: it was almost like a joke to describe them as water.

#### BELFAST ROYAL HOSPITAL.

THE usual quarterly meeting of the General Committee and Board of Management of this institution was held last Monday, and, from the report of the Committee, we learn that the convalescent home attached to the hospital is very nearly finished, and that the bazaar lately held in the Ulster Hall realised the handsome sum of £2,249 towards the funds of the institution. The collection of subscriptions has caused much anxiety to the Committee, and they have divided the town into sixty districts, forty of which have been already allocated to honorary collectors, so that they expect, by a thorough canvass of the town, that there will result a large increase to the amount of the general subscriptions. The collections held on Hospital Sunday in Belfast, in aid of the hospital, have not all been sent in; but, up to the present, about £521 have been received, being a trifle in excess of the same period of last year, but altogether inadequate as representing the size and wealth of Belfast.

#### ROYAL COLLEGE OF SURGEONS IN IRELAND.

A LARGE and influential meeting of Fellows, pursuant to a requisition forwarded to the President, was held on last Wednesday, the 28th ult., at the College, for the purpose of considering the question as to whether it was expedient that the offices of president and vice-president should in future be held for a longer period than one year. Dr. Barton, who was one of the requisitionists, disclaimed any personal feelings in bringing the matter under the notice of the profession; and stated that the proposed change was strictly within the limits of the charter. He pointed out the advantages connected with the change, should it be made, and proposed a resolution that the president and vice-president, at the termination of their year of office, should allow themselves to be nominated for a second year. Mr. Kirkpatrick seconded the resolution; but, as Dr. Mapother, on a point of order, objected to the terms of the resolution as at variance with the requisition which brought the Fellows together, Dr. Barton having used the terms "president" and "vice-president" as applying apparently to the present holders of these offices, and not including the future presidents and vice-presidents. An amendment was proposed by Mr. Corley, and seconded by Mr. Tyrrell, that the words president and vice-president should be placed in the plural instead of the singular number. A discussion took place, rather stormy and slightly personal at times, from which it appeared that it was perfectly legal to re-elect a president and vice-president, at the end of their yearly tenure of office, for another year. This, to a great extent, cut the ground, to use an expressive phrase, from under the feet of the requisitionists; and, after some time, the feeling of the meeting being evidently antagonistic to any change, both the amendment and resolution were withdrawn by their respective proposers and the meeting separated. We mentioned, some weeks ago, in the JOURNAL, that the agitation in this matter would not succeed, and we are gratified to have our statement so authoritatively confirmed.

#### TREASURY GRANT.

WE learn with great satisfaction that the Treasury have agreed to recommend votes from the Consolidated Fund for £80,000 towards the new buildings devoted to the Science Schools of the University of Edinburgh, in four yearly instalments of £20,000 each. This vote is to supplement a like amount subscribed by the public.

#### TURKEY AND THE GENEVA CONVENTION.

WE understand that a curious though scarcely to be unexpected difficulty has been met with in the general application of the principles of the Geneva Convention in the Turkish army. The Mussulman soldiers have objected to the distinctive sign of the Convention; viz., the Red Cross. In consequence, the Government of the Sublime Porte has addressed a despatch to the governments of the countries that have joined the treaty, through the President of the Swiss Confederation, requesting that the Crescent may be used in the field-hospitals of the Ottoman army, and have the same significance as the Red Cross in the field-hospitals of other armies. It is understood that the British Government has signified its readiness to meet the Ottoman wish in this respect, and that other governments are willing to follow the same course. The curious point is, that the Red Cross was not adopted as a distinctive mark for the Geneva Convention from religious motives at all; but, as the Convention was brought about by the Swiss Government and discussed and accepted in Switzerland, it was agreed that the national ensign of the country, which is a white cross on a red ground, should be accepted, with merely the colours reversed, as the badge indicative of the treaty. A badge of some kind was necessary to distinguish the hospital articles and persons who became neutralised in time of war by the articles of the Convention. The adoption of the red cross on the white ground as the distinctive sign of the Convention was acknowledged at the time as a complimentary tribute to the country by the President of the Swiss Confederation.

#### MEDICAL MICROSCOPICAL SOCIETY.

THE annual general meeting of this Society was held on January 19th, Dr. J. F. Payne, President, in the chair. This was the first meeting held in the new rooms of the Society, at 6, Pall Mall Place. The Secretary's Report for the year 1876 was read. The following were the communications read before the Society during the past year: President's Address, by Dr. Payne; Development of New Blood-vessels, by Dr. Thin; Browning's Triplet, by Mr. Jabez Hogg; Modification of Pritchard's Microtome, by Mr. Giles; Hints on the Systematic Study of Histology, by Dr. Woodman; Cirrhosis of Liver in a Child, by Mr. Needham; Freezing Microtome, by Mr. Williams; Microscope for Viewing the Circulation in the Human Frænum Linguae, by Dr. Pritchard; Carcinoma of Liver simulating Cirrhosis, by Dr. Goodhart; Myeloid Sarcoma, by Mr. Needham; The Organ of Corti in Mammals, by Dr. Pritchard; Rodent Ulcer, by Mr. Golding Bird. The *Soirée* of the Society was held on June 30th. Of the 51 microscopes exhibited, 21 were devoted to a series of typical tumours. Beside these, a variety of instruments and photographs was shown. The number of members of the Society in December 1876 was 129. Several presents during the past year, both of books and specimens, were received; and upwards of 70 different preparations, besides apparatus, were exhibited at the close of the meeting. The Treasurer's report showed, on December 31st, 1876, a balance of £30 9s. 5d., against one of £20 9s. at the same time in the previous year. The expenses of the *Soirée* amounted to £19. The retiring President (Dr. Payne), in his Address, congratulated the Society upon its condition. It had outgrown its developmental stage, and now hoped for something better. Originally intended for medical students, it soon found its sphere of action among practitioners; and, in his opinion, this Society offered a more congenial field for the investigation of histological pathology than any other in London. He deemed the special function of the Society to be to study the influence of normal and pathological histology in everyday medical practice, including its relation to hygiene. He detailed examples showing how a thorough knowledge of pathological histology had, in many instances, not only led to a clearer precision in diagnosis, but had even given a general hint as to prognosis and treatment. The difficulties of investigation were great, and the slowness of discovery was not the fault, but the misfortune, of the histologist.

## PROFESSOR LISTER.

THE statement that Professor Lister of Edinburgh was likely to be asked to take the vacant chair at King's College was received with much concern by the students attending the medical school in Edinburgh; and this feeling gave rise to the preparation of an address and requisition to the Professor, expressing the earnest desire of the students that he should remain in his present position. This address, which was in the course of three days signed by upwards of seven hundred students, was presented to Mr. Lister at the close of his lecture on Thursday, the 22nd ult., by Dr. Isaac Bayley Balfour.

The following is the address, which was written on illuminated vellum.

To Joseph Lister, M.B.Lond., F.R.S., Regius Professor of Clinical Surgery in the University of Edinburgh.

Sir,—We, the undersigned students of medicine in Edinburgh, hearing that there is a prospect of your being called to occupy the vacant Chair of Clinical Surgery in King's College, London, hasten to express our deep regret that there should be any possibility of the severance of your connection with us. We eagerly seize this occasion to acknowledge the deep debt of gratitude we owe for the invaluable instruction we have derived from your clinical teaching. We rejoice that under your tuition we have enjoyed unrivalled opportunities of gaining a most thorough and scientific insight into the principles of that art to which we have devoted ourselves. Your self-devotion to the advance of surgery, and the indomitable energy which has characterised your search after, and conquest of, the causes of those deplorable disasters once, and even now, so frequent a sequel to our surgical operations, have given us a mental impetus for good, the effects of which it is impossible to overrate. Inspired by your example, many have gone forth, and many will still go forth, determined to carry your principles into practice and spread far and wide the beneficial effects of that system of surgery of which you are the founder. The recipient of the great inheritance of the Chair of Clinical Surgery in the University of Edinburgh, bequeathed by your predecessor the illustrious Syme, you have not only upheld but extended its great reputation, increased the ancient *prestige* and glory of our medical school, and attracted to it a number of students quite unprecedented in its history. The welfare of our school is so intimately bound up with your presence, that its withdrawal must be an irreparable loss, not only to it, but to all of us, who would thus have to mourn the loss of a highly esteemed and greatly beloved teacher. We are far from disparaging that field to which you may be called; but we would venture to submit that nowhere will you find a more numerous and devoted band of followers than those who now count it their highest privilege to listen to your teaching. While we would entirely disclaim all idea of interference with that which you alone have a right to decide, we would yet earnestly hope that you will long remain in that position you so greatly adorn; and that the day may never come when your name will cease to be associated with that of the Edinburgh Medical School.

Professor LISTER, after having accepted the address, said: Gentlemen, it is perfectly impossible for me to attempt to express the feeling with which I have witnessed this demonstration and heard this address. Meeting my class quietly twice a week, and endeavouring to do my humble best, no one is, I trust, more conscious of its imperfections than myself. I was not aware that there existed among the students of this great and glorious school anything like the feeling of which I have had evidence on the present occasion. As I said to you at the last lecture, there has really been no offer made to me by the authorities of King's College; and such being the case, I feel it an exceedingly difficult thing to say a word on the matter further than this, which is very much what I said on the last occasion, that there exists nothing in London at the present time which I should consider good enough to call me away from this school. I said, gentlemen, on entering upon my office here, that I believed that this chair, if properly conducted, as it had been by my lamented predecessor, was more potent for good than any other chair in the medical curriculum; and I hold to that opinion. We have in surgery, as compared with physic, the extreme advantage that, whereas the diseases with which the surgeon has to deal are the same in essential nature as those with which the physician deals, yet, while the physician must walk comparatively in the dark and act from inference rather than from direct observation, the surgeon sees what he does, so that we are able in a class like this to teach by demonstration on the actual living flesh and blood of our patients those

great principles of pathology and practice which apply alike to medicine and to surgery. Now, gentlemen, I say that this gives to clinical surgery, if properly conducted, an intensity of interest and an opportunity of instruction which no other chair in the curriculum possesses. But if I turn to London, and ask how instruction in clinical surgery is conducted there, I find that, not only according to my own experience as a London student—which I once was—but also from the universal testimony of foreigners who visit there and then come here, it is, when compared with our system here, a mere sham. Clinical medical teaching is in various London schools exceedingly well and ably conducted; but the magnificent opportunities of demonstrative teaching presented by clinical surgery are to a great extent neglected. And, therefore, even if the too flattering article in a certain medical journal holding out to me the prospect of fame and fortune and so forth were more reliable, nay, even were it certain—and I need not say how far indeed from what would be the fact the supposition is—that I should attain the very topmost position in private practice, and at the same time have to teach clinical surgery as it is now taught in any London school, I would certainly not go to London.

## THE ARMY MEDICAL DEPARTMENT AND CIVIL PRACTITIONERS.

A FLAGRANT instance of the unjust rate of payment of civil practitioners undertaking temporarily the duties of army-surgeons having been brought before the Committee of Council, the subject was brought before the general meeting of the Association in Edinburgh, when the following resolution was passed:

"That the President be empowered and requested to sign a petition to the Secretary of State for War in accordance with the recommendation of the Council, drawing attention to the injustice of the present rate of payment of civil practitioners acting as substitutes for military surgeons."

In reply to the communication addressed to Government in accordance with the foregoing resolution, the following letter has just been received.

"War Office, February 24th, 1877.

"Sir,—I am desired by the Secretary of State for War to acknowledge the receipt of your further letter of the 8th September last, relative to the rate of remuneration paid by this Department to private medical practitioners when engaged to attend upon troops in the absence of army medical officers.

"In reply, I am to state that Mr. Hardy has had the entire question under his consideration, but regrets that he is unable at present to sanction any alteration in the existing regulations.

"I have the honour to be sir, your obedient servant,

"CAT. MAN.

"The General Secretary, British Medical Association,  
"36, Great Queen Street, W.C."

## ASSOCIATION INTELLIGENCE.

## MIDLAND BRANCH.

THE fifth monthly meeting of this Branch will be held at the house of the President, Joseph White, Esq., Oxford Street, Nottingham, on Friday, March 16th, 1877. Coffee at 7.30 P.M.

Papers, etc., at 8 o'clock.

Mr. J. Wright Baker: A Case of Rupture of Femoral Artery.

Dr. Brookhouse: Aortic Aneurism and Aortic Dilatation, with Cases.

Mr. Dolman of Derby and Mr. Hatherly of Nottingham have also promised cases.

L. W. MARSHALL, M.D., *Hon. Local Secretary*.  
Nottingham, March 1st, 1877.

## SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT MEETINGS.

THE next meeting will be held at the Crystal Palace Hotel, Upper Norwood, on March 8th, 1877, at 4 P.M.; Dr. JEAFFRESON in the Chair.

Dinner will be provided at 6 P.M. precisely. Charge, 6s. 6d., exclusive of wine.

The following communications are promised.

1. Dr. Moxon: Observations on the Use of Alcohol.

2. Mr. Maunder will Demonstrate Roussel's Transfusion in a Living Subject.



3. Dr. Dalton : Notes of a Case of Acute Mania following Scarlet Fever.
4. Dr. Miller : On a Case of Ulceration of the Œsophagus.
5. Mr. H. Taylor (Guildford) : A Case of Subcutaneous Osteotomy.
6. Mr. Sidney Turner will exhibit an Apparatus for Contracted Tendon.

JOHN H. GALTON, M.D. Lond., *Honorary Secretary*.  
Woodside, Anerley Road, S.E., February 12th, 1877.

### BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE next meeting will be held in the Examination Hall of the Queen's College, on Thursday, March 8th, 1877. The Chair will be taken at Three o'clock P.M.

*Business.*—To nominate members of the Branch "to act as officers, Council, and representatives of the Branch in the General Council of the Association".

Dr. Rickards will propose : "That the period for holding office as Secretary to the Branch be limited to four years."

The following papers are promised :—Mr. Oliver Pemberton : On two cases in which the External Iliac Artery was successfully tied for the cure of Aneurism. (The patients will attend for examination.)—Mr. Lloyd Owen : Cysts of the Orbit.

JAMES SAWYER, M.D., }  
EDWARD MALINS, M.D., } *Hon. Secretaries*.

Birmingham, March 1st, 1877.

### MIDLAND BRANCH: MONTHLY MEETING.

THE fourth monthly meeting of this Branch took place, as usual, at the house of the President, on Friday, February, 16th.

*Communications.*—Mr. G. C. FRANKLIN of Leicester read a paper on Autumn Diarrhoea in Infants, which was freely discussed by Drs. BROOKHOUSE and SEATON, and Messrs. HATHERLY and STANGER.

A Case of Diabetes followed by Rodent Ulcer was related by Mr. H. R. HATHERLY.

## SPECIAL CORRESPONDENCE.

### VIENNA.

[FROM AN OCCASIONAL CORRESPONDENT.]

*Medical School of Vienna.*—*The General Hospital.*—*Professors and Assistants.*—*Fees for Courses.*—*Reception of Foreigners.*

YEAR by year, the renowned Medical School of Vienna continues to attract to the Austrian capital a large number of foreign medical graduates, who are desirous of learning Continental views and ideas with regard to matters concerning their own profession. At the present time, there are more than a hundred such to be found congregating in the large General Hospital. Of these, no fewer than fifteen are English, double that number are Americans, not including six graduates of the fairer sex; Sweden is also well represented, and nearly every existing nation has one or more of its medical profession here; but, of course, the exact numbers are ever changing.

When one considers the size of the principal hospital and the great collection of material there ready at hand, together with the sound and earnest method of teaching, the presence of so many strangers is not to be wondered at.

At home, the special surgeon or physician finds often so much favour with the general public, that he has neither the time nor the opportunity to instruct juniors in his own peculiar branch. Here everyone is a specialist, and the pecuniary profits are consequently more divided; hence it is that many find teaching to be the means of adding considerably to their incomes, and the friendly rivalry resulting proves very beneficial for all concerned. The General Hospital, with its two thousand five hundred beds, monopolises, for the most part, the attention of students and graduates; and here are found those teachers and workers, who occupy a high position in the estimation of scientific men, and who still continue their labours for the advancement of medical knowledge and the mitigation of human suffering. This, however, is not the only charitable medical institution in the city; for example, there are Rudolph's Hospital, with one thousand beds; the Wieden District Hospital, with nine hundred; a moderately sized one for children only; and numerous smaller ones under the management of religious orders; there is also a large establishment for the soldiers alone; and, finally, there is the Poliklinik. This last one corresponds to one of our dispensaries, and to it those can resort who merely wish to receive

advice; there are no beds in connection with the institution, and medicine prescribed must be procured elsewhere. Here may be seen daily a large collection of cases of every sort; while the staff, who are chiefly composed of younger, and not at present such shining lights as their professional brethren in the large hospital, do everything in their power to utilise their patients for the benefit of those who are following their practice.

The wards in the General Hospital are plain, with whitewashed walls, but lofty enough for each patient to be supplied with sufficient air; the ventilation is maintained by means of cross currents, the windows being placed on each side the wards opposite to each other, and all have a ventilator at the upper part. The cleanliness of the inmates is also well attended to; each ordinary male patient on his admission must envelope himself in the regulated hospital garb. This consists of a long cotton dressing-gown reaching down to the heels and fastening round the waist by means of a girdle; the trousers which are worn are somewhat wide, and, like the gown, are manufactured from cotton. A shirt, a pair of woollen stockings, and shoes, minus the heels, and with no sides or leather beyond the instep, completes the category. The women have also a prescribed attire, their skirts, etc., being composed of a whitish looking washable material. The advantage of these clothes is manifest when it is thought advisable to bring a patient into the clinic for demonstrational purposes, as the rapidity with which they can be thrown off is great: so valuable time is saved.

Each of the professors has his own wards and his own assistants. These latter vary in number according to requirements, and are all qualified men; these have charge of the different wards, and take seniority according to length of service. Each assistant is appointed for four years, two of these being spent in a junior and two in a senior position; each one is provided with a room in the hospital, and receives a varying annual sum from Government; the highest payments do not range beyond £120, and out of that board must be provided. The majority of the gentlemen holding the senior posts endeavour to increase their worldly wealth by giving private courses, generally of a practical nature, on their own special subjects; and it is from such that the foreign graduate, especially if fresh from the cramming so necessary now-a-days for passing his various examinations, obtains material benefit, these classes being intelligible to everyone, even to those whose knowledge of the language is small or *nil*. Each course so carried on lasts, as a rule, from a month to six weeks, when a new one is advertised; the cost of each varies from thirty shillings to two pounds, English money. This, to the unsuspecting foreigner, seems remarkably cheap; but, after the elapse of six weeks, he begins to think that a repetition of the same course might render his manipulative skill more complete, and so renewal generally takes place. If it be a case of improvement on all subjects, the conclusion will be arrived at when six months have passed, that fifty or sixty pounds is somewhat a large sum to be paid away in so short a time.

The University clinics are not, however, expensive; on the contrary, for Austrian coinage equal to about a sovereign, paid at the commencement of the session in October, a seat is allotted to you, which continues until about the middle of March. To all the clinics and private courses, matriculated students of the University itself are admitted at half the price paid by graduates.

Members of the profession from other countries are always received kindly and courteously by the professors and teachers; but by the general run of students foreigners are regarded somewhat in the light of intruders, and consequently are not always treated with that amount of politeness which one stranger naturally expects from another.

## THE MEDICAL PROFESSION IN INDIA.

[FROM OUR OWN CORRESPONDENT.]

*The Voyage Out.*—*Arrangements on Board Ship.*

IN describing the experiences of a medical officer in India, I may commence by pointing out that the maladies he meets with, and the details of his daily work, are very different from the ordinary routine of medical practice in England. Practitioners in Great Britain may also like to learn something of the manners and customs of the "native doctors" in that portion of "Greater Britain" which comprises Hindoostan. There are several articles in the Eastern *Materia Medica* which are of undoubted therapeutic value, and which might, perhaps, not unprofitably be added to the *British Pharmacopæia*. And the real progress that has been happily made, of late years, towards diminishing the great mortality formerly caused by the diseases of India will, it is hoped, tend to draw attention to the subject. To begin, we will suppose the medical officer has arrived at Portsmouth, ready to embark in one of Her Majesty's Indian troop-ships. He walks from



the wharf, up a gangway, on board one of these magnificent vessels. There are five of them, regularly commissioned; their officers all belong to the Royal Navy; they are men-of-war, but they only carry four Armstrong guns. They are each upwards of 4,000 tons burden, and are splendidly fitted out, with every attention possible paid to the health and comfort of the military officers and men. Strict discipline is maintained on board. All the officers *always* wear uniform. A plan of the cabins is hung up near the saloon, and, by looking at it, the officer finds out at once the number of his cabin. There are three berths in each cabin; the one under the port can be used as a sofa. All the cabins are invariably filled up on the voyage to India; but, on the return passage, usually only two officers are put in each cabin. The heavy baggage has previously been put into the hold, and is not taken out till disembarkation. Boxes containing a change of clothing, to be opened at Suez, are placed in a baggage-room by themselves. Two good-sized portmanteaus are allowed for each officer in the cabin. These different varieties of luggage are distinguished by different coloured labels, which have been obtained from the regimental quartermasters. Everything is done according to regulations issued for these troop-ships, and all works smoothly. Having taken possession of one's berth and settled the portmanteaus, one has time to look round. On the starboard side of the fine large saloon are the cabins of the naval officers of the ship. The captain has a day and a night cabin; all the others one each—about ten in all. Of course, they are furnished very comfortably, as they are the temporary homes of the naval officers. On the port side, near the stern, are the day and night cabins of the military officer commanding the troops on board. Next to these is the ladies' cabin, with seven berths; then the bath-room, etc.; and next the nursery, capable of holding from 12 to 24 children, with their nurses. Underneath the saloon, on the main troop-deck, on both sides of the vessel, and also amidships, are cabins for the military officers. These can accommodate about sixty; but one cabin of four berths is usually given up for ladies (which makes the total on board eleven). There is a bath-room on each side. Below these again, on the lower troop-deck, are cabins and swinging-cots for about twenty juniors, subalterns. This place is always known as "Pandemonium". The port-holes are small (very different from the large ones on the upper deck), and they are generally closed, but the cabin space is good. Then up, through the saloon, on to the quarter-deck (not forgetting to salute it by touching the peak of one's cap), and the poop, which is the portion of the same deck abaft the mizen-mast to the stern. Here officers can always smoke, except when the ship's company are at divisions. From the quarter-deck to the fore-castle, on each side, is a gangway. On the starboard side, sit the women and children of the soldiers, except when they are at meals; on the port side, the third part of the troops composing the watch, told off to assist the sailors in hauling ropes, etc. Below this, in the waist (on the same deck as the saloon) on each side, are bath-rooms, wash-houses for the soldiers, water closets for the naval and military officers, latrines for the men, three horse-boxes, pens for sheep, stalls for bullocks, and cages for poultry. Under the fore-castle are the messes of the ship's crew. Descending one of two ladders, one reaches the main top-deck. Here are tables, suspended by iron bars from the deck above, which can be quickly stowed away to make room for the hammocks at night. On the starboard side, is the men's hospital, with twenty iron cots, fixed on pivots to iron supports to remain steady if the vessel rolls. A bath and closet are quite handy for the use of the sick. A dispensary, well supplied with drugs, is alongside. A sergeant (compounder) and three orderlies of the Army Hospital Corps attend to the patients. The hospital for women and children is on the port side, with ten cots. Extending up to the vessel's bows are the bunks, in two tiers, for the women and children, and their wash-houses, latrines, etc. There are usually from seventy to one hundred women and one hundred to two hundred children. The men average about one thousand. With the ship's crew, there are, on the voyage to India, generally about sixteen hundred human beings on board. Underneath the main troop-deck, is the lower troop-deck, with the lock-up cells for prisoners. The engine-rooms, stoke-holes, cargo-stores, etc., are below again; but not many visits are paid to them, except by those whose business takes them there. Running the whole length of both troop decks, on each side, are iron cranks or handles, for pumping water in case of fire. Once a week, the fire-bell rings suddenly and the bugles sound the "alarm". Every man on board the ship has been informed where to go, and immediately goes there, perfect silence being observed. The soldiers on the troop decks, at the word of command, commence working the cranks, and, through the leathern hose, a stream of water about six inches in diameter can be thrown on any part of the ship. Fortunately, there is no real fire; so, after seeing that everything is in perfect working order, in a few minutes the bugles sound "dismiss", and every one returns to his former occupation. The vessels are

built in five water-tight compartments, so that, if one were to strike on a rock, that portion through which the water would be rushing could be isolated, and the ship would not sink; in fact, it would make very little difference, provided the engines were not crippled. Then, there are a dozen boats and two large pontoons on board, which, in the event of a complete wreck, would take off all on board; so that every precaution is taken to guard against the loss of ship or passengers by fire or water. Looked at from a medical point of view, these beautiful ships supply every condition that modern hygiene has proved to be essential for maintaining health at sea.

The daily routine is pretty much as follows. One can get up at any time, from about five to seven o'clock, and go off to the bath. Unless very early, one generally finds a string of officers waiting their turn. After entering, salt water is turned on through a pipe into the bath, which is six feet long and about four feet deep. If a warm bath should be desired, the turning of a handle lets in a quantity of steam into the water, which can thus be heated up to any temperature required. A capital breakfast is served at half-past eight, to which ample justice is usually done. After that, those on duty begin their work. An orderly medical officer of the day is detailed in orders; he wears his black pouch and belt to show he is on duty. Any accident or case of emergency among the soldiers is immediately reported to him. There are generally four or five army medical officers for duty. They go to the male and female hospitals about ten o'clock. There is hardly anything to do in going out to India, except making out returns. All the men have been medically inspected as to their fitness for service, and are generally in very good health. A few cases of venereal disease come under treatment, but scarcely anything else of importance. No woman who is within about six weeks of her confinement is allowed to embark, so that it is very rarely that a birth takes place on board. At noon, there are bread, cheese, and beer for those who wish for them. The men have their dinner at that time. It would take up too much space to detail what they get; but they have fresh meat frequently, preserved meats, boiled beef and pork, preserved potatoes, pickles, fresh vegetables occasionally, and a pint of porter *per diem*; altogether, very good fare. The officers dine (in mess uniform) at half-past four; tea at six; the saloon lights are put out at eleven o'clock, and those in the officers' cabins half an hour after. If there be a band on board, there is usually dancing in the evening. Singing and cards, sometimes theatricals, help to pass the time; and, as a rule, when the hour to "turn in" has arrived, it has brought a very pleasant day to a conclusion.

## CORRESPONDENCE.

### DISLOCATIONS OF THE THIGH: THEIR MODE OF OCCURRENCE.

SIR,—At the meeting of the Royal Medical and Chirurgical Society on February 13th, a paper on this subject by Mr. Henry Morris was read. In the JOURNAL of February 24th, Mr. Morris criticises the observations that fell from me at the meeting. As will be readily imagined, I was entirely ignorant of the special points of the paper until it was read, and it was, therefore, with no little surprise that I heard the author's conclusions stated to be quite new and opposed to what had been taught heretofore, whereas the identical facts had been fully explained more than ten years ago by Professor Fabbri, and ever since had been taught as the true views upon dislocations of the hip-joint at St. Bartholomew's Hospital. Then and there I referred to the subject in the last edition of *Holmes's System*, and, in the section referring to the reduction of these dislocations by manipulation, finding a sentence in inverted commas, attributed in the footnote to Professor Busch, which states the guiding principle of the successful practice of this plan, at the conclusion of the meeting I pointed it out to Mr. Morris as leading to the inference that Professor Busch was acquainted with the true mode in which these dislocations occur and are reduced. Mr. Morris says that Professor Busch's views are almost exactly opposed to his own, and, in another place, that the directions given in the last edition of *Holmes's System* for the reduction by manipulation, and which are based upon Professor Busch's teaching, are insufficient for the purpose. Let it be so. I do not feel myself called upon to enter on the defence of either; I contend simply for the accuracy of the facts I stated at the meeting; viz., that I had witnessed a demonstration, as Mr. Morris points out, and in this quite accurately corrects me, by Professor Fabbri, and not by Professor Busch, as I had been led to suppose. That he has been anticipated by Professor Fabbri, I understand Mr. Morris to allow; only he finds a flaw in my statement that, since the demonstration alluded to (ten or twelve years), Professor Fabbri's views have been generally accepted at St. Bartholomew's. I



really do not know what will suffice to convince Mr. Morris; but, if a revolution in the method of reducing these dislocations, if the systematic teaching of it by at least three of the recognised teachers of surgery in succession, and if a distinct enunciation of the principle and *modus operandi* whenever a patient is brought into the theatre for the reduction of a dislocation of the thigh be not sufficient, I must admit I cannot produce more cogent proofs.

I trust Mr. Morris has not felt that in any way I questioned the thorough honesty of his investigations, or of his entire belief in the originality of his views upon this subject; nothing was further from my thoughts; but what has surprised me is, to find either that Professor Fabbri's experiments were performed at St. Bartholomew's Hospital only, or the very slight impression they made.—I am, sir, yours faithfully,  
36, Wimpole Street, Feb. 28th, 1877. ALFRED WILLETT.

#### HARVEY'S MANUSCRIPTS.

SIR,—May I request that you will, in the forthcoming number of the JOURNAL, correct an inaccuracy which appears in the number issued on Saturday last? It is therein stated: "At the last meeting of the Royal College of Physicians of London, Dr. Sieveking announced that he had discovered some very interesting manuscripts of Harvey, of which he will give an account in his forthcoming Harveyan Oration." It should have been, as stated in the Abstract of Proceedings suspended in the College Hall. "The President informed the College of the interesting discovery of the manuscript of Dr. Harvey's lectures delivered at the College, and that Dr. Sieveking had had a *fac simile* taken of the last page of that section relating to the circulation of the blood."—I am, sir, your obedient servant,

HENRY A. PITMAN, Registrar.

Royal College of Physicians, London, S.W., Feb. 27th, 1877.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### MEDICAL OFFICERS OF HEALTH AND MEDICAL PRACTITIONERS.

MR. ASHBURNER, the medical officer of the Horsham Union, has forwarded to us the following for our opinion and remarks.

At Christmas last, two cases of small-pox were imported into Horsham from London, and shortly afterwards one of the workhouse girls who had been in the town was attacked with the disease. Four or five days afterwards, Dr. Kelly, the medical officer of health for West Sussex, called at the house and asked to see the patient, which was acceded to. He examined the child, and, at a subsequent meeting of the sanitary authority, stated that it was only varicella, and, on being remonstrated with, replied that "he had a legal right to visit any patient he desired to see". Mr. Ashburner thereupon protested against any further interference; but, in spite of all objections, Dr. Kelly went again on some fresh cases occurring, without communicating with Mr. Ashburner, and again expressed his opinion that a mistake had been made. Mr. Ashburner concludes as follows: "Dr. Kelly not only differed with me, but he advised the guardians that I was mistaken, and repeated letters produced only the reply that he had pursued his usual course."

We think that, if this be Dr. Kelly's usual course, he had better alter it as soon as possible, as no medical man will ever give him any information of the existence of a case of infectious disease unless he do so. We, therefore, desire to express a very strong opinion, not only as to the unprofessional character of such conduct, but as to its being an excess of duty. All that a medical officer of health is justified in doing in such cases is to visit the spot, inquire into the causes and circumstances of the case, and advise as to the measures required to prevent an extension of the disease. There is no authority whatever given him to visit the patient, except where there is reason to believe that the latter is without proper lodging and accommodation; and even then he ought not to express any opinion as to the nature of the case or of the treatment adopted. If medical officers of health do not keep themselves within the strict line of their duty, they will do incalculable damage to sanitary action and future sanitary progress, by exciting a strong feeling of antagonism in the medical profession. Mr. Slater-Booth lately pointed out the risk of collision between sanitary officials and the medical profession, if the latter were required, either directly or indirectly, to give notice of all cases of infectious disease. It is a matter, therefore, for great regret

that Dr. Kelly should have so speedily furnished evidence as to the probability of such an occurrence taking place with considerable frequency, in the event of householders or others being legally compelled to give such notice.

### THE LONDON WATER-SUPPLY.

UNDER the presidency of Sir J. M. Hogg, the Metropolitan Board of Works met on February 23rd, the chief subject of consideration being the water-supply of the metropolis. A Committee reported that the time had arrived to give effect to the recommendations of the Water-Supply Commission, and suggested the preparation of a Bill empowering the Board to purchase existing companies and extend their works. A resolution in accordance with the report was passed.

### HOUSE-DRAINAGE.

A DEPUTATION from the Society of Arts waited upon Mr. Slater-Booth on February 23rd in reference to the working of the Public Health Act in London. Lord Alfred Churchill stated that the Society of Arts had found in Harley Street alone thirty dwellings that had never been connected with the drain. Hence, it was not surprising how typhoid and scarlet fever were propagated. Sir Henry Cole remarked that the main-sewers of the metropolis had cost £4,000,000, and yet not more than three-fourths of the houses were connected with them. Mr. Slater-Booth was of opinion that, as the matter was one coming under the Metropolis Management Act, it was for the Home Secretary to deal with rather than himself. After some conversation, he added that the statements made caused him some surprise. Undoubtedly, the imperfections that they had pointed out arose from the want of anything like a comprehensive system of sanitary government for London and of an authority to see to its application. With reference to the drainage of Harley Street, Dr. Whitmore, the Medical Officer of Health for Marylebone, states, in a letter to the papers of Monday, that, instead of there being thirty houses in that street which are not connected with the main-drain, there is absolutely not one. Two years ago, a new sewer was constructed in the street, and it was then discovered that, in about thirty houses, the portion of drain extending from the front vault to the sewer was very defective. All of those drains have since been replaced by new ones; and Dr. Whitmore states that every one of the one hundred and fifty-two houses in Harley Street has its independent drain connected with the sewer, and that all the drains are in good repair.

## MILITARY AND NAVAL MEDICAL SERVICES.

ARMY MEDICAL SERVICE.—The following gentlemen were successful for appointments in Her Majesty's Army Medical Service at the examination held at the University of London, on Feb. 12th, 1877.

	Marks.		Marks.
1. Mullen, J. J. ..	2623	10. Hogan, E. M. A. ..	1781
2. Murphy, F. H. S. ..	2353	11. Ellis, P. M. ..	1770
3. De Caux, T. ..	2210	12. Kearney, T. ..	1705
4. Johnston, W. F. ..	2011	13. Kenny, W. J. ..	1645
5. Hudson, R. D. ..	1995	14. Irwin, A. ..	1550
6. Armstrong, J. ..	1945	15. O'Sullivan, P. J. ..	1521
7. Kirkpatrick, H. C. ..	1836	16. McCarthy, W. ..	1465
8. Browne, A. W. ..	1875	17. Brodie, J. F. ..	1290
9. Powell, C. R. ..	1805		

INDIAN ARMY.—The following candidates for Her Majesty's Indian Medical Service were successful at the competitive examination held at Burlington House on February 12th, 1877. Forty-six candidates competed for twenty-seven appointments. All were reported qualified.

	Marks.		Marks.
1. Rogers, T. K. ..	2519	15. Nelis, J. A. ..	2045
2. Hatch, W. K. ..	2342	16. Mollen, D. M. D. ..	2043
3. Owen, W. ..	2345	17. Robinson, E. L. ..	2010
4. Conry, W. ..	2315	18. Mackenzie, A. W. ..	2015
5. Masam, H. D. ..	2265	19. Hancock, J. G. ..	2010
6. Jack, D. W. ..	2220	20. Crofts, A. M. ..	1975
7. Nailer, H. A. F. ..	2210	21. Coates, W. M. D. ..	1947
8. Taaffe, R. J. ..	2194	22. Elenm, D. ..	1945
9. Gillies, W. ..	2185	23. Chatterjee, N. ..	1925
10. G. J. Kellie ..	2180	24. McCarthy, M. J. M. D. ..	1919
11. Kintlar, K. R. ..	2150	25. Croft, James ..	1880
12. Mullane, J. M. D. ..	2100	26. Smyth, W. B. ..	1853
13. Bouton, G. C. ..	2082	27. Blood, J. ..	1822
14. Basu, D. ..	2065		

\* Mr. MacCarthy having withdrawn, Mr. B. L. Dutt is appointed in his place.

## MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS—Thursday, February 22nd.

*Foreign Physicians and Surgeons in France.*—Replying to Dr. Lush, Mr. BOURKE said: Lord Derby has received a copy of the Bill now under the consideration of the French Chamber of Deputies with reference to the practice of medicine and surgery in France by foreign physicians and surgeons. The effect of the measure, if passed, would be to prevent the practice of medicine in France by anyone who had not qualified in that country as a medical man. The hardship that would thereby be inflicted on English medical men and invalids has been represented to the French Government; and, at their request, full information has been given of the law and custom in this country with regard to the practice of medicine, and a suggestion for the settlement of the question has been made by the General Medical Council. This proposal is now under the consideration of the French Government.

Monday, February 26th.

*The War Office.*—On the vote of £47,000 for the purchase of Winchester House, for the accommodation of the War Department, Sir W. FRASER admitted the convenience of the building, provided the Horse Guards and the War Office were to remain on their present site; but he, for one, strongly objected to that site being retained, after the unfavourable reports which had been made upon it, and the deaths that had occurred.—Mr. GERARD NOEL said that, even if it were decided to build a new War Office on a fresh site, much time must elapse before the idea could be carried into effect; and, meanwhile, Winchester House had been purchased in order that the War Department and offices might be concentrated.—Mr. GATHORNE HARDY did not at all dispute that the War Office could never be made a decent and respectable building. He hoped that, for the honour of the country, a new office would be constructed some time or the other; but, until that was done, the accommodation which Winchester House would afford would be most acceptable.

Tuesday, February 27th.

*Vaccine Lymph in Ireland.*—In answer to Mr. Meldon, Sir M. HICKS-BEACH said: A grant of £400 a-year has been for some time made to the Dublin Cow-pock Institution to enable it to provide a supply of vaccine lymph for Ireland. The honourable member called attention last year to the inadequacy of this grant for the provision of a fair supply of lymph. The subject was inquired into, and, with the full approval of the institution mentioned, it was decided that the grant to them should be discontinued, the whole subject put under the control of the Irish Local Government Board, and a sufficient sum placed at the disposal of the Board to provide a gratuitous supply of lymph for Ireland in the same way as is done for England. This new arrangement comes into force on the 1st of April next; the sum provided for this purpose is £1,200 a-year; but, as the precise details of its application are not yet settled, they could not be given in the estimate.

Wednesday, February 28th.

*Habitual Drunkards.*—Dr. CAMERON obtained leave to bring in a Bill to facilitate the control and cure of habitual drunkards.

## UNIVERSITY INTELLIGENCE.

## UNIVERSITY OF CAMBRIDGE.

*TEACHING OF PHARMACY AND THERAPEUTICS.*—The Board of Medical Studies have reported to the effect that, the General Council of Medical Education having resolved "that it is desirable that the instruction in pharmacy should be separated from that in therapeutics, and that the former should be obtained at an early, and the latter at a later, period of the professional curriculum", the Board concurs in this opinion, and recommends that the changes required to carry it out be made in the regulations for medical degrees.

*MAGDALEN COLLEGE.*—Alfred Newton, M.A., F.R.S., Professor of Zoology and Comparative Anatomy, has been elected to a Fellowship. F. M. Pope, B.A., Second Class Natural Science Tripos, 1876, has been elected to a Scholarship.

*BEQUESTS, ETC.*—Mrs. Jane Thompson has bequeathed £100 to each of the following: Hospital for Incurables, Dublin; Adelaide Hospital and Rotunda Lying-in Hospital. Mr. John Mayne and Mrs. Dunlop have each bequeathed £50 to the Belfast Royal Hospital. Professor Gordon has given £50, Mrs. Hurst £100, and Mr. O. B. Graham £50 to the Belfast Royal Hospital.

## MEDICAL NEWS.

*APOTHECARIES' HALL.*—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, February 22nd, 1877.

Black, James, Ayrton Road, London  
Poland, James Harry, Blackheath, V.D., Blackheath

The following gentlemen also on the same day passed their primary professional examination.

Hooker, Joseph Stenson, Guy's Hospital  
Mitchell, Henry Slynman, King's College  
Scott, William George, London Hospital  
Shepherd, Thomas William, St. Thomas's Hospital

*UNIVERSITY OF DUBLIN: Hilary Term, 1877.*—At the Spring Commencement, held on Shrove Tuesday, February 13th, in the Examination Hall of Trinity College, the following Degrees in Medicine and Surgery were conferred.—Bachelor in Surgery.

Edwulph, Richard Edmund

Bachelors in Medicine.

Walton, John

Beatty, Robert Bryon

Conolly, John Vincent Joseph

Masters in Surgery.

Browne, John S. George

Orr, David Wilson

Doctors in Medicine.

Barker, John Edward

Quill, Richard Henry

Fitzgerald, Dudley Loftus

Taylor, Sidney Hamilton

Gordon, Samuel

## MEDICAL VACANCIES.

The following vacancies are announced:—

*BRADFORD INFIRMARY*—Resident Medical Officer. Salary, £120 per annum, with board and residence. Applications to be sent in on or before the 24th inst.

*CARLISLE DISPENSARY*—Junior House-Surgeon. Salary, £90 per annum, with apartments, coals, gas, and attendance.

*CREDITON UNION*—Medical Officer for the Bow and Colebrooke Districts.

*CROYDON UNION*—Medical Officer for the Ninth District.

*DENTAL HOSPITAL OF LONDON*, Leicester Square—Assistant Dental Surgeon. Applications to be sent in on or before the 14th inst.

*KILKINCHEN and KILVICKEON*, Parish of—Medical Officer. Salary from Board, £70 per annum; from other sources, £20. Applications to be sent in on or before the 3rd inst.

*MARTLEY UNION*—Medical Officer for the Martley District and Workhouse.

*NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC*—Resident Medical Officer and Registrar. Salary, £100 per annum, with board and lodging.

*ROYSTON UNION*—Medical Officer for the Fifth District.

*ST. GEORGE'S and ST. JAMES'S DISPENSARY*—Physician. Applications to be sent in on or before the 29th inst.

*UNIVERSITY COLLEGE HOSPITAL*—Resident Medical Officer. Applications to be made on or before the 10th inst.

*WEST BROMWICH UNION*—Medical Officer for the Handsworth District.

*WHITEHAVEN UNION*—Medical Officer for the Gosforth District.

*WOLVERHAMPTON and STAFFORDSHIRE GENERAL HOSPITAL*—Physician's Assistant and Pathologist. Salary, £50 per annum, with board, washing, and furnished apartments. Applications to be made on or before the 6th inst.

## MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

\*ANDREW, Edwyn, M.D., elected Honorary Consulting-Surgeon to the Montgomeryshire Infirmary.

GROSE, W. E., L.R.C.S., appointed Assistant House-Surgeon to the Halifax Infirmary and Dispensary.

HULLER, John B., M.D., appointed House Physician to the Hospital for Women, St. W. Jewell, Joseph, M.R.C.S., resigned.

\*PARR, Edward, L.R.C.S.P., appointed Medical Officer and Examiner of Candidates for admission to the Irish Training Establishment for the Army, Navy, and Mercantile Marine, and Dublin Training Ship.

STANTIN, James, M.R.C.S. Eng., appointed Surgeon to St. John's Hospital for Diseases of the Skin.

*HOSPITAL FOR DISEASES OF THE THROAT.*—At the annual meeting held on Saturday last, a resolution was passed expressive of deep sympathy with the family of the late Sir William Fergusson, who had been for thirteen years Consulting Surgeon to the Hospital; and, on the motion of the vice-chairman, a cordial vote of thanks was given to Mr. Pugin Thornton, on his retirement from the office of Surgeon, for the valuable services he had rendered to the institution during the past seven or eight years. A "round robin", numerously signed by outpatients of the Hospital, has also been presented to Mr. Thornton, thanking him very cordially for his kind and efficient services during the period of his surgery to the institution.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.—Charing Cross, 2 P.M.—
FRIDAY.....	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London. 7.30 P.M.: General Meeting. 8.30 P.M.: Dr. Edmunds, "On Questions suggested by Vegetarianism, with Personal Evidence by Vegetarians".
TUESDAY.—Pathological Society of London, 8.30 P.M. Dr. Greenhow: Chronic Interstitial Pneumonia associated with Hæmorrhage into the Suprarenal Capsules. Mr. Godlee: The Organisms characteristic of Vaccinia and Variola. Sir William Gull and Dr. Sutton: Fibroid changes in the Spinal Cord and its Vessels associated with Chronic Bright's Disease, with Contracted Kidney (Arterio-capillary Fibrosis). Microscopical Specimens and Drawings will be arranged for inspection at 8 o'clock.
WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens. Dr. Edis "The Forceps in Modern Midwifery"; Dr. Playfair, "On Fibroid Tumour complicating Pregnancy"; and other communications.—Royal Microscopical Society, 8 P.M.
FRIDAY.—Clinical Society of London, 8.30 P.M. Mr. Godlee, "Three Cases of Gas in the Peritoneal Cavity"; Dr. Burney Yeo, "A Case of Exophthalmic Goitre, with new Phenomena—a living subject"; Mr. Lowne, "A Case of Retinitis, with Observations on the Perception of Colour".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

OWING to pressure on our space, we are compelled to defer several articles and reports of societies until next week.

## TREATMENT OF TETANUS AND HYDROPHOBIA.

SIR,—The somewhat novel operation for the cure of tetanus, mentioned in the JOURNAL of February 3rd, and the very satisfactory results which have followed its performance, deserve, I think, some little consideration; for if the same success should attend future similar operations, great advance may be made toward the knowledge of the pathology of this disease, as at present little or nothing of it is known with certainty. To express any opinion as to its pathology from the evidence furnished by these two cases would only be hypothetical, although the theory that it is the result of blood-poisoning would seem to be negatived, and the opinion of those who hold it to be a local lesion confirmed. My object, however, in writing is to suggest that the same treatment be tried in hydrophobia. Although the two diseases are widely different in most points, still I think they sufficiently resemble each other to warrant the experiment, especially as hitherto no cure has been found for the latter. Should any one be unfortunate enough to have a case of hydrophobia, and think it worth while to adopt the suggestion, it would be very interesting to know the results.—I am, etc., G. BOWMAN, M.D.

OPHTHALMOSCOPE (Cockermouth).—Perrin's artificial eye apparatus is of considerable service in learning the use of the ophthalmoscope.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## THE LATE DR. FRANK-SMITH.

SIR,—In your biographical notice of my late friend Dr. Frank-Smith of Sheffield, you allude to his being the author of a small volume of poems. I should be obliged if you would let me lay a little more stress upon his literary power and poetical genius, especially in these "vivisection" times, when scientific men are constantly taunted with having no eye nor feeling beyond the driest material mechanism of life. I need not endeavour to prove the falsity of this charge by referring to such men as Frank-Smith, even though opinions might vary as to the merit of his poems. As there is no standard of poetic excellence, I will merely say for my own part that I see in them a power of diction and subtlety of thought vastly superior to what is contained in many works of world-wide fame. I select a few lines as most appropriate for a scientific journal, whose readers, in contemplating the facts of Nature, must of necessity often have had brought before them the various problems tending to throw light upon the meaning of all things. In Frank-Smith's poem of *Spinoza*, he describes the stages of thought through which the philosopher passed in his attempt to unravel the mysteries of the universe, such as atheism, pantheism, and the general objects of life. If your readers feel with me, they will dip further into his poems.—I am, etc., SAM'L. WILKS.

*Spinoza.*

I also dared  
To follow that dark clue that seemed to show  
All living creatures slender helpless threads  
Drawn to and fro, and twisted here and there,  
Of iron wheels within a mighty loom:  
A loom without a weaver, all alone,  
And moved by powers unconscious, pitiless.  
At length, as one that follows many days  
A stream unknown, mysterious, through a land  
Unknown, through forests huge and strange,  
Through swamps and sunless glens, forth issuing  
From some straight chasm of overhanging rocks,  
Beholds the boundless azure sea, even so  
I found the substance infinite, divine.  
I learned that all the many-coloured world  
Is but the breath of God, that he hath breathed  
Against the frosts of chaos and the void  
Whereby it crystallised in countless forms  
Diverse and beautiful: a little space  
They shine with iris colours in the sun,  
Then pass away to him from whence they came.  
I saw that God is all and all is God.  
At times, my soul was darkened with the cloud  
Of doubts, as vague and awful as the sound  
Of thunder o'er the dark and formless world,  
Ere yet from out its elements were formed  
The living things to tremble at the sound;  
But this not often, in that I had built  
My system like a palace, founded well  
On granite blocks four square immovable,  
And reared with stone imperishable, firm,  
Without a flaw.

And in my palace are  
Great vestibules and domed and columned halls  
Of contemplation, endless galleries  
And corridors of thought, that lead on, on  
For aye. Fair courts there are, with radiant flowers,  
And pleasant fountains meet for hope and love;  
Dark crypts of dark abstraction, solemn aisles  
And cloisters meet for reverence, brazen doors  
That open only to the hand-elect,  
And winding stairs of subtle reasonings:  
Above, and crowning all, a lofty tower,  
From whence I saw beneath me, like a chart,  
The plan and meaning of the universe.  
The polyp dies, his coral house remains;  
The fragile ocean creatures melt away—  
Their hollow spiral shells remain, perchance  
For cycles, hidden down beneath the earth.  
I also pass away, and men no more  
Shall hear my voice, but still my work remains.

## VACCINATION DIRECT FROM THE CALF.

SIR,—In a letter of February 15th addressed to the *Standard*, Dr. Wyld states that "many medical men are under the false impression that vaccinia in the heifer is modified small-pox, and that all we require to do is to inoculate the heifer with small-pox matter, and thus get a supply of vaccine lymph". He adds: "This is a mistake which might become productive of disastrous consequences; and that small-pox inoculation of the heifer produces, not vaccinia, but a modified small-pox capable of spreading small-pox amongst human beings by infection." I am certainly one of those who hold the view that Dr. Wyld condemns; and so evidently does Dr. Greene of Birmingham. I have no personal experience to support my opinion; but I would refer to Trouseau (*Clinique Médicale*, 2nd edition, 1865, p. 56) as my authority, who gives strong evidence in support of the view that vaccinia is modified variola. If this be an error, it is highly important that such should be proved by stronger evidence than Dr. Wyld has yet adduced. He has evidently given much attention to the subject. Can he refer to any experiments or facts which will support his views?—I am, sir, yours obediently,

C. H. ALLFREY, M.D., F.R.C.S.,  
Public Vaccinator, Third District, Bromley Union.  
St. Mary Cray, Chislehurst, February 21st, 1877.



**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

#### MENTAL ANXIETY AS A CAUSE OF KIDNEY-DISEASE.

SIR,—I have read with much interest and pleasure in your *JOURNAL* of to-day's date Dr. T. Clifford Allbutt's communication on Mental Anxiety as a Cause of Granular Kidney. Reference having been kindly made to me in a footnote to the paper as an inquirer in this new field of clinical work, I feel it perhaps incumbent to say that at the time of the publication of my paper upon this subject in your *JOURNAL* of April 15th, 1876, I had no knowledge that professional attention had ever before been drawn to the views I then expressed, nor have I yet seen Dr. Allbutt's published opinions in the *Lancet*. I am not, however, now writing to claim priority—a question, indeed, of but little moment—but rather to express my conviction, derived not merely from further extended personal experience, but also from the fact of Dr. Allbutt's independent observation, of the value of the knowledge of a cause—a cause, moreover, in these times of high pressure life, of daily increasing urgency, hitherto unappreciated, if not unrecognised, in the evolution of organic changes, so serious in their ultimate issue. At the same time, the entire question is *sub judice*, and can only be received or negated by the aid of far more numerous observers and much larger experience; in short, as Dr. Allbutt puts it, "the statement is one which must be tested by others, and must stand or fall by the general voice."—I am, sir, yours obediently,

JOSEPH O. BROOKHOUSE.

Nottingham, February 10th, 1877.

#### ARTIFICIAL EYES.

**ACCOCHEUR.**—No patient ought to wear an artificial eye "for some years", but should change it as soon as it becomes rough or loses its polish. One of the best London makers is, we believe, Mr. Halford, 7, Goswell Road, who supplies the Ophthalmic Hospital at Moorfields.

#### NOCTURNAL CRAMP.

SIR,—I have a patient whom I am now attending, and have been for some time, who suffers very severely from cramp in the leg, but chiefly confined to the tendons of the instep. The pain is truly agonising, usually coming on in bed about four o'clock in the morning. Nothing that I have yet done has afforded, as far as I can ascertain, the smallest relief. If any of your correspondents could kindly suggest any remedy, it would be most thankfully received. My patient is an elderly gentleman upwards of seventy years of age, and the pain has not yielded to stimulating liniments externally, nor to stimulants combined with sedatives internally. My patient, as well as myself, would be most grateful if any remedy could be suggested to afford him relief from this very suffering complaint.—I am, yours truly,

AN ANXIOUS M.D.

Enfield, February 20th, 1877.

#### THE PLAGUE IN TURKEY.

IN the *Briefe über Zustände und Begebenheiten in der Türkei*, 1833-1839, General von Moltke's experience of the Turkish method of dealing with the plague is given. In 1837, while Von Moltke was in Constantinople, the city was devastated by the plague. During the four or five months for which the sickness raged, it is calculated that, of the 500,000 inhabitants of the capital, a twentieth part died. But even this terrible mortality could not disturb the equanimity of the Turk. The soldiers could not be induced to carry out the precautionary measures prescribed by the military authorities. Not only were such precautions held to be unnecessary, but by the bulk of the people they were regarded as even sinful. "Why have so many soldiers perished by the plague?" asked a mollah in a coffee-house. "Because," he answered himself, "so many foolish precautions against it have been taken." At the same time, the Turk, conscious of his intellectual superiority, was calmly tolerant of any fear of the sickness manifested by a Frank. "Go not near him," he would say, without scorn, but with a certain tone of compassion; "he is afraid." The burial of the corpses was necessarily, during the extreme mortality, conducted in a primitive manner. The dead body was carried out on the back of a porter to a newly ploughed field which was used for the interment, without shroud or coffin, was covered over with two feet of earth, the officiating Muezzin called aloud three times the name of the deceased, and bade him go straight to Paradise.

**CYMRO.**—We believe that the baptism of an infant by a medical man, under pressing emergency, would be held to be lawful and valid; but this is a question of Ecclesiastical law, on which we cannot pretend to give an authoritative opinion.

#### CHLORIC ETHER.

SIR,—In prescribing "spirits of chloroform," some medical men use the synonym "chloric ether," so that nervous and inquisitive patients may not know it is a preparation of chloroform they are to take, in the same way as the name tinctura camphoræ composita is preferable to tinctura camphoræ cum opio. The druggist in my district has a preparation of chloric ether made up in the strength of one part of chloroform (pure) in eight parts of rectified spirits of wine (which I find given in Nellygan's *Materia Medica*, edited by Macnamara), which he would still use in dispensing a prescription in which was chloric ether, instead of using spirits of chloroform (*B. P.*), in which there is only one part of pure chloroform in twenty of spirits of wine. Nellygan's *Materia Medica* warns prescribers of the double formula; but Garrod's *Materia Medica*, which is almost exclusively the textbook in the Glasgow University, makes no mention whatever of a distinct formula for chloric ether, but the Posological Table gives the two names as being synonymous terms.—I am, sir, yours, etc.,

A MEMBER.

February 15th, 1877.

THE *Celestial Empire* quotes from Mr. Giles's translation of the Chinese manual, "Instructions to Coroners", the following valuable advice, which we suppose would be found equally useful by persons troubled with nightmare in this or any other country. "In case of nightmare, do not at once bring a light, or, going near, call out loudly to the sleeper; but bite his heel or his lig. toe, and gently utter his name. Also spit in his face, and give him some ginger-tea to drink; he will then come round. Or blow into the patient's ears through small tubes, pull out fourteen hairs from his head, make them into a twist, and thrust them into his nose."—*Pall Mall Gazette*.

**NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.**

#### THE CONTAGIOUS DISEASES ACTS.

THE *Army and Navy Gazette* says:—The opponents of the Contagious Diseases Acts have met with a severe rebuff at Plymouth, thanks to the editor of the *Western Morning News*, who mounted their platform and upset their theories by stern facts. In ten minutes they were anxious that he should sit down, although opponents had spoken for an hour; but when he had finished the tone of the meeting was changed, and those who had called it lost the day. The value of the Acts to the services is too well known to call for remark here, but the opponents will not accept any statistics of the working of the Acts, as they assert that the figures are "cooked". It was therefore to the powers of checking vice that the editor of our contemporary had to confine himself; and even on that plea he was able to confound the enemies of the measure. He had traced the reclamation of no fewer than 379 patients in six years in the Plymouth district alone.

#### HYDROPHOBIA CASES AT THE GLASGOW ROYAL INFIRMARY.

THE following letter appears in the Glasgow papers:—"The attention of the Weekly Committee of Managers of the Glasgow Royal Infirmary having been called to certain paragraphs in the newspapers containing charges of cruelty in the treatment of two patients who were thought to be suffering from hydrophobia, I am instructed to state that the matter has been carefully investigated by a committee of managers, who report that grave doubts existed at the consultations held by the medical staff on the cases as to the true character of the disease; that the tests employed were entirely with a view of deciding this question in order to the adoption of the most appropriate treatment, and that these tests were those recommended by the highest authorities on the subject, and were used in the most skilful and humane manner. I am requested to add, that the intrusion of the dog into the ward was a purely accidental circumstance, the dog having been a pet which had accompanied a lady visiting the institution (not the ward) on a mission of mercy.—I am, etc., HENRY LAMOND, Secretary."

**INQUISITOR.**—Shakspeare did not issue his own works; hence there exist in them many gross inaccuracies, arising, it may be assumed, in part from misreading bad manuscript, and in part from the inexperience of the first editors. Thus in *Troilus and Cressida*, Act 5, sc. 3 (the famous departure of Hector), we have—

"And, Cassandra, call my father to persuade."

The person referred to is King Priam, who was the father not of Andromache but of Cassandra; therefore, the passage should read, "call thy father," etc. In *Timon of Athens*, Act 1, sc. 2, Apemantus is made to say,

"Much good dich thy good heart, Apemantus!"

On the strength of this passage, Johnson has introduced the uncouth word "dich" into his dictionary, and it is explained as meaning "do it". It is simply a misprint for "diet"; and the speech itself, instead of belonging to Apemantus, whose mouth is full of root, should be assigned to Alcibiades, which renders everything clear. Alcibiades expresses his admiration at the heartiness with which Apemantus eats root, upon which Timon insinuates that Alcibiades wants some root himself—"Your heart's in the field now." If only a quarter of the intelligent care were to be bestowed on a thorough recension of the writings of the great bard that has been expended upon much more difficult authors—for instance, Dante (see the Florentine edition of the *Commedia*), a satisfactory text might be established.

#### DOCTORS' DIPLOMAS.

THE following appears in the *Chemical News*:—"I should like to call your attention to the following advertisement, which has for some time past appeared constantly in the Berlin *Kladderdatsch*:"—

"Doctor-Diplome jeder Facultät werden leicht und billig vermittelt.—Adr. Medicus, Royal Square, Jersey, England. (Doctors' diplomas of every faculty easily and cheaply obtained.)"

This advertisement, I fear, is doing much to give English degrees a bad odour in Germany. I think some of your countrymen should investigate the case, and if it be a swindle, expose it.—I am, etc.,

School of Mines, New York, U.S.A.

DR. P. TOWNSEND AUSTEN.

Of course it is a swindle: there are no diplomas of any British Faculty to be had except by examination, after a full curriculum. We have some idea, however, that the diplomas which the advertiser professes to obtain are not English, but spurious American ones.

**L. R. C. P. Ed.** asks: What is the usual custom in reference to vaccination fees? Supposing a patient who is vaccinated unsuccessfully requests a second and a third vaccination, is it usual to charge for each operation?

#### SOLUTION OF SALICYLIC ACID.

MR. W. J. MARSH of Shrewsbury asks your readers to give a hint as to a good means of forming a solution of salicylic acid. The appended formula, extensively used with much success at our Royal Naval Hospital at Lisbon by Dr. Jas. Lilburne, though not new, appears to be very satisfactory. R. Acidi salicylici 5i; liquor. ammoniac acetat. 3j; aqua ad 5vj. M. It keeps well and acts well.—Yours very truly,

FREDERICK MANSFIELD, B.A., M.D., Staff Surgeon R.N.

H.M.S. *Defiance*, Charnel Squadron, Lisbon, February 15th, 1877.

#### MEDICAL ETIQUETTE.

SIR,—Will you allow me to ask your opinion on a question of professional etiquette. The guardians of this union, being dissatisfied with the medical officer of one of their districts, would not re-elect him, but elected me in his stead. I did not seek the appointment; quite the contrary, for I wrote to a guardian in his behalf, asking him to give him a trial for another year. He has written me an angry letter because I accepted it; but if I had not taken it, the parish would have been advertised and another would have got it—a stranger, who might have done him more harm, as he would have resided in the same town with him. I am five miles distant from him, but close to the parish he has lost. He says it is most unprofessional, etc. I tell him that I do not think it is much different in principle from what occurs when a patient is dissatisfied with his medical man and seeks for another. This is quite common, and we do not resent it upon each other.—Yours faithfully,

INVITUS.

\* Under the circumstances described by Invitus, we do not think that his conduct can be called unprofessional.

**M.D.** asks: What would be considered a fair and remunerative fee for the vaccination of a well-to-do city merchant, his wife, two children, and three female servants?



## THE MILITARY AND NAVAL MEDICAL SERVICES.

THE following were the papers set at the last examination of candidates for Her Majesty's Army, Naval, and Indian Medical Services in February 1877. *Anatomy and Physiology* (Mr. Busk): 1. Give the origin, course, and distribution of the Ophthalmic Division of the Fifth Pair of Nerves, and of its Branches. 2. Write a full description of the Occipital Bone; its development, connections, and articulations; and enumerate the muscles attached to it, and their points of attachment; and the blood-vessels and nerves with which it is in immediate relation. 3. Describe the course and relations of the Right Subclavian Artery. Name its branches in the order in which they arise; and indicate the point which should be preferred for the application of a ligature, and the reasons for the choice. 4. Describe the minute structure of a Lymphatic Gland. 5. When a stream of Carbonic Acid is passed for some time through diluted Blood-serum, what is produced, and what are the properties of the product?—*Surgery* (Mr. Pollock): 1. Describe the pathological changes which occur in the shoulder and hip-joints, when affected by what is termed "Chronic Rheumatic Arthritis," and the local and general treatment to be adopted under such conditions. 2. State the symptoms by which Hydrocele may be distinguished from Hæmatocele, and the treatment to be adopted in each. 3. A man fell over some timber, and injured the right side of his chest (without any external wound). State, first, the symptoms of fracture of the ribs; secondly, the external, general, and physical signs of ruptured lung; thirdly, the conditions which would influence the physical signs, though the lung be ruptured. 4. Describe the treatment to be adopted in a case of Punctured Wound of the Palm of the Hand, followed by recurrent arterial bleeding. What evil consequences are to be apprehended after such a wound? 5. What are the constitutional and local conditions which may arrest or prevent union of a long bone after fracture? Describe the most probable causes of Retention of Urine—first, in childhood; secondly, in old age; and the treatment under the respective conditions.—*Medicine* (Dr. Aitken): 1. With what diseases is Scurvy classified in the Nomenclature of Diseases of the Royal College of Physicians of London? Describe fully (1) the Pathology of true Scorbutus, including the symptoms of the disease, the circumstances under which it is developed, and its constant cause; (2) the possible coincident complications; (3) the preventive and the curative treatment. 2. What is meant by the terms Pyrexia and Hyperpyrexia? Mention the phenomena characteristic of the febrile process, which show that fever exists. How is the temperature of the human body best determined for clinical purposes? 3. What is meant by the terms "Gravel" and "Fit of the Gravel"? What are the symptoms of irritation from gravel, and the treatment of the condition? 4. What are the causes, symptoms, and treatment of Ascites? 5. What are the causes (primary and secondary) of hæmorrhage during or shortly after the third stage of labour? How ought cases of labour to be treated so as (1) to prevent and (2) to arrest such hæmorrhage? 6. What are the physiological properties and medicinal uses of (1) Gallic Acid and (2) Hydrocyanic Acid? What are the preparations of each as named in the *British Pharmacopœia* of 1867? What are the doses of each? with what substances and in what forms are these medicines best prescribed for internal use? What are the antidotes to poisoning with Hydrocyanic Acid?—*Natural History and Physics* (Dr. Thomson).—*Zoology*: 1. Give an account of the Organs of Respiration in Rodents, Ruminants, and Carnivores, and what relation does it bear to the food of each? 3. Give the characters of the common Leech. 4. What are the chief modifications of the mouth of Insects. 5. Give a general account of the Darwinian theory of Development. 6. Give an account of the Embryogeny of *Conifers*. 7. Describe the structure of a seed, and explain the terms orthotropous, anatropous, campylotropous, hilum, foramen, raphe. 8. Give the characters of the order *Ranunculaceæ*, and describe the chief modifications of the floral organs and carpels in the British Genera. 9. What drugs are yielded by the order *Umbellifera*? State in each case their properties and the part of the plant from which they are obtained. 10. Describe the structure, development, and reproduction of mosses. *Physics, etc.*: 11. Give a sketch of the present state of our knowledge of Spectroscopic Chemistry. 12. Describe the structure of the Barometer, and explain the diminution of pressure as we ascend in the atmosphere. 13. What are the properties of Iron? In what states is it found in nature? In what geological formations do its ores chiefly occur? How is the metal extracted from the ore? 14. Explain the terms axis, pole, equator, equinox, latitude, longitude. What is the position of the two tropics and of the arctic and antarctic circles? Why is the season of summer in the northern hemisphere different from that of the southern? 15. Give an account of the present state of our knowledge of the depth of the Ocean and the inequalities of its bottom.

## DULCE EST DESIDERE.

If any one can get a laugh out of the annexed cuttings, we see no reason for not indulging him.

"An enterprising druggist advertises his cough-medicine in the following manner: 'Cough while you can, for, after you have taken one bottle of my mixture, you can't.'"

"Marriages and deaths will probably be indicated in the paper of the future under the heading—'Mated and Cremated.'"

"*Corns in High Places*.—A chiropodist announces that he has removed corns from the crowned heads of Europe."

"*How far Druggists go*.—An Irishman complained to his physician that he was stuffed him so much with drugs that he was sick for a long time after he got well."

AN ASSOCIATE, who encloses a question on medical etiquette, omits to give his name, which must always be appended to every communication, although not necessarily for publication.

## CONDENSED MILK.

DR. J. C. REID of Newbiggin-on-Sea writes:—Condensed milk is of incalculable value: it is my sheet-anchor in treating infantile disease, as well as an article of food in health. I never saw any evil follow its use.

SIR.—Will you kindly inform me if a L.R.C.P. is justified in calling himself and putting on his dooplate "Physician" or not?—I am, yours truly,  
February 1877 A.M.B., M.A.

\* Certainly, he is entitled to call himself physician. His diploma confers the title.

C. M.—The letter concerning the imperfect method in which the antiseptic system is carried out in metropolitan hospitals where it is nominally adopted, is too jocose in its style for so serious a subject; and we are not surprised that it was rejected by a scientific journal.

## MALIGNANT PUSTULE.

SIR,—In the JOURNAL of February 17th, I find an interesting case of malignant pustule described by Dr. Hamill; and I am glad to find another addition to my own experience that such a state can arise without direct contagion.

I cannot agree altogether with the treatment adopted by Dr. Hamill—namely, free incision and poulticing; but as my experience concerning the nature and treatment of this disease has been recently put before the medical profession in an article in the *Medical Examiner* for January 15th, 1877, in which it is fully explained, I will not enter into details.—I am, etc.,  
THOMAS S. DOWSE.

Central London Sick Asylum, Highgate, February 1877.

AN OLD ASSOCIATE (Stroud).—Of handbooks of histology we may mention Frey's *Compendium of Histology* and Schafer's *Handbook of Histology* (Smith, Elder, and Co.); a working handbook by Professor Rutherford (Churchill); Dr. Beale's well known book *How to Work with the Microscope* (Harrison); and Cornil and Ranvier's excellent French *Manuel de l'Histologie Pathologique*.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Sheffield Daily Telegraph; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Chatham and Rochester Observer; The Red Litch Indicator; The Colonies; The Warrington Express; The Cradock Chronicle; The Northampton Herald; The Liverpool Porcupine; The Sheffield Corrier; The Birmingham Daily Western Daily Mercury; The Macclesfield News; The Sunderland Daily Post; The North Wales Chronicle; The Broad Arrow; The North and South Shields Gazette; The Irish Times; The Australasian; The Bradford Observer; The Western Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Gazette; The Leeds Mercury; The Hull Critic; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The Higher Peak News; The Metropolitan; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Middlesex Advertiser; The Rock; The St. Andrew's Gazette; The West Cork Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Richmond and Twickenham Times; The Western Morning News; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; etc.

\* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. J. C. Bucknill, London; Dr. Bond, Gloucester; Dr. T. Lauder Brunton, London; Mr. J. Sampson Gamgee, Birmingham; Dr. J. W. Moore, Dublin; Dr. Douglas Powell, London; Dr. Joseph Bell, Edinburgh; Dr. Edis, London; Dr. Braidwood, Birkenhead; The Secretary of the Medical Society of London; Dr. Byrom Bramwell, Newcastle-upon-Tyne; Mr. H. C. Burdett, Greenwich; Mr. S. McBean, Newcastle-upon-Tyne; Mr. W. Stewart, Barnsley; Dr. Joseph Rogers, London; The Registrar-General of England; Dr. J. Milner Fothergill, London; Dr. W. Fairlie Clarke, Southborough; The Registrar-General of Ireland; Mr. Richard Davy, London; Dr. A. A. Gore, Dublin; The Secretary of the Royal Medical and Chirurgical Society; Mr. Eastes, London; The Secretary of the Hospital for Diseases of the Throat; The Military Secretary of the India Office; Mr. Ashburner, Horsham; An Associate; Mr. W. D. Husband, York; J. H. P.; Dr. Drysdale, London; Dr. Marshall, Nottingham; The Secretary of the Obstetrical Society; Surgeon-Major Porter, Neeley; C. M.; Mr. Sidney Parsons, London; Mr. J. S. Bartrum, Bath; Dr. F. Goodchild, Leamington; Dr. E. T. Wilson, Cheltenham; Dr. Peele, Dublin; Our Indian Correspondent; Surgeon-Major Sinclair, Secunderabad; Mr. C. F. Maunders, London; L.S.A., Oxford; Dr. S. F. Hawthorne, Dromore; Dr. James Kendrick, Warrington; Mr. W. Whitehead, Manchester; Dr. Littlejohn, Edinburgh; Mr. Golding Bird, London; Mr. Hatherley, Leuton; Dr. Brookhouse, Nottingham; A New Member; Mr. Stedman, Leatherhead; Dr. W. Squire, London; F.R.C.S.; Dr. Tripe, London; Mr. Page, Redditch; The Director-General of the Army Medical Department; Mr. Clendinning, Stafford; Dr. S. Drew, Wortley; Mr. J. J. Harrison, Dublin; Dr. Elliot, Carlisle; Mr. George Lawson, London; Mr. W. Berry, Wigan; Our Edinburgh Correspondent; Mr. N. A. Humphreys, London; Dr. Godson, London; Mr. T. M. Stone, London; Mr. W. G. Bloxam, Edinburgh; Our Dublin Correspondent; Mr. Lowndes, Liverpool; Dr. Cayley, London; Mr. Francis Mason, London; Dr. Shuttleworth, Lancaster; Dr. Pitman, London; M.D.; Dr. E. T. Tibbits, Bradford; Dr. Lownds, Egham; Ophthalmoscope; Dr. Franklin Parsons, Goole; Mr. L. O. Pike, London; Mr. Roberts, Ffestiog; Mr. W. W. Reeves, London; Dr. Bruce Low, Helmsley; Mr. W. E. Farnfield, London; Hon. Auberon Herbert, London; Dr. Keith, Craigveigh; Mr. Edmund Lloyd, London; Dr. Chas. R. Brown, Hastings; Mr. Chubb, Devonport; Mr. Richard Gravely, Newick; Medicus; The Secretary of the Clinical Society; Dr. Gowers, London; Mr. Alfred Willett, London; Dr. White, Southport; Mr. F. C. Shaw, West Australia; Mr. J. H. Palmer, Madeley; Dr. Crichton Browne, London; Dr. Sawyer, Birmingham; Mr. Worth, Millbrook; Dr. Gresham, Bromley; etc.

## BOOKS, ETC., RECEIVED.

Aids to Botany. By C. E. Armand Semple. London: Baillière, Tindall, and Cox. 1877.  
A Handbook of Hygiene and Sanitary Science. By George Wilson, M.A., M.D. Third Edition. London: J. and A. Churchill. 1877.  
Elements of Physics or Natural Philosophy. By Neil Arnott, M.D., LL.D., F.R.S. Edited by A. Bain, LL.D., and A. S. Taylor, M.D. London: Longmans, Green, and Co. 1876.



# THE GOULSTONIAN LECTURES

ON

## PHARMACOLOGY AND ITS RELATION TO THERAPEUTICS.

*Delivered at the Royal College of Physicians, London.*

By T. LAUDER BRUNTON, M.D., D.Sc., F.R.S.,

Fellow of the Royal College of Physicians: Assistant-Physician and Lecturer on Materia Medica and Therapeutics at St. Bartholomew's Hospital.

### LECTURE I.—*Concluded.*

THE second error into which medicine has fallen is that, while diseases have been rightly attributed to alterations in the body, it has been supposed to have a composition, and remedial measures to possess powers which were purely imaginary and utterly different from the reality. Returning, again, to our illustration of the child and the box, we may compare the medical doctrines which come under this head to the child acknowledging that it is the lock which keeps the box shut, but fancying it to be composed of butter, iron, and quicksilver, or of little brass thimbles, and believing that the lock will not open because the butter and quicksilver have become wrongly mixed, or the thimbles have been turned upside down. In the various attempts it makes to remedy this condition, it may happen to introduce a key, and thus gain its object; but, if it fail, it may be led to drive a piece of ivory into the keyhole, and will thus attribute the unsuccessful, not to say disastrous, result to its not having used tortoiseshell instead. It may happen to succeed, but its chances are very small, for there are endless possibilities of error. In the history of medicine, we find that similar methods have in some rare instances been successful, but generally they have led to utter failure. Let us shortly run over some examples, beginning with the ancient Greeks, who are said by some to have derived their first philosophical notions from the Phœnicians, and possibly, through them, from the Jews. In the Mosaic cosmogony, we read of the earth, of the waters, and of the Spirit of God which moved upon the face of the waters. From the earth and from the waters, all vegetable and animal life were evolved by the Spirit; and we find a similar triad in the Greek writings, although Stanley may be wrong, and Thales may not have derived his ideas from either Jews or Phœnicians.\* Corresponding to these three sources of life, we find three lines of thought, running down almost to the present day. In one, the liquids, in another, the solids, are regarded as of most importance to life and health; and, in the third, both solids and liquids sink into comparative insignificance before the formative power or spirit which acts upon them. Alterations in the fluids of the body were regarded as the causes of disease in the humoral pathology, with which, in later times, the chemical pathology became closely connected. Alterations in the solids took the place of the liquids in the solidist and mechanical schools; and changes in the formative principle, under the various names of nature, pneuma, vital spirit, Archæus, vis medicatrix, etc., were regarded as the essential of disease by the pneumatic school and vitalists. In the writings of Hippocrates, we find the humoral pathology well illustrated, and accompanied by the germ at least of the vitalistic pathology, although Hippocrates seems only to have received them from his predecessors, to have himself been but little influenced by theory, and to have practised chiefly by the light of experience. Adopting the idea of Empedocles, that there are four elements, fire, air, earth, and water, he considers that there are four corresponding qualities, heat, cold, dryness, and moisture, and four corresponding juices or humours, blood, phlegm, yellow bile, and black bile. The heart is the seat of the blood, the brain of the phlegm, the liver of the yellow, and the spleen of the black bile. Besides these, there is a principle pervading and modifying them all, which he calls nature, and which he regards as the healer of diseases. So long as the juices remain in their proper places, and are in due proportion to one another, there is a condition of health; but when they become disproportioned to one another, or leave their proper places, disease is the result. It is curious that the bile, which even in the present day has more sins laid to its charge than any other secretion of the body, was the first to be accused of causing disease. According to Anaxagoras, it left its

proper place, and, passing into the lungs, pleura, and blood-vessels, gave rise to all acute maladies.\* The successors of Hippocrates gave less heed than he to the teachings of experience, and allowed themselves to be carried away by theories. Some confined their attention to the fluids as the chief cause of disease, and, teaching their speculations for facts, founded the dogmatic school. Others regarded the formative principle as the most important agent, and from them issued the pneumatic school. This principle or spirit was considered to be something apart from matter, but underlying it, and determining its form and condition. The successors of Hippocrates regarded this principle, which they termed pneuma, as the motor power of the body and identical with the soul. Plato supposed it to come from the air, and assigned certain ways by which it could get to the heart. Erasistratus divided this spirit into two: the psychical soul, *spiritus animalis*, and the vital soul, *spiritus vitalis*. To these, Athenæus, the founder of the so-called pneumatic school, added a third, the physical spirit; and alterations in them he considered to be the causes of disease. These terms are still in daily use; though few of us suspect, when we say that some one is full of or has an excess of animal spirits, that we are using an expression more than fifteen centuries old.

Alterations in the solids of the body were little regarded as causes of disease until the time of Asclepiades, three hundred years after Hippocrates. Following Democritus and Epicurus, he regarded the world as composed of atoms of different sizes, which never came quite close together, but left between them pores of various widths in which finer atoms played freely about, and in the free and unembarrassed movements of which the condition of health consisted. Disease was due either to stoppage of the atoms or to variations in size of the pores. Themison simplified this doctrine by disregarding the atoms, and teaching that diseases depended either on relaxation or contraction of the pores. The simplicity of this doctrine gained it ready acceptance, and led to a method of cure equally simple, the adherents of which formed the methodic school. Diseases depending on contraction of the pores were to be cured by relaxants, and those depending on contraction by astringents. This doctrine also has survived to our own day, and I have heard a Turkish bath regarded as beneficial, and a purgative, as rendering one liable to catch cold, because they opened the pores; the person who employed the phrase seeming to be quite unaware that he was talking not so much of anatomical facts as of the fanciful doctrines of two Greek philosophers promulgated before the Christian era.

Although some physicians held almost exclusively to the doctrines of one school or another, yet the great mass had their opinions influenced by all the schools together, even when they professed to adhere to one. Many of them openly selected from each school what they considered best in it, and, uniting the practices of all, founded another school: that of the eclectics. The opinions of the methodic school were rejected by Galen, but, nevertheless, seem to have affected his pathology. This was, however, chiefly based on the humoral system, and partly on the vitalistic. Like Hippocrates, he attributed most diseases to the four juices of the body, and, like him, used emetics, laxatives, and revulsives to remove the offending humours or change the direction of their current. These revulsives were intended to draw out the offending humours from the body, or at least away from the part of the body into which it was supposed to have wandered and to be doing harm. Purgatives were used for this purpose; but the most powerful revulsive was venesection, the blood being regarded as a more usual cause of disease than the other juices. In spring, its quantity was supposed by Galen to be increased; and it is in all probability to his ideas that we may trace the custom, which prevailed in some parts of this country until a few years ago, of all adults indiscriminately submitting to the loss of several ounces of blood every spring, often by the hands of the farrier or barber. Galen was the last founder of a system of medicine before the fall of the Roman empire; and his doctrines and practice, modified by the mysticism and magic of the Middle Ages, were regarded as of almost Divine authority until about the time of the Reformation. At the end of the fifteenth century, the Turks conferred an inestimable benefit on Europe by taking Constantinople and driving the Greeks to take refuge among the Western races. One of these benefits was that the banished Greeks brought with them the original Greek versions of those ancient medical writings, so much revered by the Westerns, although known to them only through corrupted Latin versions.† On comparing these translations, previously so venerated, with the originals, many discrepancies were discovered; and men were thus led to doubt the correctness of the statements made in either the originals or the copies, and to appeal to nature to settle the dispute. The most noted opponent of the Galenical doctrines was Paracelsus, who, in the

\* Stanley, *History of Philosophy*, folio edition, page 5.

† Sprengel, *op. cit.*, vol. i, sect. iii, page 38.

† Wunderlich, *des Arztes Heillehre*, p. 12.



course of a wandering life, had consorted with alchemists, miners and metal-workers, fortune-tellers, wise women, and all sorts of curious characters, and had learned from them such secrets as they possessed. In his writings, we seem to meet again the doctrines of the early Greeks, modified by the influence of his strange associates. In place of the fire, air, earth, and water, with the underlying formative principle or nature of Hippocrates, Paracelsus puts sulphur, salts, and mercury,\* with a vital spirit which governs them. Sulphur seems to correspond to the fire and air, salts to the earth, and mercury (which dissolves metals) to the water. This vital spirit pervaded the whole body, but had a special action in every part: heart, liver, brain, lungs, and kidneys. When it was cut off from any part, that part died; and whenever it was weak, it required to be strengthened. His manner of strengthening it in the heart was very sensible, and likely to prove both useful and agreeable to his patients; for he first made an essence of crocus with pure spirit, and then administered one drop of this in good wine to old persons and to those who were melancholic or suffering from low spirits.† In his writings, we find both a chemical and spiritual element; and these formed the points of departure for two schools, just as the humoral and spiritual elements in the pathology of Hippocrates formed the points of departure of the dogmatic and pneumatic schools of the ancients. Both the chemical and spiritual notions of Paracelsus were developed by his follower Van Helmont, who converted his *spiritus vite* into a moral spirit, which he named Archæus, and which built up the body out of other materials. Instead of pervading the whole body, like the *spiritus vite*, the Archæus had his seat in the stomach, and ruled over a number of smaller Archæi, which he sent to different parts of the body to do his bidding. He was of a very uncertain temper, sometimes angry, sometimes depressed, and sometimes heedless. Paracelsus regarded fermentation, or, as he termed it, putrefaction, as an essential element in the generation of new beings, as well as in the digestion of food. According to Van Helmont, it was by means of a ferment that Archæus built up the body out of other materials; and epilepsy and mania were caused by his sending acid ferments out of the stomach into other parts, without thinking what he was doing. It is the Archæus, rather than the ferment, which plays the chief part in Van Helmont's pathology; and it is this spiritual side of it which is chiefly developed in the doctrines of Stahl, in whose writings the *spiritus vite* and the Archæus are replaced by the *anima* or soul, which he regards as the essential part of a man, the body being merely the organ through which it acts. The soul builds up the body, causes its different parts to act in harmony, and keeps it alive by preventing the putrefaction from taking place to which the body is constantly liable, and which occurs whenever the soul leaves it. The chemical element in the pathology of Van Helmont was much more generally accepted than the spiritual. One of its greatest followers was Sylvius de le Boë, according to whom fermentation is the basis of life, and of all its functions. The chief products of this fermentation are acids and alkalies. Diseases are produced by the predominance of one of these over the other; and are to be treated by neutralising the faulty humour with acids or alkalies, according to the requirements of the case, by expelling it by evacuates, especially diaphoretics, and by correcting the morbid process of fermentation by means of alteratives. This theory of fermentation found a strong supporter in Willis, who introduced the notion that it was influenced by the nervous system—a notion which seems to express the real meaning of Stahl, who lived long afterwards, but had not Willis's clear insight. The chemical system was displaced for a time by others; but recent researches show that many of the processes of life are really carried on by means of ferments, and that, if our present knowledge do not yet justify us in saying that life is fermentation, yet such a statement would contain much truth. The system which, for a while, cast the chemical into the background, was the mechanical one which was founded by Asclepiades and Themison, but having been rejected by Galen, had few or no adherents during the Middle Ages. It was again revived in another form by Borelli, who discarded the atoms, but retained the pores, and attributed disease to stoppage of the openings of the nerves in the skin and glands by a glutinous matter, so that the nervous juices were retained. In consequence of this, they underwent fermentation, irritated the nerves and heart, and caused fever. Alterations in the solids of the body were also regarded as causes of disease, and his treatment consisted in opening the pores by diaphoretics and strengthening the solids by quinine. Baglivi paid little attention to the juices, and regarded diseases as depending only on relaxation and tension of the solids. The celebrated Dutch physician Boerhaave

combined the humoral and solidist pathology, and regarded changes in the circulation, produced by alterations in the solids, as the causes of disease. The mechanical notions regarding rigidity and relaxation of the fibres became modified by Haller's demonstration of the irritability and inherent contractile power of muscular fibre, apart from the nervous system, but influenced by it; and Hoffman, consequently, divided diseases into those due to spasm and those due to atony. A great advance was made by Brown, who recognised the vital functions as the result of reaction against stimuli, and divided diseases into sthenic and asthenic, according as the reaction was defective or excessive. His doctrines were adopted and somewhat modified by Rasori, who replaced the terms sthenic and asthenic by *diathesis de stimulo* and *diathesis de contra-stimulo*. These were not to be recognised entirely by symptoms, but by the reaction of the body to certain drugs, and especially to venesection. If venesection did good, the disease belonged to the *diathesis de stimulo*; if not, to the other. The excessive or defective reaction, which Brown regarded as a character of the whole body, was limited by Broussais to parts, and stimulants were considered by him to have a different action according as they were applied to the part affected or another. In the first case, they were stimulants; in the second, revulsives. Brown regarded the asthenic as the common type of disease; but Rasori and Broussais took the other side, and contra-stimulants (such as large doses of tartar-emetic and bleeding) were their favourite remedies—remedies so destructive that it has been computed that Brown's doctrines have, through the hands of his followers, directly or indirectly, cost more lives than the French Revolution.

From this short account of the history of medical doctrines and precepts, it will be seen why, at the outset of my lecture, I dwelt upon the child's pastime of "making believe", as in some senses an illustration of medical science in the ancient and mediæval times—why, in fact, an illustration so simple and trivial might apply to the whole practice of medicine, even to a period as recent as the earlier decades of the eighteenth century. The simplicity of the child's speculations about the construction of a lock may show us the nature of some of those precepts of Galen, which, for centuries, were regarded with blind obedience, and as an authority almost Divine on questions of medical practice. Even yet, we are not free from an influence, which is worthy of respect and inquiry only because it takes us back to those earlier times of poetry and fable. We may still occasionally hear, from members of our own profession, that such a remedy "will cleanse the blood", that another will "open the pores", forgetting that they are repeating the long-discarded theories of Hippocrates and Themison. We all of us speak of laxatives and astringents, of sedatives and tonics, and alteratives, without knowing always what we mean. If we were summoned to explain the exact tissue, or organ, or process we proposed to alter by our alteratives, or the exact cell or fibre we proposed to strengthen by our tonics, we might be sorely puzzled for a true answer. But these old notions are gradually disappearing. The vagueness of the former times gives place to a sure and scientific grasp of our calling and its duties. We begin to localise and determine the parts upon which our remedies are to act. We approach to a clear idea of what we wish medicine to do. But we are still in the earliest stages of what, I trust, will soon be one of the ripest and most advanced, as it is one of the most beneficent, domains of modern science. Our ideas are often hazy and indefinite. We give medicine at random, with no defined idea of what it should do, and trusting to chance for a good result. When a remedy fails in its work, we can give no reason for the failure. We do not even seek out a reason, but content ourselves with saying "Oh, it did not act as it usually does". We forget that there must be some reason for this; that there are reasons for failure as well as for success. This law pervades the universe, and we cannot escape it in the dominion of medicine. If a stone do not fall to the ground, it is because gravity is prevented from drawing it to the earth. We seek out the cause, we remove the agent that arrests a law of nature, and down the stone must fall. We know that it will fall with a certain velocity; that it will exert a certain force. We know that this velocity will not vary the millionth part of a second, that this force will not lose the minutest fraction of a foot-pound, unless some other force interferes and interrupts it. Now, why should a law, which is so manifest to all the world, which is seen in the wonderful scenery of the earth, and whose powers we can gauge with an accuracy so minute and unerring, why should the law which governs the falling of a stone be better known to science than the laws which govern us in dealing with life and growth, sickness and health? It is in endeavouring to answer this question that we may hope to bring medical science into as advanced a position as other sciences. An ounce of sulphate of magnesia, dissolved in half a pint of water, will precipitate a solution of baryta, and will give us a definite quantity of

\* Paracelsus, *De rebus Medicis*, 1530, p. 64. Frankfurt, 1633.  
† *De rebus Medicis*, 1530, p. 64. Frankfurt, 1633.  
\* *De rebus Medicis*, 1530, p. 64. Frankfurt, 1633.  
\* *De rebus Medicis*, 1530, p. 64. Frankfurt, 1633.



the sulphate of baryta. This result we can count upon with infallible certainty. Given as a purgative, we cannot be sure of its action, although its power should be as certain and definite in the human frame as in the test-tube. The reason that we cannot be sure of its action as a remedy is because of differences in the conditions under which it is acting. It is our business to find out these conditions, so that, when we meet them again, we may know how to meet them. For there is an invariable relation between cause and effect, as invariable as the relation between an unchecked falling stone and the earth. We are, as I have said, just learning in medicine the paramount importance of tracing effects to their true cause. We may laugh at the credulity of the Middle Ages; when the way to cure a sword-wound was to apply a salve to the sword; when the only reason for the pestilence was the eccentric advent of some wandering fiery comet. But it is only with our own day that we improve upon the knowledge of our fathers; that, disdaining witchcraft, and spells, and delusions, and charms, and fables, we begin to see that the laws under which our bodies live are as immutable as the laws which govern Jupiter and the Pleiades; that, when we break them, we must suffer the penalty; that every infraction has its penalty. We learn that there is no such thing as an effect without a cause; we learn, too, that the penalty for breaking one law will not attend the violation of another. It would be absurd to say that if a child killed a fly it would have a pain in the stomach, and yet the time has been when such a statement would have been logical according to the accepted logic of medicine. The child may kill a fly—the child may have a pain in the stomach; but the pain does not result from the deed. The deed may lead to the pain in this, that the child may have to go dinnerless as a punishment for cruelty, and may gorge itself with green apples to supply nature's needs. But the penalty would be for eating unripe fruit, not for killing flies. In the same way, an unrighteous community given to cheating, lying, and profane speech may be visited by an epidemic. But the epidemic would come, not as the penalty for broken scriptural commandments, but as the penalty for broken sanitary laws, the penalty for impure water, imperfect drainage, or communication with an infected district. The violation of scriptural laws may lead to buildings being scamped, to imperfect drains, and a polluted water-supply. But simple repentance for these sins will not stop the epidemic until the sanitary laws are observed. The laws of nature admit of no exception and no excuse. The rain falls alike on the just and the unjust. If a viaduct break and a train be thrown into the river or the valley, the good and the bad alike suffer. Good and bad alike suffer, because, whatever respect they may have shown to moral laws, in this case they have offended the law of gravity—a law which exacts their lives or their limbs as its penalty. If a man swallow poison, the poison will do its work, whether the act of taking was a conscious or an unconscious act. This knowledge has enabled us to avert danger from ourselves and from those who, like children, would, in their ignorance, swallow the bright and tempting berry merely because it was pleasing to the eye, unconscious of the deadly principles lurking in its core. It is only within a short time that we have learned that men may become dull, listless, unable to command their faculties, because of the poisonous fumes from a fireplace or a stove, or the impalpable powder that floats from the arsenical paper decorating the walls. We know that the green tracery which scatters garlands and vines over our modern walls may be as death-dealing, because of this unseen arsenical presence, as the fumes of carbonic acid gas. We know that a whole district may fall under the terrible scourge of typhoid fever because the water-supply has found some contamination. We know that dinner-guests may be affected by scarlet fever because of ices composed of milk which contained the virus of that disease.\* The laws of nature are independent of our fancies. We must conform to them, or suffer the penalty of disobedience and neglect. Ignorance will not prevent disease. A physician's fancies as to the cause of a disease, or the nature of a remedy, will not check it. It is only by knowing as a truth, by patient study and investigation, the exact causes of disease, that we can avoid it. It is only by knowing these causes, the value of the remedies which will affect them, and the conditions of the human frame under which these remedies can have their full influence, that we can effect a cure. How this is to be done, is the subject to which I propose to address myself in the next lecture.

Buchanan. Mr. Simon's *Public Health Report for 1875*.

AMONG those who passed the recent Cambridge Local Examinations with honours was a lad named Farrar, who is deaf and dumb. He is under sixteen years of age, and has obtained a certificate for classics and mathematics. This is probably the first case of the sort in the United Kingdom.

## THE DIAGNOSIS AND TREATMENT OF AUDITORY-NERVE VERTIGO.\*

BY W. R. GOWERS, M.D.

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THE form of vertigo which depends on a morbid state of the organ of hearing, and has been variously termed "auditory vertigo", "labyrinthine vertigo", or, from the name of the aural surgeon who first called attention to its more striking characters, "Menière's vertigo" or "Menière's disease", has passed, to some extent, from the province of special aural surgery into that of general medicine. The reason is not far to seek. The symptom vertigo has usually little or no apparent connection with its actual cause. Hence its origin is constantly unsuspected by the sufferer. Moreover, there exists frequently an obtrusive association between this giddiness and certain gastric symptoms, which has constantly been and is still frequently misconstrued, and the nature of the disease consequently misconceived by both the patient and his medical adviser. The object of this paper is to illustrate these associations, which so obscure the real relations of the symptom, and to consider the points which are of chief importance in its diagnosis and in its treatment.

It is not necessary here to do more than allude to the evidence on which the pathology of the disease is based. That evidence is of three kinds: first, the frequent association of paroxysmal vertigo with defect or disturbance of the function of the internal ear or auditory nerve; secondly, on some scanty pathological facts, which point to the existence in these cases of a morbid state of the semicircular canals; and, lastly, on the well known experimental evidence of the connection between the function of the semicircular canals and the maintenance of the equilibrium of the body.† The theory of their function is, that they give information of the position of the head to a coordinating centre which presides over the equilibrium of the body, and which experimental physiology has located in the cerebellum. Into the question of the mechanism of the action and disturbance of the semicircular canals it is not necessary here to enter. Although the theory of varying pressure of the endolymph originated by Golz, and rendered more precise by later writers, appears highly probable, its application to the details of the normal action of the canals is still surrounded by uncertainties which render it difficult to frame a satisfactory detailed explanation of the phenomena of this disease.‡

All that we can conclude is, that their morbid condition causes a morbid action of the centre of equilibration, which may so disturb the equilibrium of the body as to throw the sufferer to the ground, or may merely result in a sense of corresponding movement or of mere instability. It is important, for a clear comprehension of the symptoms of these cases, to remember that the sense of movement and an actual movement, subjective vertigo and actual rotation or falling, are aspects of the same process. It is the motor tendency to turn which is felt as subjective vertigo. This was pointed out long ago by Dr. Reynolds,§ and its significance has been insisted upon from many points of view by Dr. Hughlings Jackson.¶

Whether any impression from the semicircular canals enters into the total sensation is uncertain, but that the chief part of the feeling of vertigo, that of movement in the individual or in external objects, is the sensation of an "incipient motor process", is evident from the fact

\* A portion of this paper was read before the meeting of the British Medical Association at Sheffield, August 1876.

† An allusion to this fact, with reference to the chief symptoms of the disease, has been given by Dr. Hughlings Jackson in his *Lectures on the Principles of the Physiology of the Nervous System*, 1874, and by Dr. Reynolds in his *Lectures on the Principles of the Physiology of the Nervous System*, 1874, and by Dr. Hughlings Jackson in his *Lectures on the Principles of the Physiology of the Nervous System*, 1874.

‡ Assuming the theory of M. J. Golz, and of Dr. Golz, that the variation in the pressure of the endolymph in the ampullæ of the several canals, produced by the movements of the head, constitutes the means of their stimulation, it is reasonable to suppose that the equilibrium centre is influenced by *stimulus* as well as by *pressure*, and that the pressure of the endolymph in the ampullæ of the several ampullary nerves in various movements will therefore be a very complex matter, involving not only the normal action of the several canals, but also information as to the position of the eyeball, by which the equilibrium centre is also influenced, depends on the degree of contraction of several muscles, oblique and straight. It must be remembered, also, that the free communication between the canals will increase the complexity of their mutual relations.

§ "Generally, in man, the tendency to movement is almost exclusively that of the will *per se*, or by grasping some object for support. The sensation of its production remains, and is projected onwards into the objects of the material world" (*On Vertigo*, 1854, p. 41).

¶ "Giddiness is objectively a motor symptom, and the 'sensitiveness' it is attended by is a state of consciousness, an impression of the body, and not of the world" (*On Vertigo*, 1854, p. 41).



that the sensation in the slighter attacks is always in harmony with the movement in the severe attacks. If the patient feel as if he were moving, it is towards the side to which he does move in the severe paroxysms. If the sensation be merely one of movement in external objects, it is always from the side towards which the patient falls; *i.e.*, it is the apparent movement of objects (say, to the left) which would result from an actual movement of the head or eyes to the right. In a case to be presently narrated, this was very marked. The practical significance of this is, that the character of the vertigo is an important aid in the diagnosis of its cause, and we are able to determine its character as accurately from such a subjective sensation as if we saw the patient reel. Hence the importance of ascertaining in every case of giddiness the precise character of the patient's sensation.

The derangement of hearing with which this form of vertigo is associated may be of two kinds. Sometimes there is evidence of undue excitation of the auditory nerve, noises in the ears, permanent or only at the moment of the paroxysm. More frequently, indeed almost universally, there is evidence of defective sensitiveness. This defect may be conspicuous or obscure; may range from a considerable degree of deafness to a slight defect in audition, which it requires much care to ascertain. The knowledge that the defect may be limited to the perception of sound conducted through the bones of the skull is an important addition to our means of diagnosis. The fact was pointed out by the late Mr. Hinton\* and by Mr. Dalby,† and cases in which it was noted have been published by Dr. Ferrier, Dr. Duffin, and others. This loss of what may conveniently be termed *perosseal audition* is regarded as evidence of an affection of the labyrinth or of the auditory nerve, may be absolute; a tuning-fork vibrating in contact with any part of the head or with the teeth may be unheard in the affected ear, while it is heard readily, if held opposite the meatus; or the loss may be partial, and in that case it may be detected by the method, commonly employed by aural surgeons, of closing the ears while the tuning-fork is sounding in contact with the vertex or some other part of the skull. Closure of the meatus, if the latter be unobstructed, increases the intensity of the sound, if the perception of sounds conducted through the skull be unimpaired, renders it weaker or inaudible, if there be impairment. But the method is one that requires much care and repeated examination to detect a slight defect in an unintelligent patient. It is important, however, to examine these cases, not only with a tuning-fork, but with a watch. There may exist marked impairment of perosseal audition to the watch, while the tuning-fork is well heard.‡ I know a gentleman who has been subject for several years to slight attacks of vertigo. The motion is uniform, a tendency to fall to the left. His hearing is acute; it was thought to be perfect. A tuning-fork in contact with the head is heard perfectly well with ears open or closed. A watch placed opposite the ear is heard perfectly well; but the loudest ticking watch pressed against any part of the head is not heard in the least. The condition, however, is a variable one. At times, a watch in contact with the head is heard well; more frequently it is not heard at all. The liability to attacks of vertigo seems to correspond to the periods of imperfect audition. Whenever he has been tested after an attack, the power of hearing the watch has been always absent.

Even a slighter degree of impairment of the power of hearing a watch in contact with the skull may be of significance, as is shown by the following case lately under my care, in which the tuning-fork failed to reveal any abnormality in the function of hearing.

P. D., aged 56, admitted into University College Hospital on August 15th, 1876, had suffered during the last five years from startings on going to sleep, which lately occurred every night. Four months previously, he had a blow on the head and on the bridge of his nose from the fall of plaster. In June (two months before admission), he noticed a considerable degree of deafness of the left ear, which continued for a fortnight and then passed away. During the six days before admission, a confused noise in the left ear was noticed. Twice during the preceding month, he had an attack of giddiness of short duration, of which no definite history could be obtained. The day before his admission, while walking, he suddenly became giddy, as if he were turning round, staggered towards the right side, and fell, as he says, in trying to recover

himself. A slight sense of movement on his part and in surrounding objects continued until his admission. He then complained much of a "confusion of sounds", which seemed to be in his head, and of headache in the occipital region and behind the ears. His hearing at first seemed to be natural. A watch was heard a good and equal distance from each ear. A tuning-fork was heard at eight feet, and was well heard when sounding in contact with the head in various positions, and in each ear it was increased in loudness by closing the meatus. A watch was heard in contact with the head and on the right side; closing the meatus increased its loudness. On the left side, however, closing the ear rendered the sound less loud; the watch had a double beat, and closure of the ear rendered one set of beats entirely inaudible. This result was obtained in every examination. (The patient was a very intelligent man, and his answers seemed reliable.) A few days after his admission, he had another severe attack of giddiness, with great "confusion of sounds in his left ear". His rest at night was much disturbed, and he turned about in his sleep until his head came to rest at the foot of the bed. Sometimes he lay curled round, with his head hanging over the edge of the bed. If he were awakened and put straight, on going to sleep again he soon returned to the former position. Five days later, he had another attack of vertigo, which continued in a slighter form for some hours, and some peculiar clonic spasm was noticed in the right arm and leg. He appeared able to control it when his attention was directed to it; but, when his attention was otherwise engaged, the spasmodic movement went on, the right hand being continually jerked up and down, so that the hand kept striking the epigastrium. At this time, he said he felt as if he were falling through the bed or swimming about the ward, so that an effort was necessary before he could realise that he was in bed. During the height of the attack, he complained of a continuous whirling or humming noise in both ears. A dose of chloral and bromide of potassium quieted him, and, on bromide of potassium and iron, he had no other severe attack while in the hospital.

In this case, the change in the hearing was so slight, that hesitation might well be felt in assigning any significance to it, were it not that the previous deafness on that side, and the noises in the ears which accompanied the severer attacks of vertigo give weight to the auditory defect, slight as it is. The occurrence of quasi-convulsive movements is a point of much interest, to which I will return. The remarkable postures assumed by the patient in his sleep are curious, and may perhaps be connected with the altered action of the organs or centres of equilibration. May the sudden startings on going to sleep be associated with the same condition? It is a well known fact that they are often related to a distinct dream of defective equilibrium.

But slight impairment of the power of hearing a watch or a tuning-fork, when vibrating in contact with the head, is not uncommon, even in persons who do not habitually suffer from vertigo. This is not surprising, since it is almost certain that the apparatus for the recognition of sound and of the position of the body are not the same, although they may be adjacent and even connected and supplied by portions of the same nerve. Even supposing, with Dr. Ferrier, that the semicircular canals are the channels by which the vibrations conducted through the bone reach the cochlea, we do not know that all disturbances of the semicircular canals cause vertigo. But I think some facts to be adduced render it probable that derangement of these canals may bring the centre of equilibration into an unstable condition, in which it is easily excited to sudden perverted action (paroxysmal vertigo) by some abnormal impression on the other nerves with which it is connected. It seems, therefore, that a morbid state of the semicircular canals may predispose to vertigo, as well as excite it. I shall return to this in speaking of the diagnosis of auditory and gastric vertigo, and shall mention some instances in which the attacks of vertigo appeared clearly predisposed to by aural, and excited by gastric, disturbance. A probable example of such a relation was afforded by a member of our profession, who, on two occasions near together, was seized with intense vertigo, brief but definite in character, the sensation being on each occasion that of a similar rotation. The attacks occurred after and were attributed to the inhalation of tobacco-smoke into the lungs. On subsequent examination of the sense of hearing, it was found that, while both tuning-fork and watch were heard when in contact with the head, closure of the left meatus rendered the sound considerably louder, while closure of the right meatus made little difference in the intensity of the sound. He had suffered from some ear-trouble in the right ear, after scarlet fever in early life; the ear was deaf for a time, but gradually, in the course of years, regained normal power. It is possible that, in this case, some permanent defect in the function of the semicircular canals, which being slight, or being compensated or allowed for in the sensori-motor adjustments, did not cause vertigo, may yet have induced a state of defective stability in the centre for equilibrium, which the

\* On Labyrinthine Vertigo (*Gray's Hospital Reports*, 1873).

† *Lectures on Diseases of the Ear*, 137.

‡ The method of testing perosseal audition with the watch which I have found most useful, is to hold the watch first close to, and then in firm contact with, the zygoma, the parietal eminence, and the mastoid process—the direct passage of the vibrations to the meatus being prevented by placing the hand as a screen between the watch and the ear in the two former positions, and in the latter by drawing forward the pinna. The effect of contact in the normal state is very marked. The watch not in contact is scarcely heard or inaudible, while in contact it is loud. This method of testing is somewhat coarse, but very convenient. The effect of closure of the meatus on the sound of a watch is slighter than in the sound of a tuning-fork; and although in health it is distinct, it is not sufficient to render this test a convenient one.



strong impression on the pulmonary pneumogastric nerve sufficed to overturn. The relation of the pneumogastric to the function of equilibration is well known. Dr. Hughlings Jackson has pointed out that the connection of its nucleus with that of the auditory nerve in the medulla, may explain the frequent occurrence of vomiting in the paroxysms of Menière's disease; and Dr. Ferrier has suggested that there is probably a still higher association between the two nerves in the equilibration centre.

The vomiting which accompanies the disturbance of equilibrium, and which is to be attributed to the association with the function of the pneumogastric, is the source, as already stated, of much of the misconception as to the nature of these cases. A few years ago, had the question been asked, What are the commonest causes of paroxysmal vertigo? the invariable answer would have been "A disordered stomach or a diseased brain". It is probable that, even now, the exceptions to such an answer would be comparatively rare. The answer, at any rate, indicates the conditions from which the diagnosis of auditory-nerve vertigo has to be made; for gastric and cerebral disturbances are probably, next to labyrinthine affections, the most common causes of giddiness, and the paroxysms of Menière's vertigo are constantly ascribed to one or the other of those conditions.

The gastric associations are especially liable to mislead. The occurrence of vomiting, in the absence of other obtrusive cause of the vertigo, is held as proof of a causal derangement of the stomach. Sometimes, an attack of vertigo may not cause vomiting; it may merely disturb the gastric functions, just as the motion of a ship does with some persons in whom it does not cause seasickness. The dyspepsia which results is regarded as a sufficient cause for the giddiness. But, further, in persons the subjects of auditory vertigo, whose equilibrium nerves and centre are deranged, a primary gastric disturbance seems sometimes to excite a paroxysm of the special vertigo to which they are liable, and the gastric disturbance which thus causes the attack is naturally regarded as its only antecedent.

An illustration of this is afforded by the case of a gentleman, who suffers from frequent attacks of intense dyspepsia and vertigo; the former appearing to him to precede and cause the latter. The vertigo is sudden and violent; he has fallen with it, and would fall always if he were not careful. He cannot say to what side he falls; but on one occasion must have fallen to the right, as he grazed the right side of his cheek. He is almost completely deaf on the right side; a watch, in contact with the skull on that side, is quite inaudible. The hearing on the other side seems unimpaired. The deafness came on gradually about twelve years ago. He has been subject from boyhood to attacks of violent dyspepsia, with vomiting and prostration. In his youth they were as severe as they are now; but he never suffered from vertigo until the onset of his deafness. Since that time, the dyspepsia and vertigo have gone on together. The paroxysms of vertigo in this case appear distinctly to be excited on the attacks of gastric disturbance. They are produced by errors in diet, and the long liability to such dyspepsia indicates that it is not to be regarded as secondary to the aural affection. But the sequence of the symptom, the coincidence of the liability to vertigo and of the ear-disease, indicate clearly that the giddiness is ultimately due to the influence of the latter, although it is excited by the stomach-derangement.

[To be continued.]

## A NEW THEORY OF THE ORIGIN OF TYPHOID FEVER.

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AT the present time, when the professional mind is carefully feeling after the origin of typhoid fever, I presume any probable theory that may be advanced to explain many of the facts surrounding this important question will in some degree be of use to, and therefore be welcomed by, those who make the subject their special study. It is with this hope that I venture to submit the following facts upon which I build my theory.

In attempting to discover the cause of this fever, from the fact of its universal prevalence in hot and cold climates, in town and country, in the houses of the rich and in the hovels of the poor, it is necessary to fix the blame upon a factor that is equally ubiquitous; and I would further add that, during the period in which my thoughts have been directed to the subject, the accumulation of different evidence bearing upon it has only tended, in my opinion, to increase the probability of the theory.

Three years ago, I attended seven or eight cases of this disease in

a row of six cottages situated on the crest of a hill about two miles from this town. After careful inquiry, I arrived at the conclusion that the cause of this outbreak was to be attributed to the fact that the slaughter-house of a butcher was situated at the end of the row, into the common sewer of which the blood from his operations was allowed to flow, there to remain and putrefy. The waste-pipes from the sinks were directly connected with this drain without the intervention of any kind of trap, and the smell therefrom was often horrible. Here, the putrefaction of a highly albuminous liquid, blood, in the drain, and a direct communication between it and the interior of the cottages, seemed to give rise to the fever.

The following case, related by Dr. Domenichetti, medical officer of health, Louth Sanitary District (*Public Health* for July 1875), and quoted by Dr. Cornelius Fox (*BRITISH MEDICAL JOURNAL*, vol. ii, 1875, p. 376), appears to have had a similar origin; viz., the introduction of the products of decomposing blood to the system; in this case, by the water-supply. "A man aged 57 was seized with marked symptoms of typhoid fever, which terminated fatally in about a week, and, upon investigation, it appeared that the drinking water was at fault, though not suspected at the time, as it was derived from a blow-well, which, in these districts, is a term applied to water from the calcareous rock." "Upon examining the premises, I ascertained there was a stable-grating within a few yards of the well, and I requested the owner to have the drain opened. Upon this being done, the tin pipe through which the water was conducted from the underlying rock was found to be corroded through, and at its base there was an accumulation of refuse from pig-slaughtering, etc., quite sufficient to account for the contamination of the water. I should observe that no other case of typhoid fever had occurred near the spot for some time."

In the experiments instituted by M. V. Feltz, and communicated to the Académie des Sciences, upon the effect produced upon dogs by the injection of putrid blood, and alluded to in a contemporary (*Lancet*, vol. ii, 1875, p. 460), the symptoms produced were very analogous to those we see in typhoid fever.

"Putrid blood which had stood for several months was dried and desiccated in the air-bath and mixed with a certain quantity of distilled water, and injected into the crural vein of three powerful dogs. The animals immediately exhibited marked depression. After a period of incubation of from four to five days, febrile symptoms set in, accompanied by vomiting, loss of appetite, elevation of temperature, bilious and bloody diarrhoea, and biliary urine", and these symptoms were produced even when all trace of bacterial life had disappeared from the blood injected.

Pondering over the origin of the typhoid cases first mentioned in this paper, my thoughts were directed to the analogies existing between the symptoms present in typhoid fever and those which characterise certain cases of puerperal fever which appear to arise from the introduction of the product of decomposing blood to the system by a channel very much the same as in the case of the experiments on the dogs. In the cases to which I allude, diarrhoea is often one of the first appreciable symptoms, accompanied by high fever, the peculiar typhoid tongue, and, later on, hurried respiration, showing that marked tendency to affection of the lungs which is common to both.

I remember a case of this form of puerperal affection that occurred in a primipara after delivery by the forceps. Two days after delivery, she had a rigor accompanied by severe pain in the abdomen; she recovered after an illness of four weeks, during which time she suffered from symptoms remarkably like an ordinary typhoid attack in all the more important particulars. Unfortunately, as a general rule, cases attacked like this die in the course of a week or ten days, and the further clinical study of them is thus effectually prevented; but so much have some of them resembled ordinary typhoid fever cases of a very severe type that, if it were possible to have overlooked the puerperal condition, they might have been set down as cases of that fever. Of course, the puerperal cases are accompanied by local affections of the organs through which the poison travels before it finally reaches the general body of circulating blood, and this fact seems for a considerable time to have obscured the true nature of these cases by diverting attention from the ultimate general effects upon the system and fixing it too exclusively upon the local expressions of the infection.

The different channels by which the poison is admitted to the blood—in the puerperal case through the lymphatics or veins of the uterus, in the typhoid case through the stomach—would to my mind go far to account for any apparent variations in the symptoms. By the first method, the decomposing albuminous matter is admitted more directly, less changed by any chemical process, and in a more recently putrefied, and therefore in a more active condition, to the blood, and thus produces, as we might have expected, much severer effects than when it



is admitted by the second channel, as in the ordinary cases of typhoid fever, as it then has lain in the earth for some time and afterwards (as usually happens) been washed or percolated into the wells, and, after being received into the stomach, undergoes the action of the gastric juice before it effects an entrance to the blood.

The question may now be asked in what way is the origin of these cases, apparently arising from some component of putrefying blood, connected with the vast number of typhoid fever cases which appear to arise from the pollution of drinking-water by the excrement of human beings? In this manner, by fixing upon the serum of the blood as the essential factor of the poison, we at once see how any severe case of diarrhoea would be sufficient to produce the disease, because the liquid evacuation of severe diarrhoea is principally composed of serum of blood, and it is drawn from a source and placed in a condition highly favourable to the development of the putrefactive process. If decomposing blood be capable of giving rise to typhoid fever, and if the decomposing liquid evacuations of diarrhoea have the same property, then serum of blood, which is the only component common to both, must be the poison factor.

By this process of reasoning, I had already arrived at the conclusion that severe cases of diarrhoea might give rise to typhoid fever in others, before the contribution of fever cases apparently owing this origin to the medical journals. Of this class, are those contributed by Dr. Low in the BRITISH MEDICAL JOURNAL for 1876, vol. i, page 659. Four cases occurred in an isolated house, where "the privy was found running over and so full that the seat could not be used". He goes on to describe a second group of cases, also four in number. "Two little boys attending a day-school had an attack of diarrhoea. One of the boys passed his evacuations in bed, but was able to go to school next morning. The mother of the boys employed a charwoman to assist her in washing the soiled bedclothes. An aunt of the boys also assisted. Within a week, these three persons were seized with symptoms of enteric fever, which developed rapidly and proved fatal to the mother and the aunt. All three were engaged in the cleaning of the soiled linen, and were nauseated by the foul smell of the evacuations." Dr. Low goes on to prove the exclusion of all possible sources of the specific infection from any prior case of the fever, either of the boys or of the women, and at length concludes: "In the absence of any proof to the contrary, we must admit that the disease began from the inhalation of the fetid stools of the boys; that the emanations from these stools poisoned the systems of the three individuals who inhaled them, and the filth-fever was generated."

In connection with this *de novo* origin of the fever, from the decomposing liquid evacuations of diarrhoea cases, it would seem something more than a coincidence that the belief is now nearly universal among practical physicians that, when the disease is propagated continuously from case to case, it is believed to be so propagated only by the medium of the stools. (*Vide* BRITISH MEDICAL JOURNAL, March 25th, 1876, page 383.) In my own management of these cases, I have never found any reason to regret my confidence in this belief. This would also tend to prove that an albuminous liquid is required to propagate and transmit the contagium of the disease to another healthy individual, or why should it not be equally communicated through the medium of the other excretions and secretions of the body?

This theory of typhoid fever, arising from the decomposition of the serous evacuations of severe diarrhoea, accounts in a more satisfactory manner than any other for the extraordinary prevalence of the fever at a certain period of the year. It is a fact of universal observation that enteric fever cases reach their maximum, in point of numbers, in the months of October, November, and December; and this "periodical disposition" to the disease is accounted for by Liebermeister, who believes that "the real cause of every epidemic and every isolated case of typhoid fever is only the specific poison of typhoid fever" (Ziemssen's *Cyclopadia*, vol. i, page 61), in the following manner. He says (*ibid.*, vol. i, page 65): "The curves representing the frequency of typhoid correspond to the curves of average temperature, only with this difference—the different points of the typhoid curve follow those of the temperature curve by an interval of some months"; and, in order to account for this discrepancy, he says it takes two or three months for the changes of temperature to penetrate to the breeding places of the typhoid germs.

But if it can be shown that typhoid fever may arise from the putrefactive decomposition of blood-serum, then the abundant prevalence of summer cholera, from the end of July to the beginning of September, affords plenty of material for the elaboration of the poison, which afterwards percolates into the wells or is washed by the autumnal rains into the sources of our water-supply.

I do not propose to enter into the discussion as to whether this disease can have an abiogenetic origin, although the facts upon which

my theory is founded appear to favour that doctrine. Whether the fever arises only from the specific typhoid germs, which (according to the advocates of this theory) have a nearly omnipresent existence, and have the property of preserving their vitality in a dormant condition for many years, ready to spring into active and vigorous life when introduced into a proper nidus for their development; or whether the poison is manufactured from the ordinary germs existing in all the putrefactive processes which take place in certain animal fluids, or is elaborated by some subtle chemical change in the properties of the substance itself, does not signify so much to those who have to deal practically with the disease, so long as we can put our finger upon the factor, element, or pabulum without which these forces would be rendered permanently impotent.

It is from the conviction that this pabulum will be found in albuminous liquids, such as blood, blood-serum, and the liquid discharges from the bowels in diarrhoea, and that the poison of typhoid fever is elaborated from the putrefactive changes which occur in them after their expulsion from the body and subsequent exposure to the air, that I have ventured to draw the attention of the profession to what appears to me to be a probable explanation of the origin of this disease.

### CASE OF SPINAL SCLEROSIS.\*

By JOHN S. BARTRUM, F.R.C.S.

S. S. DIED September 1876, aged 73. She was a hearty vigorous woman, mother of nine children. Her mother was healthy; her father, though gouty, lived some years past eighty.

When about fifty-eight years old, she complained persistently of pains in the regions above the left shoulder and down the left arm; these, at the beginning, seemed to be rheumatic, and were relieved by friction; but very gradually the arm became tremulous and lost power, with sensations she termed "pins and needles". The same loss of power and subsultus extended to the left leg, thence to the right shoulder and right leg. She could move with difficulty, and not without help. Up to 1862, she, with help on each side, could walk a mile; she then had a long illness, after which she never walked. The voluntary muscles of the whole frame gradually lost their power, while many were in continuous tremulous action. For two or three years before her death, her state was very peculiar and interesting. She lay rigid and at full length on her back, the fingers stretched out, with tonic contractions of the tendons of the forearm and elbow, so continuous that it was impossible to feel the pulse at the wrist or elbow. The wrist, elbow, and shoulder joints were all fixed by muscular action, not rigid, for each could be forcibly bent. The toes were stretched forward and the foot extended on the leg, but the subsultus was not so marked as in the upper extremity. The thigh could be forcibly bent on the trunk, the rigidity being muscular, not articular. In the legs, when not well as usual, there were occasional spasmodic twitchings and painful stretchings. In the earlier history of the case, there had been much uneasiness at the back of the neck, the muscles of which and of the back were in a state of equal tension, but not the muscles of the face, which was calm and could readily smile or laugh. The head was fixed as firmly as the limbs. Mrs. S., when put on her legs, was raised as a fixed trunk, exactly as is seen in acrobats, or as in a corpse when in the most marked stage of cadaveric rigidity. About 1868, her speech began to be difficult and voice faint, till, for some years preceding her death, the power of speaking was wholly lost, except such forcible expirations as "Yes" or "I won't". Those about her guessed her wishes, which she signified by the slightest expirations, not whispers; her assent or dissent being given by closing her eyelids or movement of the eyes. All voluntary power of the muscles of the cheeks or tongue was gone. There was no tremor of tongue or nystagmus.

Towards the end of her life, the mouth was always open, the tongue being within the mouth. She could not masticate at all, the slightest hard crumb causing imminent suffocation. This was, however, much modified by the flavour of the viands; she readily swallowed champagne, if still, but medicine could only be got down by teaspoonfuls. The slightest cough always caused anxiety lest the mucus should cause suffocation.

Sensation was everywhere perfect; a pinch or tickling of the legs caused spasmodic muscular action, and the reflex action on tickling the soles of the feet was quite painful. A ridge in her clothes was painful to her.

The digestion was good. The bowels and bladder acted naturally, and the nurse learned by intuition when it was needful to place her on

\* Read before the Bath and Bristol Branch.



the night-table. She could sit in a chair for a short time, and, till within a week or two of her death, she enjoyed carriage exercise. There was no muscular atrophy, nor did bed-sores form. Till the last hour of her life, her mental powers were perfect, being fully conscious and most pleased at the presence of her children around her dying-bed. She enjoyed reading, the leaves of the books being turned over by her attendants. Her powers very gradually failed; but there were no special symptoms except that, during the death-struggle, the muscles of the head and face were painfully distorted, but not the muscles of the trunk.

The pathology of the case is to me unknown. It resembled the unceasing tremulousness of paralysis agitans, and, like these, the muscular movements ceased during profound sleep, but began immediately on waking; indeed, the cessation of the muscular movements was often the only means of knowing whether or not she was asleep.

This case afforded the most marked example of the independence of the mental power of the spinal system; for though, as regarded her bodily movements a corpse, she ruled, not managed, a large household by her strong will; her wishes, as far as they could be learnt, being the law to those about her.

There was no *post mortem* examination.

I venture to add Dr. E. Long Fox's suggestions as to the probable cause and sequence of pathological changes in the spinal cord: 1. Spots of subacute myelitis; 2. As a sequence of this, spots of milary sclerosis in the anterior column; 3. Larger patches of sclerosed tissue in the grey matter, and possibly even in the posterior column, but not affecting the anterior cornua; 4. The same sclerosed condition of part of the medulla oblongata, especially about the nuclei of the vagus, hypoglossal, and spinal accessory nerves.

## ERYTHROXYLON CUCA IN THE TREATMENT OF TYPHUS AND TYPHOID FEVERS, AND ALSO OF OTHER FEBRILE DISEASES.

By SAMUEL McBEAN, L.R.C.P.Ed.,

Joint Lecturer on Botany in the University of Durham College of Medicine, Newcastle-on-Tyne.

SINCE Dr. Ringer made the important discovery that the amount of urea excreted by the kidneys stands in a certain relationship to the temperature of the body, it has been ascertained that in all febrile diseases, with the exception of yellow fever, the amount of urea formed is abnormally increased; and representing, as urea does, the wear and tear of the frame (tissue metamorphosis), it may be regarded in fever as affording not only an index to the severity of the disease, but also a direct clue to an exceedingly important line of treatment.

I will further illustrate the position I assume in this paper by submitting that, as throughout the duration of a case, *i.e.*, of typhus fever, there is present a specific morbid agency which so influences the sympathetic nervous system as to produce or permit an extent of tissue metamorphosis (indicated by the increased amount of urea excreted) not only incompatible with health, but most probably productive of the various febrile phenomena, the sum of which constitutes this disease; therefore, to restrain such metamorphosis until the morbid agency has ceased to exist, is clearly indicated as the most desirable end to accomplish in treatment. To accomplish this end, I believe we possess a very efficient remedy in *cuca*, the dried leaves of the erythroxylon *cuca*. I need not say anything of the properties ascribed to this drug (the subject having already been very freely ventilated), beyond stating that, when indulged in by a healthy person, it prevents for a time the feeling of fatigue, and diminishes the amount of urea excreted—subjective and objective signs of tissue-metamorphosis—and that in this property lies its value as a therapeutic agent.

CASE I.—Mr. R., aged 34, of a phthisical family, came under my care on September 8th, suffering from the usual premonitory symptoms of specific fever. He had been unwell for some time previously, but not confined to bed. Until September 15th, there was no perceptible increase of temperature, but from that date the ordinary symptoms of typhoid fever rapidly developed; and on the 19th the patient's condition was as follows. He complained of severe occipital headache and vertigo; sore-throat; pain in the back at the lower angle of the scapula; slight ileo-cæcal pain; painful confusion of thought, with occasional delirium. I found the mucous membrane of the fauces much swollen, red, and ulcerated; the tongue moist and thickly coated; slight hypostatic pneumonia of the lower lobe of the right lung; sputa muco-purulent, streaked with blood; the abdomen slightly tympanitic; diarrhoea feculent. He had occasional paroxysms of profuse diaphoresis; also an abundant crop of miliaria

crystallina. Decubitus was dorsal. Pulse 108. Temperature at 10 A.M., 102.40; at 10 P.M., 104. Respirations per minutes 36. The amount of urea excreted during the preceding twenty-four hours was 59.05 grammes (2.08 ounces). Until to-day, the treatment had been purely expectant. The patient was ordered a drachm of tincture of *cuca* in water every four hours.

September 20th. He had spent a better night; said he had "greater control of his thoughts". There was no delirium. Temperature at 10 A.M., 100; at 10 P.M., 102.40. Pulse 104. Respirations 30. The amount of urea excreted during the preceding twenty-four hours was 53 grammes (1.87 ounces); the diarrhoea was much the same; and there was still much diaphoresis. He complained that the medicine produced flatulence. The tincture was continued in doses of a drachm and a half with fifteen minims of essence of ginger, every four hours.

September 21st. There was now no confusion of thought. Temperature at 10 A.M., 99.40; at 10 P.M., 100.50. Pulse 98. Respirations 26. Urea excreted during the preceding twenty-four hours was 48 grammes (1.7 ounces). Much less diaphoresis and flatulence. The patient's general appearance much improved. The *cuca* to be continued as before.

September 22nd. No pneumonic crepitation; sputa mucous. Yesterday and to-day, he had been able to read the newspapers. Diarrhoea still continued. Temperature at 10 A.M., 99; at 10 P.M., 100. Pulse 87. Respirations 22. To-day, there were a few spots of typhoid roseola on the abdomen. He was ordered two drachms of the tincture of *cuca*, combined with a drachm of liquid extract of bael, with a view to restraining the diarrhoea.

From September 23rd to September 29th, the patient continued to improve; the temperature, pulse, and respiration on the 29th being about normal. The diarrhoea ceased on the 27th, and on the 29th the amount of urea excreted daily had fallen to 27 grammes (416.7 grains), and I now considered convalescence fairly established; but on the evening of the 30th the patient, having become rather careless, allowed himself to be exposed to a draught of cold air from a window. This was succeeded the same night by rigors. On October 3rd, he was suffering from a severe attack of lobular pneumonia; and on the 10th, I regret to say, he died.

I have treated two or three other cases of typhoid fever with *cuca*, and in each case obtained a favourable result; but have selected this case for publication, as in the others I made no quantitative analysis of urea.

CASE II.—C. B., aged 46, was seized on October 3rd with the usual premonitory symptoms of fever, and on October 10th the patient's condition was that of a well marked case of typhus fever. Temperature 104; pulse 108; respirations per minute, 34. The amount of urea excreted during the preceding twenty-four hours was 58 grammes (2.05 ounces). I prescribed a drachm of tincture of *cuca* every four hours. From October 10th until October 18th, the tincture was continued, and the dose gradually increased to three drachms every four hours. On the 18th, the amount of urea excreted during twenty-four hours was 28.05 grammes (nearly one ounce). With the diminished amount of urea, there was a corresponding diminution of temperature, pulse, and respiration, all of which at this date had become quite normal. In this case, no remedy save the tincture of *cuca* was used; and, as in the preceding case, from the time the patient began to take the tincture until convalescence was established, there was a daily amelioration of symptoms.

CASE III.—I would here refer to a case of protracted convalescence after typhoid fever. On September 17th, I was called to see Mrs. S. She informed me that she had been suffering from typhoid fever about two months ago. I found her very much emaciated, and confined to bed, from which, I was told, she had not been moved for two months, not even to have the bed made. She seemed to suffer entirely from extreme debility. The temperature was irregular, but generally high in the evening, with slight nocturnal perspiration. The respiratory murmur was normal. The amount of urea excreted during twenty-four hours was 56.05 grammes (nearly two ounces). I ordered an infusion of *cuca*-leaves to be taken when thirsty, and did not see her again for a week, when I found her much improved and able to sit up. She informed me that she experienced "great support" from the infusion for about an hour after taking it; and that, when she found she required further support, she repeated the dose. I had not another opportunity of making an analysis of *cuca*.

I have also found *cuca* of great service in both acute and chronic pneumonic phthisis. Where there is much febrile excitement, it lowers the temperature and restrains or materially alleviates the distressing perspiration. In febricula, also, it may be used with great advantage.

I do not, however, wish it to be understood that I regard *cuca* as sufficient to meet every complication that may arise in specific or other



febrile conditions, but would submit that its real value lies in the influence it exerts over that section of the nervous system which controls the *constructive* and *destructive* forces which are constantly in operation in the living body; and that when, as in fever, assimilative nutrition or *constructive* force is in abeyance, *cucua* restrains tissue-metamorphosis or *destructive* force.

P.S.—Perhaps, for the benefit of those who may wish to try the tincture of erythroxylon *cucua*, as I found great difficulty in obtaining it, I may mention that I have lately obtained it in large quantities from Messrs. Hewlett and Son, Cree Church Lane, Leadenhall Street.

## INDEPENDENT MOVEMENTS OF THE EYES IN COMA.

By CHARLES MERCIER, M.R.C.S.,

Assistant-Demonstrator of Anatomy at the London Hospital.

IN every case of loss of consciousness, in which the coma has reached a certain depth, or, in other words, at a certain stage in the onset of coma, the eyes lose their normal correspondence and move independently of each other. Usually, the optic axes diverge; but divergence is by no means essential, and, when it exists, is only temporary. One eye may be at rest while the other is in motion, or both may be moving in different directions and at different rates; the positions assumed being often most striking and unnatural, but quite inconstant and uncertain. The movements are never "spasmodic", that is, abrupt; but always slow, rolling, gliding motions. They have no relation whatever to the cause of the loss of consciousness, but only to its degree. I have seen them in coma from injury to the head, from cerebral hæmorrhage, from alcoholism, from uræmia, from "simple apoplexy" after an epileptic fit, and in profound anæsthesia from chloroform and ether. I have never failed to find them in any case of deep coma that I have examined.

The degree of coma with which this appearance corresponds is most readily observed in the artificial production of loss of consciousness by anæsthetics. After the first purely voluntary struggling, comes usually a period of quiescence and delirium, and then a second struggle, from which the patient gradually passes into "surgical anæsthesia", in which the conjunctiva is insensitive. It is usually just at this point, at the end of the second struggle and just before the conjunctiva ceases to be sensitive, that the independent movements of the eyes begin, and the return of the optic axes to parallelism is a certain indication that the anæsthesia is passing away.

So invariable is this sign, that I have been in the habit, when administering chloroform and ether, of taking these movements as the indication of the degree of anæsthesia, instead of the rather barbarous method of rubbing off the corneal epithelium with the finger.

The independent movements have also, I believe, a great diagnostic value. Since it is clearly quite impossible for any one to simulate them by an effort of will, their existence forms a ready and certain means of excluding malingering and hysteria from the diagnosis of a case. The movements are in no degree an active process; but are simply dependent on loss of control, and what Dr. Hughlings Jackson calls "reduction in automaticity". In this connection, it is interesting to note that, in some of the lower animals (*e.g.*, the chameleon), the eyes normally move independently.

The terms coma and loss of consciousness are used here in a wide sense, to include not only the state of profound stupor, with stertorous breathing, etc., but also all the stages which precede this graver degree.

## LOSS OF ASSOCIATED MOVEMENTS OF THE EYES UNDER CHLOROFORM AND IN DISEASE.

By FRANCIS WARNER, M.D. Lond., M.R.C.P.,

Medical Registrar at the London Hospital; and late Extra Acting Physician to the Children's Hospital, Birmingham.

THE movements of the eyes have been studied with much care, and present a field for clinical observation. I wish now to direct attention to the loss of association in the movements of the eyes in patients deeply under the influence of chloroform, and in some cases of disease, and congenital defect of the brain. In the healthy subject, the eyes when moving in the horizontal plane are strictly parallel; when they are directed upwards they diverge slightly, but symmetrically; similarly, when directed downwards, they converge symmetrically. In looking at near objects they also converge. Now, in each of these physiological departures from parallelism, the inclination of the axis of the eye towards or from the median plane, is equal on the two sides,

and these associated movements are supposed to be due to certain "brain centres", which govern such associated movements.

1. Preserving parallelism when they move horizontally.
2. Governing convergence when accommodating for near vision.
3. Governing divergence or convergence as the individual looks at an object above or below the horizontal plane.

When a patient is being placed under chloroform, the eyes first roll upwards as in sleep, and, in so doing, they diverge symmetrically, as when they roll up from any other cause. When the patient is fully comatose, and before he begins to breathe stertorously, there is a *loss of association in the movements of the two eyes*. At this stage of temporary brain-paralysis, the eyes are usually directed in the horizontal plane (or what would be the horizontal plane were the patient in the vertical position). In this condition, *one eye may remain perfectly quiescent, while the other slowly wanders either inwards or outwards*; the same thing may then recur, or the other eye may remain at rest, or the two eyes may both move, but without any association of movements except that they both (generally at least) keep at the same level. I have myself never seen the same phenomena in the coma produced by ether, presumably, because with ether surgical coma may be brought about by a less degree of brain-paralysis than in the use of chloroform. This is an argument in favour of the greater safety of ether as an anæsthetic.

The following case came under my care at the Children's Hospital, Birmingham. A girl, three years of age, was the subject of permanent paralysis of one arm and leg, following convulsions in infancy. She had never been able to speak, was constantly dribbling, and idiotic in manner. On observation, there was seen to be an occasional loss of parallelism of the eyes: one would remain at rest, while the other wandered inwards or outwards; this was a chronic condition in the child, who was suffering from no acute disease.

I have seen a few similar instances, one in conjunction with two other physicians, who confirmed my observations. In a few instances, I have seen the same thing in acute cerebral meningitis. In considering the physiological significance of this condition, I think the cases quoted indicate that it is due to paralysis of certain portions of the brain, and that it is not due to any spasmodic action of the recti muscles. If it be granted that a brain-centre governs the horizontal parallel movements of the eyes, this centre must be paralysed in the condition referred to. Chloroform administered to the stage of complete surgical anæsthesia, and just short of producing stertorous breathing, paralyses this centre; ether may produce surgical anæsthesia without paralysing it. These observations are incomplete, and the deductions crude; but I have thought the subject worthy of notice, and of clinical interest.

## THERAPEUTIC MEMORANDA.

### SALICYLATE OF SODA.

THE use of salicylic acid in rheumatic fever is not restricted to the period of pyrexia. At the St. George's Dispensary, a coachman, aged 50, who had previously suffered from rheumatic fever, came under the care of Mr. Prince, the resident surgeon, in January last, for severe polyarticular rheumatism. He was treated during the first week with citrate and acetate of potash. The knees, ankles, and wrists were affected; there was free perspiration, and the fever was high. In the second week, hiccup, vomiting, and diarrhoea set in, with distension of the colon, and dyspnoea; enemata afforded relief. The articular pains persisted, but the temperature fell. Six to eight ounces of brandy in the twenty-four hours were added to a liberal supply of milk (three pints), eggs, and beef-tea. In the third week, with further swelling of the joints, salicine was given. The temperature ranged from 101 to 102 deg. An endocardial murmur appeared; there were cough and distress at night, with a tendency to morning diarrhoea. The salicine had to give place to bark and ammonia. The urine was free, of low specific gravity, with excess of phosphates. In the next week, one or two full doses of quinine were prescribed, and cod-liver oil was given at night with benefit; an eczematous rash appeared over the chest where warm poultices had been applied, and extended along the inner aspect of the arms; the breathing was better, the cardiac murmur disappeared, and the appetite returned. On February 23rd, fresh rheumatic swelling showed in the right wrist. The temperature at 4 P.M. was 98.8. Ten grains of salicylate of soda were given every three hours. The night was quite free from pain or disturbance; so, also, the next. The breathing became easy, the urine quiet, the urine of higher specific gravity, with a deposit of uric acid for the first time since the early part of the illness, and giving the well



known reaction of salicylic acid with the iron test. The articular pain was much easier, the stiffness had gone from the ankles, the knees were less swollen and tender. After six doses had been taken, it was not found necessary to repeat the medicine at such frequent intervals. At noon, February 26th, the temperature was only 97.8 deg. The urine still yielded traces of the remedy, which was continued every six hours. On February 27th, I omitted the six o'clock dose of the medicine, and tested the urine at intervals for its presence. After eight hours, the indications became fainter; they were distinguishable up to ten hours, the urine having a specific gravity of 1027, and depositing lithates. The urine passed from ten to twelve was paler, clear, and hardly darkened the perchloride of iron solution. The dose was then given and, in half-an-hour after, the small quantity of urine obtained produced the purple cloud in the solution of iron. Doses every four hours again increased the specific gravity of the urine, which was in good quantity, and deposited lithates. The bowels acted well; a good night was passed. There is now no tenderness of the joints, the swelling of the wrist and knee is almost gone, the man is able to sit up and shave himself, and can stand with assistance.

Salicine as an antipyretic must certainly rank below either quinine or digitalis. Salicylic acid is comparable with perchloride of iron in the control it exercises over rheumatic pyrexia. It would also appear, from this case under my observation, to exercise some other beneficial influence on rheumatism, and to be useful in its later stages.

WILLIAM SQUIRE, M.D., M.R.C.P.,  
Surgeon to the St. George's Dispensary.

## REPORTS

OF

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### NORTHERN HOSPITAL, LIVERPOOL.

##### CASES OF DISEASES OF THE SPINE.

(Under the care of Dr. DAVIDSON.)

FOR the notes of the following cases, we are indebted to Mr. James Barr, M.B., L.R.C.S. Edin., late House-Surgeon.

**CASE I. Caries of the Vertebra; Myelitis; Paraplegia; Death: Necropsy.**—E. W., aged 30, married, Slater, was admitted on November 7th, 1874, with paralysis of the lower limbs and also of the bladder of less than five days' standing. He was going about his duties as usual up to Monday, November 2nd, when his feet felt "numb", as if they were "asleep", which condition soon extended up the limbs, but was not so severe as to cause any alarm. On awaking the following morning, he found that he was unable to move his lower extremities or to urinate. Since then, his urine has had to be regularly drawn off with a catheter, and there have been several involuntary evacuations of faeces. After admission, his bowels were only opened under the influence of enemata and laxatives. He could not account for the sudden onset of his complaint, nor could anything very definite on the subject be elicited, except what might be gathered from the following brief summary of his previous history. He has never been a very strong man, and has had antero-posterior curvature of the dorsal spine from a child. He had gonorrhoea about twelve years ago, but never any chancre. Six years ago, he suffered from suppuration of the left testicle consequent on injury; and, four years later, the right testicle was similarly affected, but without any ascribable cause. For the last nine months, he has been troubled more or less with pains of a rather indefinite character in his abdomen and loins, so that he had to give over work for a few days on several occasions, at which times he was treated by various medical men. Latterly, he was supposed to be suffering from tapeworm, as, according to the patient's own statement about six weeks ago, he passed about "two inches of a flat-jointed worm". Four months ago, he fell from a scaffold fifteen feet high on his feet; he, however, went straight up to his work again, and did not afterwards consider any of his symptoms referable to this accident. On admission, his countenance was not expressive of any suffering, and, when lying quietly in bed, this might be said to be *nil*, but, on attempting any bodily movement, he complained of abdominal tension, with severe pains in this region and in the loins. Tongue clean; appetite good. The bowels had not been opened the last two days. Pulse 68, weak. The abdomen was very tense and flatulent. Over the lower dorsal and lumbar spines, there was slight tenderness on pres-

sure, and more especially marked on percussion; also in this situation the hot and cold sponges were easily appreciated, and the sensibility to the latter was rather increased. His power over the lower extremities was almost at zero, and over the right less than the left. Reflex action was greatly diminished, and sensibility to pain, touch, and temperature slightly impaired. The muscles were pretty firm, fairly nourished, and the muscular sense was not much, if at all, affected. There was paralysis of the bladder and the urine required to be drawn off twice daily. This excretion had a specific gravity of 1026, and contained a great amount of urates, but no albumen. The heart and lungs were normal, as also the hepatic and splenic dulness. He was put upon ordinary diet, and, on the 9th, had a dose of the oil of male fern, which, as was anticipated, yielded a negative result as regarded tapeworm.

On the 8th, 9th, and 12th, he had castor-oil and turpentine enemata, which greatly lessened the flatulent distension; and, on the 14th, the anterior aspect of the spinal column down to the promontory of the sacrum could be distinctly felt through the abdominal walls, and pressure on it gave rise to considerable pain, especially when made at the upper portion. At this date, there was considerable, but not complete, loss of sensibility of the skin up to a line corresponding with the lower margins of the ribs, little or no pain being felt below that line on pricking with a pin, except on the dorsa and soles of the feet, where there was a considerable amount of paræsthesia, painful impressions being acutely felt, while tactile sensibility was proportionately diminished. No reflex action. The temperature of the lower extremities was diminished. He was now put on the iodide of potassium, and had emplastrum cantharidis applied to the lower dorsal and lumbar spines. On the 19th, the blister was repeated, and, on the 20th, he thought his sensibility was rather better. The bowels being greatly constipated, he was ordered an active cathartic.

November 23rd. The urine was alkaline, of specific gravity 1026, with a considerable deposit of urates and pus.

November 27th. The walls of the abdomen being much more relaxed than on any previous occasion, a very careful examination of that cavity was made to-day. No tumour or other abnormal condition could be discovered. The pulsation of the aorta and its branches was strongly marked. Pressure on the bodies of the lumbar vertebrae gave rise to great pain shooting down into the scrotum. There was complete incontinence of urine, the catheter not having been required for the last two days. The bladder was empty. The bowels were opened by an aperient. Tongue clean; appetite bad; pulse 85, weak. The feet and ankles were oedematous.

November 28th. About ten o'clock this morning, after some slight disturbance consequent on changing his bed, this patient was seized with regular spasmodic convulsions of the muscles of the neck, trunk, and upper extremities. There were also some movements of the face, but no writhing, nor anything more than what would be accounted for by the spasm of the muscles of the neck. There was no opisthotonos. The patient was quite sensible, and did not complain of much pain. Temperature 98.4 deg. Fahr. He was anaesthetised, and the actual cautery applied to the region of the lower dorsal and upper lumbar spines. Bed-sores had been lately forming in the gluteal regions.

November 30th. Pulse 120. The pain has been relieved since the application of the cautery. There have been no convulsions since. He was ordered bicarbonate of potash and infusion of bchu, six ounces of port wine, and a liberal diet.

December 2nd. This morning he complained of sore-throat, and had some difficulty in swallowing his breakfast. At 10 A.M., there was strong spastic contraction of the masseteric, sterno-cleido-mastoid, and posterior cervical muscles. The head was drawn backwards and the cervical spine arched forwards, but there was no marked opisthotonos. He was unable to swallow, owing to spasm of the muscles of deglutition. There was tenderness over the upper dorsal spines. He was ordered nutritive enemata and chloral-hydrate by the rectum, and hypodermic injections of morphia.—Evening. The tonic spasm was worse, and frequently there was clonic spasm superadded, which made the patient cry out. During these attacks, the *risus sardonius* was well marked.—10 P.M. The patient was in every respect worse. The clonic spasms were more frequent and much more violent. He had spasmodic twitches of the upper extremities. The convulsions were diminished by large doses of chloral-hydrate, and subdued when he was under the influence of chloroform. The patient gradually sank and expired at 5 P.M. on the third.

**Post Mortem Examination Forty-five Hours after Death.**—Rigidity was well marked. There was no lividity. The body was well nourished. There was a large bed-sore on each hip. On laying open the spinal canal from the sixth to the eighth dorsal vertebrae, there was found apparently an inflammatory product, closely resembling granulations, about two inches in length, and of a thickness equal to that of the cord itself.



It was situated on the posterior aspect, and slightly to the right side of the cord. On splitting open the membranes, they were found to be somewhat adherent and very vascular throughout. The upper portion of the cord was of normal shape and consistence, or perhaps rather soft; but, at the point of exit of the posterior root of the third dorsal nerve, and extending down to the eighth, the cord was flattened and softened, especially at the lower part of this area, where it was pressed upon by the mass exterior to the membranes. On splitting open the anterior portion of the membranes, there was less vascularity, but the cord was more softened about the middle of the flattened portion than it was posteriorly. From the third to the eighth dorsal vertebrae inclusive, the anterior portions of the bodies were quite ulcerated, and there was also a collection of pus, which communicated with the canal extending over that length of surface, and limited by the anterior common ligament. All the viscera were normal. On microscopic examination, the tumour was found to consist of numerous round and spindle-shaped cells, clearly of inflammatory origin. The whole cord presented the usual appearances of myelitis, though in different degrees at different parts, the greatest changes being in the part corresponding to the diseased vertebrae.

CASE II. *Primary Cancerous Tumour of the Ribs and Vertebrae pressing on the Spinal Cord: Paraplegia: Death: Necropsy.*—F. J., aged 47, widow, was admitted on April 17th, 1875, under the care of Dr. Davidson, complaining of loss of power over the lower limbs and inability to urinate.

*History.*—She had two children, and, since her last confinement, sixteen years ago, her menstruation had been quite regular. For some time, she had been engaged as a nurse, and, about a year ago, when attempting to lift an old paraplegic gentleman of 16 st. in weight, she fell and his whole weight was thrown on her left side. Beyond the shock at the time, she did not feel any immediate effect therefrom; but, about a month afterwards, she began to suffer from a "gnawing pain" under the left shoulder, which had remained constantly there ever since. Her general health had been gradually deteriorating, but she was able to follow her employment up to a fortnight ago, when the pain before alluded to appeared in an aggravated character, shooting down the spine and radiating all over the back. On April 10th, she was scarcely able to stand, and, on the 11th, her legs were almost powerless. On the 13th, she was unable to micturate. She had only lately noticed the tumour in her back, to be afterwards referred to, and thought that it had grown rapidly.

The family history was indefinite. On admission, she was pale, anæmic, very weak, and much emaciated. The tongue was coated with slight aphthous patches. She had considerable thirst. Her appetite was bad and her bowels confined. She slept badly. Pulse 110, small and feeble. The urine was normal. Her condition, as far as the lower extremities were concerned, was that of utter helplessness. There was complete loss of power over the lower limbs and bladder. Reflex action was impaired. There was great diminution in the tactile, and painful sensations, especially in the right limb. The sensibility was best in the soles of the feet, but even there it was only slight. She had great difficulty in localising the sensations, often referring them to the wrong limb. She said that, three or four days previously, there were involuntary movements, and the loss of sensation, which now extended as high as the umbilicus, was rather later in taking place than the loss of motion. Close to the left border of the spine, and rather below the level of the lower angle of the scapula, there was a prominent firm tumour, which evidently involved the ninth and tenth ribs about their angles, and the projecting part of which was about half the size of a small orange. This tumour was punctured with a very fine exploratory needle, and a few drops of pale milky albuminous fluid taken away with the aspirator, which, under the microscope, showed numerous cancer-cells. The abdominal viscera were all apparently healthy. Cardiac percussion was small. The impulse was feeble and sounds weak. There was no murmur. At the base of the left lung, posteriorly, the percussion was comparatively dull and the respiratory murmur absent. Over the right lung, the respiratory murmur was feeble and attended occasionally by a few dry rales. She died on April 26th.

*Post Mortem Examination Thirty Hours after Death.*—The body was evidently much emaciated; but yet, on laying open the chest and abdomen, there was a considerable amount of adipose tissue. The heart was small; its muscular fibre was pale and the mitral valve was atheromatous. The right lung was large and generally emphysematous, though not to a marked degree at any one point. The lower and posterior part of the left lung was quite collapsed and indurated by the pressure of a tumour to be afterwards noted. The liver was normal. The spleen was small. The kidneys were healthy. There was no affection of the lymphatic glands.

Involving the left ninth and tenth ribs at their angles, and also the same side of the corresponding vertebrae, there was a tumour about the size of a small orange, of tolerably firm consistence, limited by a thin shell of bone and fibrous periosteum. On laying open the canal, it was found that this tumour directly communicated with it and pressed on the anterior and left lateral columns of the cord for about two inches and a half opposite the ninth and tenth vertebrae. About half an inch below this, there was, on the anterior surface of the cord, a greenish yellow patch, apparently consisting of pus and softened lymph, stretching down for about two inches and a half.

## REPORTS OF SOCIETIES.

### PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 6TH, 1877.

CHARLES MURCHISON, M.D., F.R.S., President, in the Chair.

*Pneumonia, with Disease of the Suprarenal Capsules.*—Dr. HEADLAM GREENHOW related the case of a man aged 29, who had suffered from winter-cough for years, and who was admitted into the Middlesex Hospital in December last, with increasing shortness of breath. There was impaired resonance of the chest posteriorly. The liver and spleen were not enlarged. The man grew gradually weaker, and fainted and died. At the *post mortem* examination, the lungs were found full, and the pleural surface contained opaque vessels, probably altered lymphatics. The right suprarenal capsule was adherent to the kidney, and contained a clot in it. There was atrophy of the true structure. The walls of the blood-vessels were thickened. The left suprarenal body was enlarged to four times its natural size, and also contained a coagulum. It was the earliest stage of Addison's disease that he had yet met. It was common to find the disease accompanied by lung-disease.

*Organisms of Vaccinia and Variola.*—Mr. RICKMAN GODLEE brought forward a communication, which, he feared, would be found incomplete. A series of experiments had been instituted to ascertain if there were any bodies or organisms in the lymph of the vaccination vesicle or of small-pox, which could be cultivated. The plan of Lister was adopted of preparing a flask, putting in a quantity of fluid, heating this, and then securing the mouth of the flask with cotton-wool, and then watching the career of the enclosed fluid. These experiments were made with milk, turnip-infusion, and hydrocele fluid. The experiments had to be carefully conducted, and the possibility of accident borne in mind. The plan above adopted was effectual. Blood also was procured from two cases of ague, and examined in the most careful manner, but nothing was found. Two experiments were made with the blood from two cases of embolic pyæmia, with negative results. Negative results followed in cases of typhoid. In another case, innumerable chains of granules arranged in multiples of two were found. There were no bacteria. Since the work of Cohn, it had been agreed that the granules found in vaccine lymph on the eighth day in small numbers, but in larger quantity in older lymph, were organisms. Filtration of such a fluid is difficult. By inoculating lymph into the fluids before-mentioned, these organisms will grow. They vary in size in various fluids. In turnip-infusion, they arrange themselves in multiples of four. In a few days, the milk becomes of a dead white appearance. The hydrocele fluid remains much the same. A few bacteria are seen sometimes. The urine becomes intensely alkaline. With a view of ascertaining if the organisms alone were capable of originating the disease, it was determined to inoculate a child with a fluid in which they were actively growing. Some of this fluid was passed into other infusions, so as to get rid of the primitive organisms, and then inoculated; the other arm being vaccinated ordinarily. The effects of the prepared fluid were absolutely *nil*. The following conclusions were drawn. 1. The granules constantly observed in active lymph are really organisms; 2. They are capable of growth in fluids of very various characters; 3. They probably require a heat nearly approaching that of the human body for their active development; 4. They produce upon the fluids in which they grow very characteristic changes; 5. As they have been at present grown, they are alone incapable of originating vaccinia. By inoculating a cow with small-pox and then inoculating a human being with the fluid of the vesicles so produced, vaccinia and not small-pox is the result. Further experiments, like those given above, but with small-pox lymph, will be made to ascertain the infecting power of the organisms so bred. As yet, no positive statements can be made.—The PRESIDENT said that the subject was an interesting one, and that he should look forward to the next experiments. Were these organisms



distinct from all other organisms? That was a question. Caution was required as to any results attained. Many experiments which threw doubt upon the identity of vaccinia and small-pox had been performed. There were great differences of opinion.—Mr. JABEZ HOGG objected to the title of the paper. The specimens shown gave organisms in no way peculiar to vaccine lymph. He also advocated great caution as to accepting the results.—Dr. SQUIRE spoke to the effect that variola grafted upon the cow gave children vaccinia.—Dr. THIN said it would be desirable to observe what grew in the fluids of other skin-vesicles.

**Arterio-Capillary Fibrosis.**—Sir WILLIAM GULL read a paper prepared by himself and Dr. Sutton on changes in the spinal cord and its vessels in arterio-capillary fibrosis. He reminded the Society that, in May 1872, they had recorded a series of observations in the morbid state, commonly called chronic Bright's disease with contracted kidney, and affirmed that there are not only the (1) well recognised cases, in which the kidneys are contracted, the heart much hypertrophied, and the vessels diseased; but that (2) there are others, in which the kidneys are but slightly affected, and yet in which the heart is hypertrophied and the vessels diseased; and (3) there are other cases in which the heart is hypertrophied and the vessels diseased, yet without disease of the kidney of the kind in question, or merely the congestion of the dying. In all these cases fibroid changes in the arterioles, capillaries, and interstitial tissue of various organs, had been observed. On these grounds, they expressed the opinion that the pathology of the state commonly called chronic Bright's disease with contracted kidneys was not essentially renal, and that for its full comprehension, a wider investigation of concomitant, or even antecedent, changes in other organs was called for. Since that time, they had continued their investigations throughout the several organs—stomach, spleen, liver, lungs, heart, skin, brain, and cord. It would seem that there is a pathological condition which leads to fibroid changes generally, and that the renal disease is but a more pronounced local expression of this general disease or degeneration. From this point of view clinical medicine would recognise the importance of many now supposed unimportant ailments; and might find that those ailments are signs of commencing tissue-changes of the kind in question, springing up in one or more organs, it might be in advance of renal changes, and foreboding their advent. They held that these tissue-changes may in some cases result from the renal disease, whilst in others they may follow the renal changes in respect of time, but not be dependent upon them, but upon a general cachexia, of which the renal disease is a part. As to the hypertrophy of the arterioles, they found the muscle, in some of the larger arterioles especially, increased in bulk. As to whether this was due to true hypertrophic growth or to contraction of the vessel, they had not been able to satisfy themselves. Moreover, they knew of no observations which showed that the muscular layer had a constant thickness in arterioles of equal calibre. Nor is it always easy to say whether the adventitia of an arteriole is thickened if it be separated from its surroundings. In doubtful cases they were much aided by seeing how the apparently thickened adventitia is in continuity with the increased connective tissue about it, and how the fibroid changes spread from the vessels to the surrounding textures. Whatever conclusions may be arrived at respecting any given vessels, they maintained that there is atrophy of the muscular layer in many arterioles in chronic Bright's disease, and the general state associated with it, together with a hyalin-fibroid change in the arterioles and capillaries. This communication was but part of a series, which will be expounded gradually. The same character of lesion occurred in other organs. The surface of the cord is bounded by connective tissue, part of its pia mater; and processes of the same penetrate at many points into the white matter. These send off processes forming a connective tissue plexus, in the meshes of which the nerve tubules lie, as in a stroma. There is thus a normal basis for disease to commence upon. First came the changes of oedema. Here many small homogeneous masses are seen which readily stain. These are colloid bodies, and are masses of albumen coagulated after death. Then there is simple exudation, in which the vessels are thickened by fibroid material. The connective tissue plexuses are also thickened. There are also masses of homogeneous material. In a slide exhibiting this, the arterioles of the dorsal portion were seen very noticeably thickened by fibroid material. The tunica intima of one was normal, and some of its transverse muscle-cells are indistinct, as if shrunken, and outside the muscle-layer was a homogeneous substance, bounded by coarse and dense looking fibres, amongst which were spindle-shaped nuclei. A large series of sections were then described, of which any valid written account is impossible. Sir William Gull himself stated that his account was incoherent, but that the demonstration was coherent. He made the following summary. 1. In two cases with granular and contracting kidneys, there were no appreciable changes in

the cord; in two others, the arterioles and capillaries were hyaline and much thickened. 2. In one case in which there were granular and contracting kidneys (with indications of recent acute nephritis), and well marked hypertrophied heart, there was seemingly simple exudation into the substance of the spinal cord (oedema.) 3. In two cases in which there were the usual changes of chronic Bright's disease, with contracted kidneys, some arterioles and capillaries of the cord were thickened by fibroid material, others were swelled and hyaline only. The connective tissue in parts looked rigid, and there was exudative material around and into it and the nerve-tubules. 4. In three cases some of the arterioles and capillaries were much thickened, their walls swelled by hyaline material, and without any or but doubtful evidence of chronic fibroid changes in them. The connective tissue was swelling and the fibrillar character lost, seemingly in consequence of large exudation of hyaline homogeneous material into it. Its nuclei were multiplied (myelitis). But whilst this condition of the connective tissue and nuclei of some of the arterioles and capillaries was evident, other arterioles were apparently thickened by coarse fibroid material, indicating more chronic changes preceding the acute. 5. In another case, no traces of chronic fibroid changes were found in the arterioles and capillaries, but their walls were greatly swelled by exudation of homogeneous hyaline material, which extended from them into the surrounding tissues. 6. In two cases, the arterioles and capillaries were here and there thickened by fibroid changes, and there were numerous centres of thickening of connective tissue with atrophy or contraction of nerve tubules (*sclérose en plaques*), whilst in many other parts the cord-substance looked strikingly healthy. In one of these cases the heart was greatly hypertrophied, weighing twenty-two ounces; valves healthy, kidneys venously congested. In the other case, the kidneys were granular and contracted, and the heart hypertrophied. 7. In three cases, the arterioles and capillaries were much thickened by fibroid material, and sections of these vessels showed them embedded in large quantities of felt-like fibroid substance, which extended from them, dividing and subdividing, and invading and destroying medullary sheaths and axis-cylinders, or enclosing other nerve-tubules in a coarse felt-like connective tissue. Near the exit of the posterior nerve-roots from the surface of these cords, the thickening of connective tissue was especially great, and many nerve-tubules at this part were replaced by fibroid material. The fibroid changes observed in these cords resemble those of granular kidney in the following features. In the spinal cord, as in the kidney, the fibroid change, as might be expected, is most marked when the connective tissue is most abundant; extending in the cord as in the kidney, from the surface membrane inwards, or extending in the cord from the grey matter outwards, in the kidneys from the base of the cones outwards; extending in the cord and in the kidney from the adventitia of the arterioles and capillaries into the surrounding connective tissue. The fibroid material in the cord, as in the kidney, contracts and compresses the surrounding tubules, atrophying or destroying them, but leaves many other adjacent tubules comparatively normal. In the cord, as in the kidney, it would seem that acute change commonly supervenes on the chronic. Seeing that so many tubules remain comparatively normal, we are enabled to understand how it is that both cord and kidney may retain much of their functional activity, even when they are the seat of extensive fibroid changes, and this usually continues (*i.e.*, persons walk or secrete urine fairly well) until the more healthy tubules are deteriorated by acute changes. In the five cases in which there were well marked fibroid changes (sclerosis) in the cord, the kidneys were very granular and contracted, the left ventricle of the heart hypertrophied, no valvular disease in two. The kidneys were slightly granular, and the left ventricle of the heart not hypertrophied in one. The kidneys were not contracting nor granular in two; but in one of these the lungs were the seat of extensive fibroid induration, and the testicle also, and in the liver a little similar change. In the other, the left ventricle was greatly hypertrophied, without valvular disease. These particulars show that fibrosis in the cord may occur coincidently with fibrosis of the kidney; or it may be in advance of the fibroid change in the kidney; or occur as part of a general fibrosis, altogether independently of renal disease.—The demonstration was all summed.

**DONATION.**—The Goldsmiths' Company have made a grant of £500 towards the fund for rebuilding the Metropolitan Free Hospital.

THE public meeting of the Sanitary Institute of Great Britain, to consider the report recently issued by the Committee appointed by the President of the Local Government Board upon the Disposal of Town Sewage, will be held at the rooms of the Society of Arts, on Wednesday, March 14th. The Chair will be taken by the President of the Institute, His Grace the Duke of Northumberland, at 3 P.M.



## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, MARCH 10TH, 1877.

### KING'S COLLEGE AND OTHER HOSPITALS.

THE movement at King's College Hospital to invite Professor Lister to fill the Chair of the late Sir William Fergusson has naturally aroused some discussion as to the principles on which hospital appointments are and ought to be filled in the metropolis. On the one hand, it is alleged that hospital appointments are the rightful spoils of the students educated at the hospital, and of the junior *attachés* of the hospital and school. It is stated that those who enter a medical school do so in the expectation partly that, in accordance with their capabilities and desires, and as circumstances may serve, they are entitled to succeed to the offices which become vacant. Further than this, it seems to be held by the partisans of this argument that promotion in hospitals should go in regular and unbroken steps, so that, when once a young man has his foot on the lowest rung of the ladder, he may feel sure that he will be gradually pushed upwards as years roll on, and his seniors die off or resign, by the accumulating crowd of juniors beneath him, each rising in his turn to fill the place which he has vacated. It is also alleged that those hospitals or schools which have departed from this rule of inheritance have suffered in professional estimation, and have lost in professional popularity, what they have gained in efficiency. This is a very intelligible and very convenient theory, and will in some circles obviously be very popular. But it is clear that even its most ardent supporters must admit that it is subject to many limitations; that, in order to work it at all, it must be rendered liable to many exceptions; and that very often the breach of such a regulation must be far more honourable than its observance. The obvious objections to any such law of selection and promotion are: that it is clearly only applicable to large and prosperous schools, which can depend upon having at their disposal, at any given moment, candidates well suited by their age, their aims, and their capacity for every given appointment. If we look around the metropolis, we shall see that even those hospitals which command a very large annual contingent of students, such as St. Bartholomew's, which stands at this moment at the head of all metropolitan schools in point of number, have found it necessary to recruit the staff from external sources.

It has been pretended that such recruiting is in itself an indication and a source of weakness to the hospital which departs from the strict circle of its own disciples. Facts, however, do not support that pretension. If there be any weakness in the staff of St. Bartholomew's, it is certainly not in the persons of those whom it has assimilated from without. In taking to itself Dr. Gee, Dr. Lauder Brunton, and Dr. Klein, St. Bartholomew's has done nothing to weaken itself and much to add to its strength; it has in no way derogated from its dignity, and it has largely added to its efficiency, its teaching power, and its attractiveness to students.

King's College has been reminded, by some of its would-be friends, that it has driven away some of its own best students, by whose services other hospitals have profited. In some sense, this statement is, we believe, very true, but not in the sense in which it is used for their argument. University College has profited by the services of Mr. Christopher Heath, who was originally a King's College man; West-

minster, by those of the late Dr. Anstie; St. Thomas's, by those of Dr. Murchison; but surely University College has shown to King's a good example in taking to itself Mr. Heath from one hospital, Mr. Barker from another; just as St. George's has wisely strengthened itself by calling to its aid Dr. Barnes and Mr. Brudenell Carter; and St. Thomas's, by reinforcing itself with Dr. Murchison, Mr. Liebreich, Mr. Mac Cormac, and Mr. Francis Mason.

If the proposition that a hospital is bound, in any interest, to limit itself to the area of selection from its own students, be considered critically, it will be seen that, unless it be accepted with such frequent liability to transgression as make it of very small force, such a regulation never has been, and never could be, adopted by any persons responsible for the selection of hospital medical officers. There are many circumstances which, even in great schools, impose very difficult conditions on a committee which should adhere to such a principle. Suppose, for instance, the office of lecturer on any given subject falls vacant, together with a minor appointment in the hospital, such as a curatorship. To make the selection a good one, the candidate should, in the interests of the hospital and the school, be the best possible person for both appointments; and when, subsequently, a higher appointment falls vacant, if the law of promotion is to be unhesitatingly observed, he must be a suitable person to go up through all the gradations of the hospital hierarchy until he, of necessity and as a mechanical condition, becomes the senior officer of the hospital.

When the choice is limited to half a dozen young men, who could by no possibility put themselves in competition for such a post, it will be seen that the chances of selecting the really best man for the post in London are infinitely small. So far from there being any reason to complain that the claims of individual students belonging to a hospital school are not usually well considered, it would, we believe, be much nearer the truth to say that the too great desire to recognise the force of such a principle of selection has been a frequent source of injury to most of the hospitals of London, and a distinct loss to the whole profession and the public. The true and right principle of hospital selection, we believe, would be much more nearly embodied in a rule that every hospital should be open to every candidate, and that every candidate should be available for every hospital: "*La carrière ouverte aux talents*" would, we believe, be the keynote to a great reform in all our hospitals. A severe critic might even be tempted to say that there are to be found on the staff of various metropolitan hospitals men who are only not ridiculous because they are insignificant; and that there are others who, not recognising this condition, become ridiculous because they insist on attempting to overcome their insignificance.

There is in London no test such as that of *concours* in Paris, by which young men admitted to junior posts by reason of having given some faint early promises of merit, or from some other reasons, can be required to vindicate their subsequent elevation in the scale, or their claim to full surgeoncies or physicianships or to professorships in the schools. Thus, it has often happened, that the most important posts in the hospitals and schools of London have been filled by men who have absolutely no valid intellectual claims to such offices, and whose presence is a positive injury to their schools. From this tyranny of a custom, which it has too often been attempted to erect into a law, many schools have suffered, and do suffer; but many also are breaking loose from its fetters, and the greater schools, which have felt themselves at liberty to depart from such a rule, have invariably benefited by every assertion of the larger policy. There is, indeed, no reason why the system of invitation, which has worked with such singular advantage in the German Hospitals and Universities, should not be very widely adopted in this country. It would be difficult to suggest, so far as we can see, any adequate cause for declining to abolish this narrow system of "protection" altogether in all the hospitals, or in favour of free trade, so that, whenever a hospital vacancy might occur, every man should feel that he would have a fair chance of obtaining it, if he had done such work and had given such evidences of aptitude as marked

an incontestable superiority over other candidates. There is no reason in England, more than in Germany, why students going out from a school, and distinguishing themselves by work done at other schools, or by private research and study, whether in London or in the provinces, should not at a fitting time be invited to fill any post for which they were particularly fitted; but their fitness for the post should be always their main qualification to it whether at their own school or at any other. It cannot be doubted that many of the most valuable intellects have been lost to the London hospitals from the limitations which from time to time have been urged with the view of compelling each hospital committee to exclude candidates from without.

There are now buried in obscure positions throughout the country men whom we could name, who have been driven into those positions solely because the hospital career was closed to them from this narrow system of scientific "protectionism". Unless a young man possesses ample means for waiting till a post falls vacant, and hanging about the hospital, as it is called, until the time comes when some junior office offers, he has, too often, no other alternative than to accept such means of getting his bread as may offer in any part of the empire. He cannot look to all the other schools, for the excessive prevalence of this protective system has done much to bias and to terrorise committees' selection, and compel them to supply their necessities, as well as they can, from any person offering from their school, even though he be by no means the best man who could be found if their selection were not so limited, and though he may have no special qualification for the vacant post.

This rule frequently operates to the disadvantage of the school, to the injury of the profession, to the detriment of science, and to the great loss of the hospital service, which is, after all, essentially a public service.

We should be glad to see much wider views prevail. We should be glad to find a more patriotic and a more public spirited policy reign. It will be an auspicious day for medical science, for medical education, and for hospital efficiency, when it is understood that every candidate will have an equal chance, according to his merits, for every hospital appointment. In the meantime, the very necessities of the case, and the inherent weakness of the system, have led to exceptions so frequent that it requires, as we think, a very strong bias to attempt to discover anything, in the past history of King's College Hospital, which should operate to impede the Council of King's College in offering the Chair of Sir William Fergusson to the surgeon who might be expected to rival even his reputation in London, and to render King's once more illustrious and revive its falling fortunes, by making it a great centre of surgical teaching, to which all Europe will look, as it now does, to the clinic of Professor Lister at the University of Edinburgh.

#### THE OUTBREAK OF SCURVY IN THE ARCTIC EXPEDITION.

THE great body of interesting evidence taken by the Committee appointed for inquiring into the causes of the outbreak of scurvy in the Arctic Expedition has now been completed and printed, and the Committee have concluded their sittings and sent in their preliminary report to the Admiralty. It will be remembered that the Committee consisted of Sir James Hope, Admiral Inglefield, Admiral Ommaney, and, together with Inspector-General Dr. Donnet, R.N., and Dr. Fraser, F.R.S.E., formerly assistant to Professor Christison and Lecturer on Materia Medica in Edinburgh, and now Medical Officer of Health for Cheshire. The result at which the Committee have arrived has been precisely that which we from the first ventured to predict. It has been shown to the satisfaction of the Committee that the outbreak of scurvy in this expedition was due essentially to the omission—or, rather, to the refusal—of Captain Nares to send lime-juice with his sledge-parties. It has been shown that the provision of the ships was ample in quantity and excellent in quality; and, fur-

ther, the Committee having had before them the preliminary memorandum by Sir Alexander Armstrong, the Director-General of the Medical Department of the Navy, strongly and explicitly requiring the issue of a daily ration of lime-juice, and having heard Sir George Nares's explanation of the reasons which induced him to act in defiance of that memorandum, have decided that in doing so he made himself responsible for the outbreak of scurvy which occurred, and that he had no sufficient reason for not carrying out the rules laid down in the memorandum.

A considerable number of medical witnesses were examined, in whose hands were placed all the journals of the sledge-parties, the sick list, the reports of the medical officers, and the memorandums of Sir Alexander Armstrong, together with the full explanatory statements of Sir George Nares. Dr. Pavy, Mr. Busk, Dr. Leech, Dr. Guy, Professor De Chaumont, and Professor Macdonald were heard in succession, and they all expressed their unequivocal opinion that the essential cause of the outbreak was the want of lime-juice with the sledges.

It will be remembered that a theory had been started recently by Mr. Clements Markham that the scurvy was due to darkness, damp, foul air, and confinement during the winter season. This theory is effectually disposed of by every scientific witness examined. Of course these causes, operating with considerable intensity over a lengthened period, would have a tendency to predispose the men to scurvy, and to a variety of other diseases. And no doubt they operated to promote the intensity and the rapidity of the outburst of scurvy when the men were suddenly deprived of their ration of lime-juice, and called upon to make extreme exertions on sledging-parties. The medical evidence is quite unanimous on the subject; and it will be found to be extremely full of very interesting details, drawn from the experience of scurvy in the past.

Sir George Nares has already publicly developed at the Mansion House and elsewhere his reasons for not sending the lime-juice on the sledges according to Sir William Armstrong's directions. They were, first, the weight of the lime-juice; secondly, the weight of the fuel which would be necessary to thaw it; and, thirdly, the delay involved in that operation.

The weight of the lime-juice itself is, of course, comparatively insignificant and could not alone enter into calculation in such a question, since it would not have amounted to more than 100 lbs. altogether; whereas the total sledge-load was over 4,000. As to the thawing of it, it appears that, in the case of four bottles which were taken, it was found possible to thaw a part of the contents of a quart bottle of lime-juice by merely placing it between the legs in the sleeping bag at night, which was the proceeding actually adopted by Captain Markham, with the exception of one bottle which was broken by placing it over the fire. Moreover, it appears from evidence given by Surgeons Ede and Toms, who had served on previous sledging-expeditions, that lime-juice mixed with rum is an agreeable drink, which the men much relished; and that even frozen lime-juice sucked and dissolved in the mouth did not, on previous expeditions, prove to be disagreeable or injurious, but that, on the contrary, it was found to assuage thirst. The difficulties of fuel or of thawing do not, therefore, appear to be by any means of so formidable a nature as Captain Nares seems to have represented them to himself. Sir George Nares initiated in a memorandum prepared for the Admiralty, of which a copy was laid before the Committee, a very curious medical doctrine, which he appears to have evolved out of his own consciousness, and which, he says, guided him very much in withdrawing the lime-juice ration from the sledge-parties.

The sledge-parties started in the month of April, and during the month of March Sir George Nares voluntarily issued to his ship's crew two ounces of lime-juice daily, instead of one; and in this way, he says, he knew that he should be able, so to speak, to saturate his men with lime-juice before they started, so that they might be able to do without it on their journeys. This is possibly a fair example of the sort of medical theorising in which intelligent men will indulge when



they have not before them a lively fear of the operation of the maxim that a little knowledge is a dangerous thing. Some drugs are, of course, cumulative in their action, and Sir George Nares seems hastily to have assumed that lime-juice was of that character.

The assumption is entirely gratuitous and entirely unfounded, and betrays ignorance of the action of that useful vegetable juice. Sir George Nares might easily have found this out by reference to his medical officer; but considering, as he says, that he himself is responsible for the maintenance of the health of the men, he appears to have left that functionary very much out of the question. He stated, indeed, in his evidence, that he knew that Dr. Colan considered this extra issue immaterial and of no advantage, but that knowledge does not appear to have at all affected his mind. He further admits that he framed his sledge-dietaries without consulting his medical officer, and that he omitted the lime-juice without reference to him, and without informing him of the omission, and that, when the fact came to the knowledge of Dr. Colan, he remonstrated with him for not sending the lime-juice, but that remonstrance did not induce him to change his course. Dr. Colan, indeed, also states, not voluntarily, but in reply to questions, that the sledge-dietaries were not submitted to him at all, nor was his opinion asked about them, nor was he informed of their contents, but that he found out for himself that no lime-juice was included in them, and that thereupon he thought it incumbent upon him voluntarily to go to the captain in his cabin and call his attention to the recommendations of Sir Alexander Armstrong, and to urge that lime-juice should be sent. Dr. Colan appears further to have cautioned Captain Markham verbally as to scurvy, and in his written instructions he especially urges the advisability of collecting such scurvy-grass, sorrel, or other Arctic vegetation, as might come within the reach of any of the parties.

Another theory which was started since the return of the sledging-parties, in order to palliate the omission of lime-juice from the sledging-rations, was that lime-juice, when exposed to an extreme degree of cold, deteriorates and becomes a mere frozen mass, having no antiscorbutic properties. This theory was not only disproved by the evidence of the medical officers on other sledging-expeditions, but was effectually answered by the fact that the whole expedition was virtually saved from the most fearful mortality from scurvy by the opportune discovery of a depôt of lime-juice left five years since by the *Polaris* expedition, and which had been lying in a cask on the ice exposed to the extremity of cold alternating with heat, and which had been weather-beaten and on its surface mixed with snow, but which nevertheless proved to be in no respect deteriorated in its antiscorbutic powers, and which served to keep off the last extremities of disease from the sledging-parties to whose relief it was sent in time. It appears, indeed, to us, and it will appear, we think, to any one who reads the whole narrative, that, but for the timely discovery of this depôt of the *Polaris* lime-juice, and its utilisation for the sledging-parties, there is good reason to fear that so large a proportion of the crews would have been destroyed by scurvy, that it is doubtful whether the whole expedition would not have been lost from the want of sufficient power to bring the ships out of the ice. However this may be, this frozen lime-juice rendered the most essential services, and the theory that freezing destroys its virtues is most effectually disposed of.

It is a satisfaction to find that throughout the whole of this inquiry the Medical Department of the Navy comes out with the utmost possible credit. Nothing could be more clear, more explicit, more absolutely prophetic than the memorandum which was furnished to Sir George Nares by the Admiralty from Sir Alexander Armstrong, on the immeasurable importance of supplying the men with a daily ration of lime-juice. The whole of his directions for the maintenance of the health of the men are indeed most able, practical, and judicious; and, had they been strictly followed out, the results would have been very different. The conduct of all the medical officers of the expedition appears to have been such as to merit and to receive the warmest approbation of their superiors from first to last, and they showed a devotion to duty which

is entirely comparable with that displayed by the officers and men of this gallant expedition generally. They can seek for no higher praise, and it is on all hands conceded that they merit no less.

Dr. Colan has shown a modesty and reticence, during all the discussion of this painful affair, which the lovers of the discipline of the service will fully appreciate. His vindication, however, although tardy in the public eye, is complete; his services appear to have been extremely arduous, owing to the severity of the outbreak of scurvy, and to have been rendered with the utmost zeal, devotion, and intelligence. Owing to the operation of some of the mysterious rules of the service, it was not, we believe, possible to recognise his distinguished services by as prompt promotion as befell his junior officers; but there is, we imagine, no room to doubt that the first opportunity which offers of raising him to the rank of Deputy Inspector-General will be promptly and gracefully used by the Admiralty.

One moral of this inquiry, which is salient on the face of it, and which we can hardly be expected to abstain from pointing, is, that combatant officers will do well always to respect the functions of the medical officers, and to attribute just weight to medical recommendations. In framing false medical theories, and in assuming the responsibility of refusing to act upon his medical instructions, Sir George Nares brought a great disaster upon this expedition. He assumes the full responsibility of it, and we fear it must weigh heavily upon his shoulders. There are few men in the service who can throw into the opposite scale such a great weight of distinguished merit, great accomplishment, and unflinching devotion to duty. We must, therefore, all the more deeply regret that this counterbalance of serious misdoing has now to be considered.

AT Hull Police Court on the 7th instant, the stipendiary magistrate gave judgment in the case of two Philadelphian medical men, named Armstrong and Rayner, charged with practising in Hull contrary to the Medical Act. In each case, a fine of £20 was imposed.

IN our report of the last meeting of the Royal Medical and Chirurgical Society, we omitted to mention that Mr. Donald Napier showed a new form of self-retaining catheter, together with the latest improvements in his instruments for the detection and removal of stone from the bladder.

THE efforts of the Prince of Wales and the Earl of Leicester to promote the movement to enlarge the Norfolk and Norwich Hospital have resulted in a determination of the governors of the institution to build a new hospital, in accordance with a generally expressed wish of the subscribers. This course has been decided on at a meeting of the governors. It is estimated that the new hospital will cost £50,000, and £43,000 have been already subscribed.

#### THE WAR OFFICE.

THE Committee appointed by the Queen to report on the sanitary condition of the War Office, have declared that—as had been pointed out—no patching or alterations can ever make the building really healthy or fit for occupation as a public office; that its winding passages, ill-built rooms, and general defects of construction, make it impossible to ventilate it properly. Mr. Hardy sympathetically proclaimed on Friday last that he, too, endorsed all the statements of the recent report of the *Sanitary Record*; he admitted that it was hard indeed to expect public servants to work in rooms unfit for occupation, in a building vitiated by incurable defects of construction, and in an atmosphere which, as all authorities agree, must injure their health. Whereupon, as every one agrees that the building is incurably bad, the Board of Works are proceeding to lay out a large sum of money to cure the incurable, and plans are in course for adapting this building, which four successive reports have now declared to be one which ought to be forthwith abandoned. If these repairs and changes be expressly understood to be only for a temporary purpose, they may do good; but it should be distinctly understood that the War Office has

now been specially condemned by Sir William Jenner, Sir W. Muir, and Dr. Seaton, by Sir Ranald Martin, Dr. Sutherland, Mr. Rawlinson, Sir J. Fayer, Captain Galton, and we know not how many others, as a building dangerous to health, having incurable defects of construction, and unfit for occupation as a public office. Moreover, the present site would sell for enough to cover at least half, probably three-fourths, of the total cost of a suitable new building either in Parliament Street or the Thames Embankment.

#### MR. HARDY ON THE ARMY MEDICAL SERVICE.

MR. HARDY'S unhappy speech in moving the Army Estimates will have been read by all medical officers; we are unable to quote it at length. He alluded, with a flippancy not in very good taste, considering the gravity of the case, to the discontented state of the Army Medical Department; and, ignoring the gross injustice of the successive "schemes" by which they have been from time to time deprived of the privileges guaranteed by former warrants without any sort of compensation, he intimated that it was yet too early to reconsider the last scheme of reorganisation. Its total failure must, however, be apparent even to the indulgent eyes of its official sponsor; and Mr. Hardy may be sure that matters will grow worse, and not better; and that his ill-advised sneers at the department will not tend to ameliorate its prospects. The sooner, therefore, he admits the failure which is now patent, the less the damage he will be called upon to repair. The department is breaking down, and each successive examination shows more and more clearly how much Mr. Hardy's last scheme has done to damage and discredit it.

#### THE ROYAL COLLEGE OF SURGEONS.

PROFESSOR FLOWER, F.R.S., will commence his course of nine lectures, on the Comparative Anatomy of Man, in the theatre of the College this day (Friday), at four o'clock. The annual election of Fellows into the Council of the College will take place as usual in July next, when three vacancies will be declared, arising from the death of Sir William Fergusson, who was first elected a member of the Council in 1861, and by the retirement of Messrs. John Gay and John E. Erichsen, both of whom were elected in 1869, and who will offer themselves for re-election. Mr. E. L. Hussey of Oxford has been elected Chairman of the Fellows' Festival, which will take place the same evening. The half-yearly preliminary examination in arts, etc., for the diplomas of fellowship and membership of the College will be commenced on Tuesday, the 13th instant, at Burlington House: 313 candidates have offered themselves—viz., 67 for the fellowship, and 246 for membership. The first primary or anatomical and physiological examination for the present session will be commenced on Friday, the 6th proximo, and after the conclusion of the pass examinations for the fellowship and membership, early in June, Messrs. Carter and Lowne will commence their respective courses of lectures.

#### LIFE SACRIFICE IN LANCASHIRE.

THE Registrar-General, in his last quarterly return, calls attention to the fact that the rate of mortality among the rather more than three millions of people living in that county in 1876 was equal to 26.0 per 1,000, whereas in the rest of England and Wales it did not exceed 20.3. Thus, during the year in equal numbers living, 128 persons died in Lancashire during the year to 100 in the other portions of the country, including London; in other words, about 17,000 persons died in Lancashire during the year, who would have survived had they resided in other parts of England. The Lancashire death-rate in 1874 and 1875 was still higher, namely, 28.3 and 26.9 per 1,000 respectively. It is evident, therefore, that the excessive mortality in 1876 was not exceptional. In examining the details of this high death-rate, it is found to present the usual features of all high death-rates, among which excessive infant mortality and great fatality from zymotic diseases are, as usual, conspicuous. Lancashire affords a striking example of the results of the chaotic condition of our sanitary organisation. This county is under the sanitary control of no

less than 159 urban and rural authorities, created by the Public Health Act of 1872. Of these 159 sanitary authorities, 25 were rural and 134 were urban. The 134 urban authorities included 22 municipal boroughs, 109 local board districts, and 3 improvement districts. The number of these urban authorities is being still further increased from time to time by the creation of new local board districts, often containing but a population of a few hundreds. The sanitary control of the county of Lancashire is, therefore, in the hands of 159 independent local authorities, having no community of action; and, as but few of these sanitary districts have been combined for the purpose of appointing a joint medical officer of health, as provided for by the Act of 1875, the number of medical officers is almost equal to that of the sanitary authorities. The inefficiency of this disorganised sanitary government of Lancashire is proved by the unsatisfactory condition of the health of the county in recent years. We need only allude to the fact, that about £10,000 a year is paid in the county as salaries to these numerous medical officers of health, to prove that the system is as wasteful as it is inefficient; wasteful, because the far greater part of this £10,000 *per annum* is paid in sums of less than £50 to medical practitioners, who thus nominally become medical officers of health, but too often are made to understand that they are expected to do as little as possible—in fact, that their duties are to be as nominal as their salaries. If the county were formed into a convenient number of combined districts, and if medical officers of health were appointed to these districts, with salaries ranging from £700 to £1,200 *per annum* and debarred from private practice, the causes of the present waste of life in Lancashire might soon be controlled, with but slight increase in the expenditure for professional advice on public hygiene.

#### MEDICAL EXAMINATIONS FOR THE PUBLIC SERVICES.

WE understand that a Bill will be presented to the House of Commons during the present session, at the suggestion of Sir Dominic Corrigan, which will aim at the institution of examinations for the medical offices of the Civil Service (Poor Law and Public Health), comparable to the existing entrance-examinations for the Army and Navy.

#### ARCTIC ETHNOLOGY.

THE fine ethnological collection in the Museum of the College of Surgeons has just received a valuable addition from Captain Allen Young, who, with Mr. Horner, the surgeon of his vessel the *Pandora*, obtained, during the last cruise of that ship, a collection of the skulls of Esquimaux. Most of them are from Upernivik, but one belongs to a tribe located in the neighbourhood of Whale Sound, at the north of Baffin's Bay, and is, therefore, further north than any point from which remains of human beings have been hitherto brought to Europe.

#### M. WADDINGTON.

OUR Paris correspondent writes:—M. Waddington, the Minister of Public Instruction, and Deputy at the National Assembly, has just had a narrow escape with his life. Whilst in the act of mounting his horse, at the Bois de Boulogne, the animal started off and dragged his rider some distance. Fortunately for the Minister, his foot got disengaged from the stirrup, and he fell to the ground with no other injury than a subluxation of the foot and a few bruises on the leg.

#### THE RESPITE OF TREADAWAY.

WE think that there is some reason to regret that Mr. Secretary Cross has declined to furnish fuller information as to the grounds of the respite of Treadaway and the character of the report of Dr. R. Bennett and Dr. Crichton Browne. Our readers, however, have been put in possession, by the persons best qualified, of the whole of the medical features of the case, and we have grounds for assuming that the capital sentence has been remitted because, having a strong hereditary predisposition to mental and nervous disease, and being an undoubted epileptic, he would be more liable than a healthy man to give way to temptation or a criminal impulse. The epilepsy



has already in some slight degree weakened his mental faculties; and it is possible that his own statement, to which he has consistently adhered, that he had a seizure of some kind immediately before the murder, and that he recollects nothing of what occurred for an hour afterwards, may be true. That statement is not incompatible with medical experience.

#### MEDICAL SOCIETY OF LONDON.

ON Monday last, this Society held its meeting for the election of officers, etc. The finances of the Society are now in a prosperous condition; and Mr. Gay, the retiring treasurer, gave a very satisfactory account of his stewardship. The Fothergillian gold medal of the Society was awarded, for an essay on Pyæmia, to Dr. P. M. Braidwood of Birkenhead. The essay related some interesting experiments, and was illustrated by specimens, microscopic sections, and some beautiful drawings. Dr. Braidwood, some years ago, gained the Astley Cooper prize for an essay on the same subject. A silver medal was awarded to the retiring secretary, Mr. Richard Davy, for his services; but the second silver medal, for an essay or paper read before the Society, was not awarded. The following is the list of officers and Council for the year 1877-78. *President*: George Buchanan, M.D. *Vice-Presidents*: J. C. Thorowgood, M.D.; F. W. Braine; Leonard Sedgwick, M.D.; Richard Davy. *Treasurer*: Thomas H. Hill. *Librarian*: C. Theodore Williams, M.D. *Secretaries in Ordinary*: Clement Godson, M.D.; J. Astley Bloxam. *Secretary for Foreign Correspondence*: T. S. Dowse, M.D. *Council*: William Adams; W. Allingham; H. Royes Bell; Thomas Bond; John Brunton, M.D.; T. Lauder Brunton, M.D., F.R.S.; W. B. Dalby; R. Farquharson, M.D.; Sir Joseph Fayrer, M.D.; J. Milner Fothergill, M.D.; John Gay; J. D. Heaton, F.R.C.P. (Leeds); Constantine Holman, M.D.; H. Lawson, M.D.; C. F. Maunder; W. D. Napier; Robert H. Semple, M.D.; Erasmus Wilson, F.R.S.; Alfred Wiltshire, M.D.; J. C. Wordsworth. A paper was then read by Dr. Edmunds on Vegetarianism. Two well known vegetarians—Professor Newman and Mr. Maitland—were present, and gave their experience. The aged professor is hale and vigorous, and replied readily to the many questions put to him. He found that his dietary had relieved him of indigestion and constipation, and so enabled him to work more cheerfully. He eats but sparingly, and avoids eggs as far as possible. Mr. Maitland's experience was of but a brief duration, and he exhibited much of the enthusiasm of the convert. Mr. Sibley related some facts connected with his brother's experience, who has been a vegetarian for many years. After the ordinary hour had been exceeded, the discussion on the subject was adjourned till the next meeting.

#### THE EPIDEMIC OF TYPHUS IN CHELSEA.

THE recent remarkable outbreak of typhus in Chelsea affords additional evidence, if this be necessary, of the completely unsatisfactory condition of the sanitary organisation of the metropolis. Under present circumstances, the epidemic, disastrous as it has been to a large number of the hard-working poor, almost becomes a subject of congratulation among those who have the health of London really at heart, inasmuch as it has driven the Vestry of Chelsea to take earnest measures for improving the condition of this fever-nest, which was allowed to exist until the recent outbreak of typhus rendered its toleration no longer possible. Mr. P. A. Halahan, of 407, Fulham Road, appeared before the Westminster Police Court on the 2nd instant, to answer a summons for default in complying with the regulations of the Vestry of Chelsea made in pursuance of the Lodging-house Act. It was stated in evidence, by one of the sanitary inspectors, that dirt and overcrowding rendered the condition of these houses dangerous to health; and, further, that from forty to fifty cases of typhus had occurred, of which twenty had proved fatal. We have reason to believe that the number of deaths is thus overstated. If this were not the case, the proportion of mortality to cases would prove the fever to have been of an unprecedentedly malignant and fatal

type. The magistrate, Mr. Woolrych, inflicted a fine and costs with regard to one of the houses, adjourned the summonses relating to the other ten for twenty-eight days, and complimented the vestry for having done their work with great care and disinterestedness. The Vestry of Chelsea may fairly be complimented upon their unwonted energy since the outbreak of typhus; but it appears to us that a sanitary authority which requires a severe outbreak of typhus to stimulate it to cleanse and purify such a fever-nest as recently existed in Oakham Street and Wickham Place can hardly be regarded as a model sanitary authority. The medical officer of health has asserted that the disease was imported into Chelsea; but it appears more probable that it originated there. He has further stated that "it is only in presence of some formidable disease that such measures can be taken" as were sanctioned and approved by the Vestry of Chelsea in the late emergency. Now, it is quite evident that the outbreak of typhus neither caused the dangerously filthy condition of the property nor created any new machinery for dealing with this condition. The blame, therefore, for not dealing with the existing nuisances in time to prevent the outbreak of typhus rests between the sanitary staff and the vestry; and the possibility of such neglect is proof that a radical reform is necessary in the sanitary organisation of the metropolis. In many respects, sanitation in London is falling behind that which prevails in most other large English towns. London possesses, it is true, about forty medical officers of health; but all, with scarcely an exception, are busily engaged in private practice. Ten medical officers of health, with such salaries as would secure their entire devotion to public hygiene, would render far more valuable services to the health of London. It is easy to see, moreover, that one central health-authority for the metropolis would be infinitely better suited to deal with a large proportion of the health-questions continually claiming attention than are the thirty-nine vestries or district boards which now constitute the local sanitary authorities. Such a central authority would conduce to economy as well as to efficiency in health-administration.

#### THE MEMORIAL TO DR. PARKES AT UNIVERSITY COLLEGE.

THE establishment of a Museum of Hygiene in memory of Dr. Parkes is in a fair way towards completion. The Council of the College have granted the necessary space, and immediate steps will be taken to fit it for the purposes of a museum. The Secretaries will be glad to receive offers of the gift or loan of objects of hygienic interest, or subscriptions towards the permanent endowment of the memorial.

#### DR. DEVILLE AND THE HARROGATE IMPROVEMENT COMMISSIONERS.

WE print in another column an abstract of Dr. Deville's proceedings against the Harrogate Improvement Commissioners. By his independent search after truth in the first instance, and his firm stand in defence of his rights in the law proceedings now pending, Dr. Deville has earned the thanks of the profession, more especially of medical officers of health. It would be but a fitting and graceful recognition of his labours and his losses if some movement were set on foot, to at least reimburse him for the pecuniary outlay inseparable from the battle he is now fighting for a question of principle and what may prove to be a very important precedent.

#### THE "SPECTATOR" ON DR. FERRIER'S RESEARCHES.

THE *Spectator* this week has a curiously characteristic article, in which, by way of attacking experimental physiology generally, it endeavours to prove that Professor Ferrier's researches are valueless, and that his great book on *Cerebral Localisation*, which has been welcomed all over the world as "an epoch-making book"—to use the words of one of its transatlantic critics—is worthless as a contribution to knowledge and a basis of medical research. To establish this, the *Spectator* endeavours to show that Dr. Ferrier has been anticipated and rendered superfluous by the work of Dr. Hughlings Jackson as a clinical physician and pathologist. No one appreciates Dr. Jackson's work more than Dr. Ferrier, who dedicates his book to him; and what Dr. Jackson

thinks of the relation of his work to Dr. Ferrier's may be seen in the following passage, written in 1875 (*Clinical and Pathological Researches on the Nervous System*, p. vi).

"No one feels more than I do the difficulty of observing convulsive seizures with sufficient precision for anatomical and physiological uses, and the difficulty there is in defining at autopsies the exact parts of the brain damaged. The damage by disease is often coarse, ill-defined, and wide-spread. The facts I have up to this time obtained towards the 'localisation of movements in the brain' of man by observing cases of convulsion are, I admit, very few and of a most general character; they scarcely deserve mention along with those obtained in the masterly investigations of Hitzig and Ferrier on the lower animals. Nevertheless, I repeat, the experiments of disease *must* be considered in the case of man. We cannot have clear notions of convulsion as a symptom in epilepsy until we have studied it anatomically and physiologically."

The *Spectator* aims at scientific candour; it should, therefore, lose no time in rectifying this misrepresentation.

#### HOW SMALL-POX IS SPREAD.

A YOUNG woman, described as a "nurse", was charged on the 6th instant at the Southwark Police Court with stealing a large quantity of wearing apparel and bed-clothes belonging to a small-pox patient whom she had attended. It was shown that the prisoner had not only taken the clothes of her patient and the children of the latter, but had also abstracted the very coverlets in which the poor woman was wrapped while in a most dangerous stage of the disease, all of which articles were pawned. The prisoner was remanded. We are glad to see that the magistrate wisely and thoughtfully gave directions that the medical officers of the district and the pawnbroker should be made acquainted with the facts of the case. By this step, it is possible that the further dissemination of small-pox by means of the infected clothing may yet be hindered.

#### SMALL-POX FROM THE LAUNDRY.

AT Hammersmith last week, Mr. Lewis Samson, of Elgin Crescent, Notting Hill, appeared to answer a summons, at the instance of the Kensington Vestry, for exposing infectious clothing contrary to the Sanitary Act, 1866, section 38. Mr. Harding, clerk to the vestry, said that in December and January several persons had small-pox in defendant's house; one case, that of a child, proving fatal. During that time, the washing was regularly sent to the laundress; and, to show the danger attending the practice, he stated that the disease was spread to other persons. A soldier, who had been stopping on furlough at the house of the laundress, left on January 15th for Birmingham, and died from small-pox on the 18th, three days afterwards. A woman who washed his clothes was also attacked with the disease. The vestry had not issued the summons for the purpose of obtaining a heavy penalty, but to show the public that it is impossible to stamp out an epidemic like small-pox if clothes were sent to be washed in that manner. Emma Pain, a laundress, of Clifton Street, Notting Hill, was called, and proved receiving the washing in the usual way. She said her daughter and niece, who sorted the clothes, were attacked with small-pox. The defendant, a foreigner, said at first he did not know it was small-pox. Both he and his wife said that chloride of lime was used with the clothes before sending them to the laundress. Mr. Bridge said he had no doubt that the clothes were not disinfected; but, as the defendant was a foreigner, it would make a difference in the amount of punishment to be inflicted. It was the first case which had been brought to that court, and the Act would now be known; but in future he should inflict the highest penalty, £5, because persons who neglected the proper precautions must be reckless of the lives of the public. He fined the defendant £2 and 2s. costs.

#### THE PUBLIC HEALTH.

THERE were 2,498 births and 1,529 deaths registered in London last week, the former having been 14, and the latter 132 below the average number. The deaths included 84 from small-pox, 23 from measles, 23 from scarlet fever, 4 from diphtheria, 40 from whooping-cough,

16 from different forms of fever, and 22 from diarrhoea; thus, to the seven principal diseases of the zymotic class, 212 deaths were referred, against 187 and 208 in the two preceding weeks. With respect to the 84 deaths from small-pox in the metropolis last week, the Registrar-General points out that 37 were certified as unvaccinated, 23 as vaccinated, and 24 were "not stated" as to vaccination. The deaths of 15 unvaccinated children under five years of age were referred to this disease. Of the total number, 36 were recorded in the Metropolitan Asylum Hospitals, 3 in the Highgate Hospital, and 1 in the hospital provided by the St. Pancras local sanitary authority; the remaining 44, or 52 per cent. of the total cases, occurred in private dwellings. After distributing the hospital cases, it appears that 11 of the deceased patients had resided in Lambeth, 8 in St. Pancras, 7 in Poplar, 7 in Southwark, 6 in Bethnal Green, 5 in Bow, 5 in Newington, and 5 in Wandsworth and Clapham; in all, 6 belonged to the west, 16 to the north, 2 to the central, 27 to the east, and 33 to the south groups of districts. The numbers showed a general decline, but the disease continues to show the greatest proportional fatality in East London.

#### MEDICAL INSTITUTIONS IN BIRMINGHAM.

OUR correspondent in Birmingham writes:—The season of annual meetings is in full force with us. The General Hospital presents a very good report, dealing with an expenditure of £12,000. The cost of each in-patient is reckoned at about £3 3s. 4d., and of each out-patient at 3s. 3¼d. A special point is made of the institution combining both the privilege and the free systems. Under the former, 1,100, and under the latter, 1,300 in-patients were admitted; whilst out-patients numbered 12,000 and 9,000 respectively. The income of the charity is increasing, and moreover the very handsome sum of £6,000 had been received as the proceeds of the festival. Another point is the very moderate expenditure for stimulants in the hospital; the total amount was only £380, whilst the milk cost £430. The sanitary condition of the hospital has been much improved, and an additional piece of land will prove a valuable gift for airing purposes. We believe that, amongst other improvements, the Committee contemplate the appointment of four additional paid officers in the out-patient department. The Earl of Warwick has been elected President for the ensuing year.—The Training Institution for Nurses presented also a favourable report, though dealing with moderate figures; the income being £1,600, and the number of trained nurses thirty-one. This admirable work is well managed; but there seems much difficulty in securing the right material, and the demand always exceeds the supply. There had been no demand for public district nurses, whom the Committee desired to supply: a most excellent idea, but apparently considered dear at £50 *per annum* per district.—The Birmingham and Midland Sanatorium had provided for nearly seven hundred patients, having been, as usual, crowded during the summer, half-empty in the winter. The Committee had succeeded in paying off a debt of £2,000, and proposed now to add fifteen more beds. The Earl of Dudley has been elected President.

#### INFANT HEALTH IN IMPROVED DWELLINGS.

THE Trustees of the Peabody Donation Fund, in presenting their annual report for 1876, are able to afford satisfactory evidence of the sanitary condition of the inhabitants of their improved dwellings during last year. It appears that the death-rate among the population housed in the Peabody Buildings, "calculated upon the mean number of inhabitants", did not exceed the rate of 19.02 per 1,000 during 1876, and was more than 3 per 1,000 lower than the average rate which prevailed in the entire metropolis. When it is considered that this is the death-rate in a poor working-class population, the weekly wages of the heads of families among whom averaged less than twenty-five shillings, such a result affords conclusive evidence of the sanitary advantage of improved dwellings. It should not, however, be lost sight of, that in calculating the rate of mortality in these buildings, a correction, of unknown quantity, should be made for the deaths of residents occurring in work-



houses and hospitals. There is, however, another test of the value of improved dwellings, from a sanitary point of view, which is not open to the same statistical objection; this is, the rate of infant mortality which prevails therein. We have ascertained that 358 births were registered in the Peabody Buildings during last year, equal to a rate of no less than 51.1 per 1,000 of the mean number of residents during the year. The deaths of 52 infants under one year of age were registered, showing a rate of mortality equal to 145 per 1,000 births: whereas, in the whole of London, infant mortality during the year, measured in the same manner, averaged 157 per 1,000. A comparison with the rate of infant mortality prevailing in the immediate neighbourhood of the Peabody Buildings is somewhat more favourable to the improved dwellings. The ten groups of Peabody Buildings, in occupation at the close of 1876, are situated in as many registration subdistricts, in which the rate of infant mortality, out of the improved dwellings, averaged 159 per 1,000, whereas in those dwellings it did not exceed 145. It would be necessary, however, to ascertain the rate of infant mortality which prevails among an equally poor working-class population housed in the purlieus of Holborn, Clare Market, Drury Lane, St. Giles's, and Southwark, in order fully to realise the effect of improved dwellings upon infant mortality. The rate of infant mortality in London varies from about 75 per 1,000 births among the middle and upper classes, to nearly 300 per 1,000 among the poorest classes living in the most insubstantial parts of the metropolis. The rate of infant mortality in the Peabody Buildings showed a considerable decline in 1876 from that which prevailed in 1875; and, although we fully believe that more intelligent use of all the sanitary advantages provided in these dwellings would tend to a considerable further reduction, the figures quoted above should afford the strongest incentive to the application of capital for the provision of additional improved dwellings for the working classes. The effect of these dwellings on the health of the residents is more especially apparent in the death-rate among the infants and children, and healthy children imply greater vigour and prolonged life for the coming generation.

#### UNFOUNDED CHARGE AGAINST A MEDICAL MAN.

We find in the *South Wales Daily News*, of February 20th, a full account of a case which had been mentioned lately in the daily press in a manner seriously affecting the professional character of a surgeon at Cardiff. In this case, Mr. D. E. Jones of Cardiff was charged by a woman, named Elizabeth Moore, with having assaulted her under very peculiar circumstances. She stated that, having been stabbed in two places in the arm, she was taken to the surgery of Mr. Jones, and there attended by the assistant, who sewed and bandaged up her wounds. Mr. Jones then entered the surgery, and, according to her statement, asked her for money, and said that if she did not pay him he would take off her bandage and open her wounds again, as he would not treat her for nothing. He then cut all the stitches, or at least those of the largest wound, put a piece of sticking-plaster round her arm, and told her to go. This atrocious charge has naturally attracted much attention, and has been the subject of premature unfavourable comment. We are glad to find, as might have been expected, that the charge has been entirely rebutted, and proved to be wholly without truth. The sworn facts of the case came out on investigation before the magistrates; and it appears, from the evidence both of Mr. Richards Evans and of Mr. Jones, that the bleeding continued after the stitches had been put in; and that, at the end of half an hour, Mr. Jones judged it best to relieve the tension of the wound by taking out two stitches, and to clean out the clot of blood which had formed between the edges of the wound. This was done, and the wound was strapped with plaster. The evidence of the woman was entirely contradicted as to all material points; and there was ample medical evidence that the course which Mr. Jones pursued was, as indeed it clearly was, the correct one, from a scientific and practical point of view. The case was dismissed; the magistrates stating "that they had no hesitation in saying that Mr. Jones acted quite properly in his treatment of the case". The magistrates, how-

ever, are not quite free from blame in this matter; for it appears that the charge was, in the first instance, preferred against Mr. Jones upon the *ex parte* statements of two persons of disreputable character concerned in the stabbing case, and that the stipendiary magistrate directed a summons to be issued against Mr. Jones. It is quite clear that there never was any real ground for issuing such a summons. In taking a course for which there was no reasonable or proper ground, the magistrate inflicted severe mental anxiety and great professional wrong upon a respectable surgeon; and we cannot but think that, having acted upon a totally false impression in the first instance, and having inflicted the most grievous wrong upon a professional gentleman, the magistrates were bound to express at least their very deep regret for the wrong and injury they had inflicted, and to take every means in their power to afford Mr. Jones the utmost possible reparation by tendering him the most ample and sincere expressions of their regret. It must be hoped that his reputation will not in any way suffer from the inconsiderate action of the magistrate, and that the public in Cardiff will even feel that they owe some kind of consolatory reparation to Mr. Jones for the wrong done to him by a public official who has omitted to make due amends.

#### UNIVERSITY OF LONDON.

At their last meeting, the Senate of the University of London took into consideration the opinion of the Law Officers of the Crown on the admission of women to degrees in Medicine. It was decided by a majority of 14 against 7, that the University should exercise the powers conferred by the Act passed last Session, relative to the admission of women to degrees; and a Committee was appointed to consider and report in what mode and on what conditions effect should be given to the resolution.

#### ADMINISTERING A NOXIOUS DRUG.

At the Cornwall Assizes, before Lord Chief Justice Cockburn, a young man named Hennah was charged with administering a noxious drug to a young woman named Rowe, of Fowey. The thing administered was cantharides, but it was deposed that the quantity was so small that it was perfectly innocuous, and the point was raised that the charge in the indictment was not sustained.—The Lord Chief Justice, after consultation with Mr. Justice Hawkins, held that a distinction had to be drawn between a drug that was noxious in itself, like prussic acid or strychnine, and a drug that in small quantities was harmless, and in which the noxiousness was essentially a condition of quantity. It could be held that the small quantity of cantharides administered was not a noxious thing, and therefore the prisoner must be acquitted. If the quantity administered had been so large that injury might reasonably under ordinary circumstances have been anticipated, it would have been different. The prisoner had better be careful for the future.

#### DR. J. W. MOORE.

At a meeting of the Committee of Council, held at the office of the Association, 36, Great Queen Street, London, on Wednesday, January 10th, 1877, a letter was read from Dr. J. W. Moore, Dublin, resigning the office of Honorary Secretary for Ireland. It was moved by Dr. Foster, seconded by Dr. De Bartolomé, and resolved unanimously, "That the best thanks of the Association be given to Dr. J. W. Moore for his services as Honorary Secretary for Ireland, an office which he has most courteously and ably filled for the past six and a half years". It was resolved also, "That Dr. George F. Duffey, Dublin, be appointed Honorary Secretary to the Association in Ireland in the place of Dr. J. W. Moore". Dr. J. W. Moore has for many years filled ably and most courteously the office of the Honorary Secretary of the Association for Ireland. There is not yet much of Branch organisation in Ireland, although we have there now a large and steadily increasing body of members; the local Medical Association of Ireland showing great and most useful activity, and not availing itself so fully as it well might of the political and professional advan-

tages which an active cooperation with the British Medical Association might afford. The services of Dr. Moore deserve a very cordial recognition. It is also a matter of satisfaction that in Dr. Duffey the Association obtains the co-operation of a physician of recognised ability and of great energy and organising power. As the numbers of the Association in Ireland grow from year to year, the duties will take more defined shape, and we can but wish that Dr. Duffey may during his term of office see once more such a fraternal meeting of the profession of Great Britain and Ireland as preceded the appointment of Dr. Moore; and that, when he shall leave his office, the existence of numerous Branches, such as that of the South of Ireland, will form a lasting monument of his activity and of his desire to assist in promoting the interests of the profession at large throughout Ireland and in the whole kingdom of Great Britain.

#### VACCINATION IN SWITZERLAND.

THE *Echo* says:—The strife concerning the utility of compulsory vaccination led some time ago to a general consultation of "all legitimate Swiss physicians" upon this debated point. A Committee was appointed at the end of last year to draw up a set of questions, issue them to all the members of the medical profession, and receive their answers. No fewer than 1,376 voting cards were sent out. Each card was divided into three columns, headed respectively "Yes", "No", and "Undecided". At the beginning of this month, 1,168 cards had been returned, each containing the specific suffrage of a qualified practitioner upon each of the questions, accompanied in some cases with a good deal of explanatory comment. The questions, which, after much debate, were reduced to five in number, were put in the following form.—I. Does your experience incline you to the view that a thoroughly successful vaccination protects the subject against small-pox, or at least against the severer forms of it, for a long series of years? To this question 1,122 doctors replied "Yes", 22 "No", while 24 were "Undecided". II. Would you recommend the vaccination of healthy children? Answers—1,128 "Yes", 25 "No", 15 "Undecided". III. Would you recommend revaccination? Answers—1,083 "Yes", 60 "No", 25 "Undecided". IV. Do you consider that inoculation with retrovaccinated cow-lymph offers such advantages that its use should be universally striven for? To this, 771 reply "Yes"; the "Noes" rise to 213; 184 are "Undecided". V. Are you an advocate for the maintenance of the present compulsory vaccination? 1,010 reply "Yes", 133 "No", and 25 are "Undecided". Some of the answers are merely accompanied by pithy *marginalia*; others take the form of longer or shorter essays upon the whole question.

#### SCOTLAND.

A MUNIFICENT donation of £1,000 to the Kilmarnock Fever Hospital and Infirmary has been received from Mr. John Fulton of Edinburgh. The money is to be applied in any way the directors think fit for the benefit of the institution.

At a meeting of the Edinburgh University Court, Dr. Andrew Smart was recognised as a Lecturer on Institutes of Medicine in Edinburgh, whose lectures should qualify for graduation in medicine in the University. At the same time, Principal Sir Alexander Grant, Bart., was appointed a Curator of Patronage of the University for three years, from 19th February last, in succession to the Right Honourable Sir John McNeil, G.C.B., whose term of office then expired.

EDINBURGH continues to show a remarkable immunity from zymotic diseases. During the week ending February 26th, the mortality was at the rate of twenty per thousand, and only seven deaths were to be referred to zymotic disease, of which five were from whooping-cough and two from diphtheria. No fatal case of this kind occurred in the New Town, and only one (diphtheria) in the Southern suburbs. Last week, the mortality was at the annual rate of nineteen per thousand,

and only six deaths occurred in the zymotic class, four being from whooping-cough, one from fever, and one from erysipelas.

#### TRIAL OF A STUDENT FOR HOMICIDE.

A MEDICAL student named Harris was tried before a jury in the Ayr Sheriff Court, on the 2nd ultimo, on a charge of culpable homicide; in having, when called upon to attend on Mrs. McQueen, the wife of a baker at New Cumnock, appeared in a state of intoxication and acted in a rough, unskilful, and reckless manner, the result of which was that the woman died a week after. Dr. Brodie, for whom the accused had been acting as *locum tenens*, but who had returned home before the case occurred, deposed that he thought Harris had managed the case just as well as he could have done himself, and that, on the morning in question, he appeared to him to be perfectly sober. A *post mortem* examination showed that the woman died from inflammation and mortification of the uterus, how caused there was no evidence to show. The jury returned an unanimous verdict of "not guilty" on the charge of culpable homicide, and, by a majority of eleven to four, of "not proven" on the alternative charge of reckless and unskilful treatment while intoxicated.

#### IRELAND.

In the week ending February 24th, of the 21 deaths registered from the South Dublin Union Workhouse, there were 13 cases in which the cause of death was returned as "unknown". The only explanation given of this extraordinary occurrence is that the medical officers had not sent in any certificates of the causes of death in these cases to the resident officer of the institution.

#### RATHMINES AND PEMBROKE MAIN DRAINAGE BILL.

THE objections to this proposed scheme have already been referred to in these columns; but we find that, at a late meeting of the Corporation of Dublin, it was resolved that their law agent should be directed to oppose the Bill, and to employ Mr. Bazalgette and counsel, to protect the interests of the citizens in this matter. The Dublin Port and Docks Board will also oppose the scheme.

#### VACCINE LYMPH.

IN consequence of representations made to the Government, the annual grant to Ireland has been increased by £800, and from the 1st of next April the total sum will be £1,200 a year. This sum will be placed at the disposal of the Local Government Board, who will supply vaccine lymph in the same manner as in England. Heretofore, medical practitioners, not subscribers to the Cow-pock Institution in Dublin, paid threepence for each point of vaccine lymph they got, and could not obtain tubes at any price—a matter of considerable importance, as, with the most careful precautions, points very often prove perfectly useless.

#### MEDICAL FEES AT INQUESTS.

DR. JACOB, President of the Council of the Irish Medical Association, attended before the Government Auditor, on last Monday, to protest against the system adopted for the payment of medical fees at inquests held in Dublin. At present, the medical evidence at coroners' inquests is given, it is stated, exclusively by Dr. Egan, who receives £150 yearly. This method of payment is considered derogatory, and the Council of the Irish Medical Association wish to have the doctors examined at inquests paid each one guinea for each inquest, instead of a regular annual salary. Mr. Finlay, the auditor, overruled the objections made, but pointed out that, under the Act of Parliament, an appeal could be made. We understand that the legal point raised, as to its being compulsory to pay a fee of one guinea per inquest, will be brought into the Court of Queen's Bench. Mr. Purcell, Q.C., has given an opinion that the arrangement now acted on, of employing the same medical practitioner as medical witness at all inquests held by the coroner, is contrary to law.



## MEDICAL AND SURGICAL CLINQUES OF PARIS.

[FROM AN OCCASIONAL CORRESPONDENT.]

### III.

*M. Charcot.—The Salpêtrière.—The Clinical Lecture Room.—The Administration.—Lecture on Syphilitic Epilepsy.*

THE Salpêtrière is one of the most important hospitals established in Europe. It contains, indeed, four thousand beds for old women, or for women attacked with chronic diseases, paralysis, affections of the spinal cord, rheumatism, cancer, etc.; and nearly a thousand beds are set apart for the insane. Here M. Charcot has during the last twelve years delivered clinical lectures which are now classical in European science. His studies of the pathological conditions of the spinal cord, and of the phenomena of ataxic, paralytic, and convulsive diseases of the nervous system, are among the most remarkable clinical researches of the last twenty-five years, and have placed him in the first rank amongst European inquirers. Some of his lectures on the Nervous System are about to be issued in translation by the New Sydenham Society, which has for some time had the volume in preparation; and their general scope and value are too well known to need here a detailed reference. M. Charcot lectures on Sunday mornings at the Salpêtrière; and his measured and deliberate eloquence, the care with which he prepares his materials for teaching, the wealth of illustration with which he enriches them from the wards of this great establishment, the research, the sagacity, the learning, and the originality which are seldom or never wanting, combine to attract to these lectures the flower of the students and the most thoughtful of the younger aspirants of the faculty in Paris. I am glad to hear that there is some prospect of his attending the meeting of the British Medical Association in Manchester, where he would present a paper giving the results of some of his clinical and pathological researches. M. Charcot is gifted at the same time with the power of research and of exposition, and his manner of teaching is not less excellent and careful throughout than is the substance of his lectures. I attended recently the last of his course for this season at the Salpêtrière, and had once more occasion to feel astonished that in a hospital so considerable, where Pinel, Esquirol, Rostan, and Cruveilhier accomplished labours so remarkable, where one of the first of French physicians has now taught and studied the pathology of disease and its treatment for twelve years, there is neither a museum nor a fitting laboratory, nor a theatre for the lectures. M. Charcot's lectures are, in fact, delivered in a room habitually occupied by the patients; and in this room are collected several hundreds of students, house-surgeons, and foreign visitors, attracted by the reputation of the teacher. These three or four hundred persons are crowded together in a room situated on the first floor, only accessible by a narrow staircase, and containing large pillars supporting the roof and obstructing the sight. This room, indeed, is unworthy of the teacher and discreditable to the administration.

Incidentally, too, I learnt what in any other country and under any other administration than of the administration of the French hospitals would have filled me with surprise, and would have seemed, indeed, incredible. In this hospital are collected a great number of *romantic* patients, of cases of hysteria, of mental alienation, of epilepsy, for which, above all others, the means of giving vapour-baths and douches of various kinds are, of course, extremely and constantly desirable. In this vast Salpêtrière there seemed to be, as far as I can learn, no system of baths whatever, no vapour-baths or douche-baths—nothing but a few movable baths, which are, or would be considered in our hospitals, insufficient even for the ordinary purposes of cleanliness. The necessities of a population of six thousand persons chronically diseased, as are the patients of the Salpêtrière, require imperatively an efficient hydrotherapeutic system; but here there is none. The whole establishment would easily lend itself to very serious criticism in respect to its administration; but this one example, which struck me forcibly in the course of even a chance visit, suffices to indicate how much this hospital, as well as others which I have named in Paris, suffers from the extreme centralisation, which robs the local medical officers of the power of making their needs immediately known to administrators of the hospital, and of enabling the latter quickly and efficiently to satisfy them. Such defects as exist in the administration of the French hospitals are, I may once more repeat, not to be found in any other hospitals in Europe, and would not for a moment be tolerated by any physician in London; nor, indeed, could they possibly occur under a system in which the immediate administrators of the hospital felt a direct personal responsibility for the condition of the

establishment over which they presided. Officialism strangles progress and tolerates every abuse; and of this the hospitals of Paris offer the most striking examples I have ever seen. Nothing, however, can rob men of M. Charcot's stamp of the opportunity of showing their devotion and their skill; and the lecture which I heard on the occasion of this visit was only the more remarkable from the material deficiencies of the place in which it was given. It was a lecture on partial epilepsy of syphilitic origin, and I am indebted to M. Bourneville for the full notes which I append.

M. Charcot began his clinical lecture on partial epilepsy of syphilitic origin by saying: Partial epilepsy, of which I recently endeavoured to point out to you the principal characters and symptomatic varieties with the aid of the descriptions of Bravais and the more recent descriptions of Dr. Hughlings Jackson of London, and also of myself, is one of the most frequent manifestations of cerebral syphilis. This is now a fact of almost commonplace knowledge amongst our English brethren, as is testified by the writings, among others, of Drs. Jackson, Broadbent, Buzzard, etc.\* On the other hand, in France, if I am not mistaken, it has not yet been remarked as much as it deserves to be, on account of its practical importance; although a physician of great competence in these matters, Dr. Fournier, has endeavoured to popularise it in a work which I cannot too strongly recommend to your attention.† Thus you will find it, I hope, opportune that I should draw your attention for a moment to a subject as yet little studied, while presenting to you a summary of a certain number of examples of sufficiently well marked partial epilepsy, which I have recently observed.

In the course of my lecture, I shall endeavour to find an opportunity of showing you how to put your finger on certain peculiarities which this clinical form of cerebral syphilis often offers. But I shall especially have it in my mind to bring into relief the fact that, in such cases, the opportune administration of the appropriate agents, when it is resolutely—I was going to say audaciously—conducted according to a certain method, is capable of triumphing very rapidly over all obstacles, and of bringing about a durable cure even in the very cases in which the same agents administered upon other principles, or at least more timidly, may have completely failed.

On September 16th, 1874, I was called to M. X., aged 42, attacked by serious cerebral symptoms, and confined by them to his room for several months. In the history which he gave, M. X. referred his actual disease to the month of July of the same year. As clerk in a banking house, he was one day seated, according to custom, before his desk and occupied in writing, when all of a sudden, without having remarked any immediate premonitory symptoms, he felt, and not without alarm, his lower right limb agitated by convulsive rhythmic precipitate and energetic shocks. This sort of trepidation lasted for some seconds, then the right limb stiffened, lifted itself up in one piece, and immediately afterwards M. X. fell to the ground senseless. He did not regain his senses till the end of an hour, and he knows nothing of what passed during that time. The next morning, he was able to return to his affairs, and no new symptom appeared until September, when, while descending from an omnibus, he fell upon the pavement deprived of consciousness, after having felt, as on the first occasion, during some seconds, the trembling with rigidity of the lower right limb described above. A slight paralytic weakening of the limb of the right side, a notable confusion in his ideas, a certain degree of cloudiness of the memory, were the symptoms which followed this second attack and persisted after it. From this period M. X. suspended his business, and no longer went out of his house, except at rare intervals, fearing always to be seized afresh in the street by new symptoms. Towards the middle of November, without appreciable cause, without any warning, a short attack took place. This time, the duration of the symptom of the *aura motrix* was longer; and the patient, before losing consciousness, had time to observe that the convulsive rhythmic shocks, and the rigidity, after having attacked the right lower limb, and without leaving it, rapidly invaded the upper limb of the same side. A person present at the time stated that afterwards the head was carried towards the right shoulder, at the same time that the right side of his face was drawn into grimaces; then the convulsions extended to the whole body, predominating however, always on the right side; and after their cessation there occurred a stertorous sleep. It is certain that, during the attack, M. X. did not bite his tongue, and that he did not urinate.

Before he regained consciousness, several other attacks occurred, in all respects resembling the first, so as to constitute a condition of epileptic disorder of which the total duration was about three hours.

\* Buzzard, *Aspects of Syphilitic Nervous Affections*. London: 1874.

† *De l'Epilepsie Syphilitique Tertiaire*. Paris: 1876.



The consecutive symptoms already pointed out in describing the crisis which occurred in September became more marked after that which has just been described. For some days, there were also a certain degree of embarrassment of speech, of forgetfulness of words, a feeling of loss of sensation in the right cheek, in the neighbourhood of the labial commissure; but these last symptoms were quite transient; they were completely dissipated when I saw M. X. After having verified the existence, which had been mentioned to me, of slight weakening of the right limbs, I ascertained that they were not the seat of any sensation of creeping; that they did not present any trace of loss of sensation; and that the vision was not at all disturbed.

In listening to the narrative of M. X., I had been naturally led to suspect that in him syphilis might be in action; and I proceeded immediately to the examination of the various parts of his body accessible to the eye, with the view of looking there for the vestiges of some one of the manifestations of this disease. The result of this investigation was absolutely negative. It was not so, however, with the study of the antecedents, which led me to obtain significant information. I learned, in fact, as follows. At the age of 29—that is to say, about twelve years before the appearance of the first epileptiform symptoms—M. X. had an indurated chancre, soon followed by divers manifestations of constitutional syphilis, amongst which was roseola. The treatment of the disease at this epoch appeared to have been regularly carried out and continued during several months. The matter stopped there, and for more than ten years M. X. had lived in good health, enjoying perfect security, when, towards the end of 1873, he began to feel a singular illness, marked especially by a great prostration of strength, by inaptitude for intellectual work, by well marked dyspeptic troubles, which were very obstinate and resisted ordinary treatment, a certain degree of wasting, a cachectic state sufficiently marked, but which did not seem to be due to any visceral affection; and, finally, headache of a particular kind soon completed the picture. This cephalalgia has never completely ceased to exist to a certain degree from that time. I have not, however, spoken to you of it until now, because I reserved to myself especially to point it out to your attention. At the beginning, it was constantly localised to a circumscribed space not larger than a franc-piece above the right eyebrow towards the temple; later, at the moment of the exacerbations, it extended often to the summit of the head, and even to the occiput, without at any time abandoning its original seat. It appears well established that the exacerbations took place habitually towards seven o'clock in the evening, prolonging themselves more or less into the night, and sometimes preventing sleep, but never being followed by vomiting. If I insist on the description of this pain in the head, it is because you will find it with the same peculiarities in the history of many cases of syphilitic epilepsy. This fact, moreover, has been many times brought into relief by authors who occupy themselves with the question. Dr. Buzzard, among others, has observed that this pain in the head is associated with attacks of syphilitic convulsion. It precedes, in general, the development of the attacks; it is often localised in a particular point. One frequently finds noted in the antecedents that it has existed during some months before the appearance of the first attack.\* We must not, however, go so far as to consider this cephalalgia, fixed at a certain point and preceding for a long time the convulsive attacks, as a characteristic sign; for it may be met also, indeed almost always, less accentuated, in various forms of partial epilepsy independent of syphilis. Nevertheless, it is an element which the clinician must not disdain to utilise, and which may sometimes contribute to clear up the diagnosis.

Having collected the information which I have just laid before you, I consider myself authorised in declaring that, in my opinion, the various symptoms experienced by M. X. for eighteen months must be considered to be due to syphilis, and that probably they would all yield to the suitably directed employment of a mixed treatment. I was then informed that, on the advice of a physician, M. X. had for nearly a year never altogether ceased taking either syrup of iodide of mercury or medium doses of iodide of potassium. This statement did not discourage me; and, reasoning from the instruction drawn from previous observations, I expressed the opinion that I must proceed here in some sort by forcible assault, and seek to obtain a rapid result; that, in other terms, the immediate administration of full doses of mercury would perhaps quickly triumph where the prolonged action of medium doses had shown itself insufficient to prevent the symptoms or to combat them when once developed. My colleague and I agreed on the following treatment. Friction was collected to be made every day with five or six *grammes* (a drachm and a quarter to a drachm and a half) of mercurial ointment. At the same time, the iodide of

potassium was ordered to be taken in doses of from six to eight or ten *grammes* (one and a half to two or two and a half drachms) in the twenty-four hours, partly by the mouth, partly by enema. The treatment was directed to be continued as much as possible in all its rigour during about fifteen days, then completely suspended for some days, recommenced in the same manner as at first, and so on for three or four times in succession.

I saw M. X. again at the end of 1875. He told me that the treatment had been commenced the day after the consultation; that, two months afterwards, the amendment in all the permanent symptoms—cephalgia, paresis, amnesia, cachectic state—was already such that he was able to resume his occupation; that, a month later, he considered himself as completely cured; that the epileptiform attacks had not reappeared; and that he had not besides felt anything more which could induce him to fear their reappearance. I again saw M. X. at the end of 1876. The cure at this time had not for a single moment shown any signs of giving way.

#### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE annual meeting of this Society was held on Thursday, March 1st, at 8 P.M.; Sir JAMES PAGET, Bart., F.R.S., President, in the Chair. Sir Joseph Fayrer and Dr. H. G. Evans were nominated as scrutineers, and the ballot for election of officers and council for 1877-78 immediately opened.

*Report of Council.*—The annual report of the President and Council stated that the number of deaths among the Fellows had been seventeen, including two honorary, nine resident, and six non-resident Fellows; and that nineteen new Fellows had been elected, consisting of two foreign honorary, thirteen resident, and four non-resident Fellows. The total number of Fellows was now six hundred and fifty-one. The ordinary receipts and expenditure varied little from those of previous years. The volume of *Transactions*, owing to expensive illustrations, cost more than that of the previous year by about £100; and that, with some items of extraordinary expenditure, had more than consumed the cash balance in hand at the commencement of the year. The report referred to the near approach of the time when the council would have to award the Marshall Hall Memorial Prize for the best original work done during the previous five years, and recorded in the English language, on anatomical, physiological, or pathological research relative to the Nervous System. In reference to the committee appointed to examine into the relations existing between membranous croup and diphtheria, the report stated that the Committee had held several meetings during the past year, and had been engaged in collecting evidence bearing on the more important facts at issue. To facilitate their investigations, they had formed themselves into Clinical and Morbid Anatomy Sections; and, though some time must elapse before the Committee will be able to make a report, they hoped that facts would be established which will be of great value in determining the identity or non-identity of the diseases. The report also referred to the hospitable reception the delegates of the Society—Dr. Hare, Dr. Barnes, and Mr. B. Carter—had received at Philadelphia, and the great success of the Medical Congress held there last autumn. Two portraits of himself and of the late Mr. Thomas Alcock, presented by Sir Rutherford Alcock to the Society in 1866, under an erroneous impression that the Society was forming a gallery of oil-paintings of its Fellows, were recommended to be returned to him; and a feeling allusion was made to the death of the late Dr. Sibson, who had for some years been one of the honorary librarians of the Society. In relation to the library, the report stated the number of new books added to the library in the year to be four hundred and thirty-five, and that the new catalogue and index were progressing, and would be ready for the press in the course of the summer. The usual triennial inspection of the library had been made, and its management found to be in good working order and efficiency. The report ended with statistics of the number of works and volumes in the library, the numbers lent out, and the number of visitors to the library, similar to tables given at previous intervals of three years. The adoption of the report was moved by Mr. W. S. SAVORY, seconded by Mr. JOHN CROFT; and a separate motion for returning the portraits to Sir R. Alcock was proposed and seconded Dr. MILLER ORD and Dr. SILVER. Both motions were carried *unanimously*.

*President's Address.*—The President then addressed the meeting. He commenced by taking a review of the past history of the Society, particularly contrasting its state nearly forty years ago, when he first became a Fellow, with its present condition. He found only changes which the lapse of time accounted for, and which were mostly for the better: the papers having grown more elaborate, the methods of in-

\* See Buzzard, *loc. cit.*, page 14.



quity more various and minute, and the investigations more deep and thorough. In alluding to the inevitable controversy which must exist between seniors and juniors in their estimation of each other's work, which, if passionless, must ever do more good than harm, he referred to the younger societies growing up around the parent society, with which he felt sure there was no ground for conflict. The communications to all societies might broadly be divided into the less and the more elaborate; both were useful, if containing truth, and he considered it the duty of this Society to seek the more elaborate. It would also be its right to have them, if it continued to exercise care in admitting them to be read, still greater care in selecting for publication in the *Transactions*, and liberality in publishing those selected. Mistakes might sometimes be made, but they were rare, and should be endured for the sake of maintaining the honour attached to having a paper in the *Transactions*, which, he might add, were by far the largest and best series of volumes published by any medical society of the present or any past times. In the institution of other societies, he could see no sign of the Royal Medical and Chirurgical Society having suffered damage, and he could see many signs that medical science had gained great advantage. The only point in which the Society could be said to have suffered was, that the meetings were less fully attended and the discussions less animated; but this might partly be explained by the greater completeness of the papers, the minuteness of their details, and the elaborateness of their argument, which were more likely to render the reading dull, and were less fit for discussion; but this was a result that must be endured in the best promotion of knowledge. The Royal Society originally embraced every branch of natural science in its labours, but now there was scarcely a division of natural science without a society devoted to its cultivation; and, nevertheless, the Royal Society was never more prosperous, its fellowship never more desired, its *Transactions* more rich, or its influence on science more distinct.

The President then gave brief memoirs of the many important Fellows who had been lost to the Society during the past year. They included the following names:—Mr. G. Naylor of Savile Row, surgeon to the Hospital for Diseases of the Skin, Blackfriars; Sir John William Fisher of Park Lane, late surgeon-in-chief to the Metropolitan Police; Mr. George Southam, Surgeon to the Manchester Royal Infirmary, and Professor of Surgery at Owens College; Mr. William Sudlow Roots of Kingston, Surrey, Surgeon to the Royal Establishment at Hampton Court; Dr. John Webster, Physician to the Scottish Hospital, to whom (he said) the Society owed some respect for an almost unflinching attendance at its meetings for above thirty years; Mr. Victor de Méric, Surgeon to the Royal Free Hospital and to the German Hospital; Dr. Thomas Laycock, Professor of the Practice of Physic in the University of Edinburgh; Dr. Henry Wyldbore Rumsey of Cheltenham, the indefatigable worker on State Medicine and Sanitary Reform; Mr. William Smith of Clifton, Bristol, for some time Surgeon to the Chesterfield and North Derbyshire Hospital; Mr. William Harvey, the well-known aural surgeon, and the real author of the system known as Bantingism, though it was not till long after that treatment had gone out of fashion that his work on *Corpuence* was published; and Dr. John Butter of Plymouth, Physician to the Plymouth Royal Eye Infirmary.

The President also gave obituary notices, with more fulness of detail, analysis of character, and feeling allusions to the usefulness of their life and works, and the lessons which they taught, of two of the Foreign Honorary Fellows of the Society—Dr. Louis Stromeyer, Director-General of the Medical Department of the Army of Hanover, and Professor Christian Gottfried Ehrenberg of Berlin; and of three of its Resident Fellows—Dr. Francis Sibson, Consulting Physician to St. Mary's Hospital, who was one of the Honorary Librarians of the Society at the time of his death; Dr. Robert Lee of Savile Row, late Obstetric Physician at St. George's Hospital, one of the Society's oldest members; and Sir William Fergusson, Bart., Surgeon to King's College Hospital.

In speaking of Dr. Stromeyer, the facts were noticed of his father having also been an Honorary Fellow of the Society, and the introducer of vaccination into Germany. Notices were also given of Stromeyer's love for England and his unaccomplished wish to study in London, his education under Blumenbach, Himly, and Langenbeck, his visits to Goethe, and the interesting character of his "Recollections" of the German surgeons and surgery of fifty years since, and of his visit to this country and notices of the social and professional life of London; also, his first section of the Achilles tendon in 1831, an operation which marks the beginning of the whole system of subcutaneous surgery; the rapid increase of the practice of tenotomy in this country by the labours of Dr. Little after the cure of his club-foot by Stromeyer in 1836; Stromeyer's dislike of specialising and devotion to the larger studies of surgery, fearing he might else be called a mere

tendon-cutter, and his modesty in maintaining his claims of priority in the discovery of subcutaneous surgery. After detailing his progress at Erlangen, Munich, and Tübingen, in years subsequent to 1838, Sir James Paget referred to the insurrection of 1848, when Stromeyer commenced his distinguished career as a military surgeon, with Esmarch, his son-in-law, as one of his assistants, and collected the materials of his valuable *Maximen der Kriegsheilkunst*; his devotion of himself, after 1854, to an entirely military career on his appointment as Director-General of the Medical Department of the Army of Hanover; his last visit to England in 1872, and his lectures at St. Thomas's; and the honours he received on his jubilee in April 1876 from all ranks in Germany and from British surgeons; two months after which, while still at work, he fell in apoplexy, and in a few minutes died.

In speaking of Christian Gottfried Ehrenberg, the President referred to his early devotion to microscopic studies, and first great discovery and demonstration of the sporules of the lowest fungi; the vast results in number of species of plants and animals obtained in his scientific expedition to Africa for the Royal Museum of Berlin; and the appearance of his most important work on the *Infusoria* in 1838, which enlarged in every direction the field of microscopic inquiry. In pointing to the illustrations of his marvellous industry in the 268 titles of papers by him in the Catalogue of Papers by the Royal Society, the speaker said that in the history of microscopy his name must be placed next to that of Leeuwenhoek.

Of Dr. Sibson, the President said it was difficult to tell briefly anything worthy of his life and good deeds. In all his professional work, and in all the offices he filled, he was vigorous and abundant in discharge of duty, while the rare charm of his personal character moved many to work with him and multiplied the power of his own work. From 1835 to 1848, he was Resident Surgeon to the Nottingham Hospital, where he gained much of that knowledge of the mechanical physiology of respiration, and the position of the internal organs in health and disease, which culminated in the publication of his *magnum opus* the *Medical Anatomy*. He passed the examinations for M.B. and M.D. at the London University in the same year (1848) with honours in both—a notable achievement, considering the active life of practical work in which he had been engaged: and was nominated to the Senate in 1865. Reference was made to his constant attention to the business of the University, and also of the College of Physicians, of which he became a Fellow in 1853; his successive delivery of the Goulstonian, Croonian, and Lumleian Lectures; and his enormous labours as Secretary of the Committee on the "Nomenclature of Diseases", of which undertaking he was the principal originator, and of which, as a work of more than national importance, the principal honour was due to him. After referring to his connection with St. Mary's Hospital, with the British Medical Association, and with the Royal Medical and Chirurgical and the Royal Societies, in all of which his labours were not less vigorous, and in every office of which he always set himself a high standard of duty and fulfilled it, the President summed up the characteristic of all his work, his devotion and intense labour to determine many questions which will in consequence not need to be investigated again. "He never flinched from any duty, but when he saw it was to be done, he looked rather to see how large it could be made, and no man followed better the advice of the King Preacher—'Whatever thine hand findeth to do, do it with thy might'; and surely no one ever worked harder with so light and genial a heart. Who of us can forget the gentleness and enthusiasm of his social life, his fervent greetings, his words of affection, the sincerity of which was proved by the whole tenour of his pure and unselfish life? He was a many-sided man, and on all sides good."

Dr. Robert Lee was one of the oldest members of the Society, and had contributed twice as many papers to its *Transactions* as any living Fellow. He had also had the honour of attracting the three largest meetings, about 1850-51, which ever assembled in the rooms of the Society, to discuss his papers upon the use of the Speculum, and upon Ovariectomy. "Many of us," said Sir James, "can remember how his dissection of the nerves and ganglia of the uterus, and afterwards of those of the heart, seemed to engage his whole mind, and inflame it not only with the love of truth, but with scorn for those who could not see the truth where he did. For Dr. Lee was a strong instance of that fault which sometimes goes with honesty; he was so sure that his convictions were the results of hard and well-intentioned study; so sure that he sought the truth, and sought it on the right way, that he was wholly unable to believe that any one, with equal honesty, and almost equal industry, could arrive at conclusions different from his own." His preparations are in the University of Cambridge, to which a few years ago he presented the whole of his anatomical collection. A passing reference was made to the controversy in the Royal Society between him and Dr. Snow Beck, on the



nerves of the uterus; and the notice finished with a criticism on the character, value, and utility of his works, in spite of his excessive opposition to all innovation.

In referring to the last name on his list of deaths, that of Sir William Fergusson, the President did not wish (he said) to go through a cold bare narrative of the life of one so recently with us, and for whom all had so sincere a regard, but would confine himself to a study of his character and work. Looking upon him as the chief practical surgeon of his time, he noticed his remarkable endowments by nature, which he educated to the highest degree of sensitiveness and mobility, not only in the long hours spent in dissecting, but in his amusement in music and fine carpentry; his familiarity with the character and relations of every structure; his calmness and self-control; his love of mechanics, which made him so good a judge of apparatus; his orderliness, which caused his apparatus to be always complete and in its place; and, altogether, his sensibility, dexterity, calmness, and mechanical power, which rendered him more fitted to be a great surgical operator than any one that he (Sir James Paget) had known. To these he owed his first reputation; but the publication of his *Practical Surgery* showed the wide range of his surgical knowledge, and he soon, in important cases, showed his great power of diagnosis, which, associated with his caution, made him a safe surgeon in cases where good operators are sometimes apt to be dangerous. He had such personal and social qualities as commanded the confidence of the public; he was gentle in voice and manner; cheerful, warm-hearted, and kindly in his judgment of others; firm in his friendship, and had a tender-hearted love of home. He had great personal influence as a teacher, and his pupils admired him and boasted of him, though his oral teaching was not effective, and he addressed the eyes much more than the ears of his class. "He will always deserve a high place in the history of surgery for those improvements and changes, which include his operations for hare-lip and cleft-palate, excision of joints, especially of the hip and knee, and removal of the upper jaw by the labio-nasal incision; and, generally, for the simplicity he encouraged in all apparatus. But his chief influence will be through our distinct remembrance of him; for his good qualities were such as none can forget who had the happiness of knowing them intimately."

At the conclusion of the address, a vote of thanks to the President, moved by Mr. JOHN MARSHALL, and seconded by Mr. ERICHSEN, in highly eulogistic terms, was carried with great applause.

Thanks were also voted to the retiring Vice-Presidents and other members of Council: Dr. E. Ballard, Mr. Charles Brooke, Mr. John Marshall, Dr. Wilson Fox, Dr. Graily Hewitt, Mr. John Couper, Mr. George Gaskoin, and Mr. Thomas Smith. In proposing the latter vote of thanks (which was seconded by Dr. STEWART), Mr. CHARLES HAWKINS incidentally alluded to the singular fact that, just sixty years ago, the offices of President of the College of Surgeons and of the Medical and Chirurgical Society were held contemporaneously by the celebrated Henry Cline, who also, during his Presidency of the Society, delivered the Hunterian Oration, in exact parallelism with the retiring President, Sir James Paget. The result of the ballot for Officers and Council for 1877-8 was announced. The names of those elected were given at page 238 of the BRITISH MEDICAL JOURNAL for February 24th.

#### REPORTS ON THE SANITARY CONDITION OF ST. MARY'S HOSPITAL, PADDINGTON.

THE Committee of St. Mary's Hospital have printed and circulated three reports on the sanitary condition of their hospital, made by Professor F. De Chaumont in 1875-6. The results are interesting and instructive, and it is much to the credit of the Committee that they should have been so ready to recognise the defects of their hospital, to apply the necessary remedies, and to communicate the results of their experience for the benefit of others. The hospital was built between twenty and thirty years ago, at a time when the hygiene of buildings was but little understood, and it was enlarged some years later. It is in the form of a T, with the front to Cambridge Street, Paddington, and behind some garden-space partly occupied by buildings, but still having sufficient ground free for the patients to walk in. The wards are, for the most part, badly constructed, either *long*, with windows only one side, or (as in the case of the accident-ward) *square*, with double rows of beds. Previous to the alterations, there were little or no provisions for constant ventilation, and the ventilators that did exist were quite inefficient. The wards had openings communicating with other wards, with lobbies and corridors, with the chapel, etc. The sculleries were practically in the wards, and the water-closets opened

directly upon them without being cut off by a cross-ventilated vestibule. There were various *culs-de-sac* in the lobbies and passages, and the staircase, on which much space has been wasted, was a receptacle for all the foul air of the house. Erysipelas and other hospital diseases had made their appearance from time to time, and the health of the inmates was unsatisfactory. The arrangements for receiving the out-patients, for the laundry, the kitchen, the disposal of dust, etc., all required alteration and improvement. Under these circumstances, the Committee applied to Dr. De Chaumont to make an inspection of the hospital and point out the chief points requiring attention. Accordingly, in June 1875, this was done, and the results of the inspection, made in company with the secretary, Mr. Wilkinson, and the architect, Mr. Stephen Salter, are embodied in the first report. The second report, made in July 1875, gave the results of a practical inquiry into the condition of the wards, etc., by means of analyses of the air and observations with the anemometer. Without going too much into detail, we may mention that the mean of the observations on carbonic acid showed a respiratory impurity of 0.287 per 1,000 volumes, which indicated a mean effective supply of fresh air per head amounting to a little over 2,000 cubic feet per hour, a supply quite inadequate to keep a hospital fresh and sweet. On the other hand, the anemometer observations showed that a much larger amount of air had actually passed through the wards, but had not been utilised, on account of bad distribution. The amount of organic matter was also considerable, whilst the suspended matter was in large amount; drawings of the latter are given, showing, among other things, a great deal of epithelium, and, in one instance, actual pus. In connection with the latter instance, it is curious that this was found in the centre of the accident-ward, near some beds that had rather a bad reputation for erysipelas; the same spot showed also a notable excess of organic matter and carbonic acid. The recommendations, jointly made by Dr. De Chaumont and Mr. Salter, consisted in, as far as possible, ventilating each ward on its own account, by shutting up all openings to any other part of the house, except the door, which was directed to be kept shut. All the projecting and unsightly structures in the wards were to be removed, and the sculleries and closets placed in *annexes* connected by means of ventilated lobbies. Additional ventilators, in the shape of Sherringham valves and Tobin's tubes, were recommended, so that a more constant supply of fresh air in large quantity might be obtained. A minimum floor-space of one hundred square feet for ordinary cases, and at least one hundred and twenty for surgical cases, with twelve feet in height, was recommended; and a minimum of four thousand cubic feet of air per head per hour. Other minor recommendations concerned the out-patients' department, etc. The removal of the kitchen and laundry from the basement, if practicable, was also recommended. Most of those recommendations (except the last mentioned) were carried out at considerable expense, and by the spring of 1876 the hospital was again fully occupied. In August 1876, a second examination of it was made by Dr. De Chaumont, with the gratifying result of finding that its condition was much improved, both in appearance and cheerfulness, and also in the actual condition of its atmosphere.

The conditions in this second inquiry were very trying, as the temperature was very high (higher outside than inside at one time), but still several of the wards showed that not only was the four thousand feet reached, but considerably exceeded. That the results were not perfect may be easily understood from the inherent faults in the construction of the building, but the change was in every way encouraging. One highly interesting point brought out was, that Tobin's tubes cannot be entirely depended upon as constant inlets, even when other openings are closed; for, on the second night of the experiment, they were found to be outlets as well as inlets. They are, however, useful as providing means of ventilating places not readily accessible, and doing so with but little draught. As usual, they were plugged up by nurses or patients, Dr. De Chaumont finding in one an old flannel jacket and some newspapers. The great change in the whole place was well seen by the state of the central staircase: before the alteration, the respiratory impurity (as carbonic acid) was 0.447 per 1,000; after the alteration, .026, or not much more than one-twentieth part.

What has been done in this instance shows how much improvement may be effected in a building radically bad in construction. Of course, pulling it down and building it afresh would be the best; but, in default of the necessary funds for so easily a remedy, the Committee have done the next best thing to accomplish their object. It is to be remarked also that the hospital is somewhat disadvantageously situated, being rather hemmed in by narrow streets and also exposed to the influences of the great dust-yard on the borders of the canal, the existence of which in the heart of a great city is a disgrace to the age we live in and to the government (or non-government) of this metropolis.



## OWENS COLLEGE, MANCHESTER.

PROFESSIONAL opinion in Manchester is already largely occupied with the approaching visit of the Association to Manchester, and all arrangements are being undertaken with characteristic energy. The fine buildings of Owens College will supply an admirable *locus in quo*, and we have been glad to avail ourselves of the opportunity of visiting them afforded by the courtesy of Dr. Leech, the Branch Secretary, and of Dr. Arthur Gamgee, the Dean of the Medical School.

Entering this department from Coupland Street, we find on the ground-floor two fine lecture-theatres, well fitted for 100 and 150 students; a library of 20,000 volumes; a large general museum, which room will be wholly given to the Association museum; and a smaller museum of *materia medica*. Over the theatre is a dissecting-room nearly 100 feet in length, well lighted from side and roof, well furnished, and at the time of our visit amply supplied. Next to this, are most complete physiological laboratories—a large one for the practical working of students, a smaller one for the professor—a balance-room, and private study. In fact, one of the most noteworthy points in the whole building is the convenience of all arrangements for the professors, and the provision of sufficient private rooms and means of original work.

The laboratory is amply supplied with valuable instruments: amongst which we noticed Geissler's pump; a new form of respiration-apparatus, with which Dr. Gamgee is carrying out experiments on the action of compounds of antimony, arsenic, and phosphorus on the blood; a large "digester", in which observations on fermentation were being made; the recording tuning-fork; and various ingenious appliances for injection with continuous pressure. Cardiographs and sphygmographs of the latest type were not wanting; and rare products of animal chemistry from the German laboratory were ready for demonstration and further research.

Passing then to the domain of Professor Roscoe, we cross a courtyard in which, we believe, the luncheon-tent is to be spread, and in one part of which we find an engineering department, and in another a complete animal-house, tenanted by rabbits, dogs, etc.; and we enter another large separate building devoted to chemistry. The lecture-theatre here is the finest we have seen, both for size and light and arrangements; and the two large laboratories for students are known to be superior to any others here or on the continent for their size and height, the completeness of the fittings at the working tables, and their admirable ventilation and draught arrangements. The professors' rooms in this department are also very good; and one secret, no doubt, of the general excellence is that the professors were appointed before the rooms were fitted, and have been able to personally superintend everything.

The main building, devoted to the departments of art, science, and law, is necessarily larger and more imposing than the parts already mentioned. The ample stone staircases, the encaustic floors, the pillars, the stained glass, the succession of class-rooms and lecture-theatres—upwards of twenty in number—the professors' rooms, library, geological museum, model-room, etc., contribute to form an impression of the great resources and grand opportunities possessed by the College.

Turning to the calendar, we find the number of general students to be nearly 400; of medical students, 160; of students at the evening classes nearly 900; and we find complete courses of study open in Greek and Latin, French and German, English language, literature, and history, mathematics, physics, logic, philosophy, and political economy, geology, engineering, surveying, drawing, harmony, etc., and all the classes directed by men of specially high reputation. Fortunately, too, the most cordial understanding has obtained between the Council of the College and our profession, so that great mutual advantages have accrued from the amalgamation of the Manchester School of Medicine (which took place in 1872), and which has added to the professorial list many of the most esteemed names in the city.

Several of the more important chairs, as of anatomy, physiology, and chemistry, are well endowed, a circumstance which secures constant high class teaching power. We had the pleasure of listening to one of the lectures in the physiological course—an eloquent exposition and demonstration of the views of Heidenhain of Breslau and of Kühne upon pancreatic ferments, pancreatic digestion, trypsin-zymogen, hemipeptones, antipeptones, and many points of vast practical importance that have still to filter down to most of us from the researches of specialists.

The examination-papers, also printed in the *Calendar*, show evidence of a very high standard, that might perhaps have prompted Mr. Lowe's fear lest, under other conditions, the degrees of Owens College "might sink to the level of that of Oxford or Cambridge". There is a long

list of honours men, and, by no means least, there is a goodly array of prizes and scholarships. We are sure that it will be a source of pleasure to all of us in August next to make a closer acquaintance with the workers and the work at Owens College.

## MEDICO-LEGAL CASES.

## DEVILLE v. THE HARROGATE IMPROVEMENT COMMISSION.

AT the North-Eastern Circuit, in York, on March 2nd, an action was tried before Mr. Justice Lopes and a special jury, which was brought by Dr. Deville of Harrogate against the Sanitary Authority of that place. Mr. Digby Seymour, Q.C., Mr. Cave, Q.C., and Mr. Vernon Blackburn were for the plaintiff; Mr. A. Wills, Q.C., Mr. Waddy, Q.C., and Mr. Law were for the defendants.

The case involved the question as to the extent to which the Local Government Board were authorised to override the decisions of the local authority as to the removal of medical officers. Dr. Deville was appointed in April 1873 Medical Officer to the Harrogate Improvement Commissioners at a salary of £100 a year. His appointment was then approved for one year by the Local Government Board, and he entered upon the duties of the office. He continued, with great activity and with benefit to the district, to discharge his duties until, in April 1876, the Improvement Commissioners again appointed Dr. Deville for a year, up to April 1877, at the same salary. On April 26th, 1876, Dr. Deville attended a meeting of the Yorkshire Association of the Medical Officers of Health, and read a paper upon improving the sanitary condition of watering-places. This paper was on watering-places in general, and had no very special reference to Harrogate. On May 3rd, 1876, Dr. Deville received a letter from the Improvement Commissioners of Harrogate, asking him to attend and explain his paper and conduct. It seemed that the Commissioners assumed that the paper was directed to point out the defects in the sanitary condition of Harrogate. Dr. Deville declined to be called to account by the local authority, and thereupon the Commissioners invited him to resign his appointment, which he declined to do. The Improvement Commissioners then sent him a month's notice to terminate his appointment, to which he replied that they had no power so to terminate the appointment. A correspondence then ensued between the Harrogate Improvement Commissioners and the Local Government Board, in which the Local Government Board pointed out that, as a part of the salary of Dr. Deville was paid out of funds provided by Parliament, the Commissioners could not dismiss him without their sanction. The Commissioners then wrote various letters to the Local Government Board, raising many complaints against Dr. Deville, mainly founded upon his supposed excess of zeal in sanitary improvements, finally taking their stand upon the reading of the paper above mentioned. The Local Government Board declined to sanction Dr. Deville's dismissal, though they intimated that they did not approve the reading of the paper or his conduct in not explaining when requested to do so. The Improvement Commissioners, in the course of the correspondence, pointed out to the Local Government Board how high, as tested by death-rate, the sanitary condition of Harrogate was, and how far they had gone in the path of sanitary improvements, contending that the strictures of Dr. Deville were uncalled for. The Commissioners, instead of acquiescing in the decision of the Local Government Board, appointed another medical officer, and refused to allow Dr. Deville to perform the duties of his office, and declined to pay him his salary. They further declined to receive any portion of the salary from the Local Government Board, so as to keep entire control over their officer. Dr. Deville was cross-examined by Mr. WILLS, and admitted that, in the discussion after his paper, he had said that hotel and lodging-house keepers did all they could to prevent him from knowing of disease. He admitted that, in his paper, he had made reference to Harrogate, and stated, as was the fact, that people came to Harrogate when recovering from diseases, and when they were in a condition best to propagate disease, and that, in order to check such propagation, his time and patience were always sorely tried. On re-examination by Mr. DIGBY SEYMOUR, he stated that, on one occasion, he had taken vigorous measures to prevent the spread of small-pox, and had succeeded in doing so, but that the consequence of the stringency of his acts was that he was actually mobbed. He further said that Harrogate was now the most healthy of large watering-places. Mr. WILLS submitted that the plaintiff had no case in law; that he proved no contract, as required by the Public Health Act, 1865; that he was medical officer *de facto* until he was superseded, but that, he contended, created no contract binding for any specific time. Mr. DIGBY SEYMOUR contended that



the provisions as to the mode of contracting applied to works to be executed, and not to appointing officers. The learned JUDGE adopted that view, thinking that there were some subsequent sections making it plain that the provisions did not apply to such offices as the plaintiff's. The next point taken by Mr. WILLS for the Commissioners was that, there being no appointment under seal of Dr. Deville to his office, he could not recover. Mr. Wills further contended, that there never was an unconditional appointment of the plaintiff, but that it was subject to a condition which was never complied with. After several other points of a technical nature had been raised by the learned counsel, Mr. Justice LOPES said that, availing himself of his powers under recent enactments, he should, as the questions raised were questions of law rather than of fact, reserve the matter for further consideration, the points being of great importance, involving as they did the relations of the Local Government Board to the urban sanitary authorities throughout the country. The verdict was accordingly entered for the plaintiff for the sum claimed *pro forma*, judgment being reserved as above stated.

### MEASLES IN FIJI.

At the last meeting of the Epidemiological Society, on Wednesday, January 10th—the President, J. Netten Radcliffe, Esq., in the Chair—Dr. Squire read a report, from official sources, on the very fatal epidemic of measles in Fiji, of which so much has been heard. On January 12th, 1875, soon after Fiji was placed under our Colonial Government, the Chief, Thacombau, arrived at Levuka in H.M.S. *Dido*, on his return from Sydney. While there, he or some of his party had measles. On January 6th, during the voyage home, one of his sons and a native attendant fell ill with measles. They were treated in a house built for them on the ship's deck, and made so good a recovery that no obstacle was raised to their landing on the 12th. Two or three days after landing, another son of the chief, who returned with him, was seized with measles. At this time, visitors from all parts thronged the house where he was sick. On January 24th and 25th, there was a great assemblage of native chiefs, some from the more distant parts of the large island. A strong force of the native constabulary attended. Any new cases of measles in the native village had not at this time attracted notice. On February 12th, a despatch from Mr. Layard announced measles to be epidemic among the natives, and that nearly one hundred of the native constables were down with it. No alarm had been raised by February 7th, or we should not find that one hundred return labourers were then sent from Levuka to Malicolo to carry disease with them. On February 25th, quarantine provisions were in force, to prevent the spread of disease to the other islands. Mr. Layard says, "To stay its progress here is impossible". He reports at the same time the death of one of the most influential chiefs who attended the great gathering. In the interior of the large island, Mr. Harding writes: "All the chiefs who attended the great meeting have it, and it is spreading rapidly." On March 3rd, Mr. Layard writes: "The attacks have been so sudden and complete, that every soul in a village will be down at once, and no one able to procure food, or, if procured, to cook it for themselves or others. The people have died of exhaustion and starvation in the midst of plenty." The Colonial Secretary in June reported the disease to have been carried everywhere by the latter end of March or the beginning of April; from that time it gradually decreased, and by the end of May it seemed to have died out. The condition of the natives was painful in the extreme; a great want of food occurred, or rather physical strength was wanting to dig up and carry in the yams and dates which form their chief food. For the same reason, the Government could purchase no supplies. It was impossible to obtain a boat's crew; many small craft were lying in harbour quite unable to proceed to sea. The mortality could only be ascertained in three districts, where a census of the population had been made: Ovalau, population before the epidemic, 1,546; after, 1,099; deaths, 447: Koro, before, 2,543; after, 1,855; deaths, 688: Ba, before, 7,925; after, 5,711; deaths, 2,214. From other places near, 1,637 deaths had been returned from measles. The disease is estimated to have caused more than twenty thousand deaths, and to have destroyed from one-fifth to one-fourth of the entire native population. That these people had special proclivity to more than the known accidents of the disease is negated by the favourable progress of the early cases. Dr. Cruikshank treated one hundred and forty-three native constables, with nine deaths, some of them resulting from evasion of needful precautions. So, later in the epidemic, at places where it is said to be like plague and people seized with fear had abandoned the sick, some dying in such close huts that the walls had to be destroyed to let the trade-wind purify the air, only one death

occurring among a number of severe cases treated in separate rooms with fair attention, shows any acquired intensity of disease to be very limited. Fear added to the effects of disease. In one place, twenty-six deaths are said to have occurred within forty-eight hours of the seizure. The season at which the epidemic occurred was unfavourable. Though the mean temperature is 80 deg., with a mean daily range of only fifteen degrees, except on the highlands, the tropical rains following the hurricanes were excessive. In March, fifty inches of rain fell; it rained on twenty-seven days and during two hundred and four hours. The people choose swampy sites for their dwellings; and, whether they remained close shut in huts without ventilation or rushed into the streams and remained in the wet during the height of the illness, the consequences were equally fatal. The greatest causes of the excessive mortality were, the utter prostration from terror at the mysterious seizure, and the want of commonest aids during illness. There were none to offer drink during the fever, nor food on its subsidence; consequently, thousands were carried off by want of nourishment and care, as well as by dysentery and congestion of the lungs. The worst dangers from crowding were incurred in the small houses, and the worst dangers from cold by the sufferers making at once to the water, where they would continue immersed. Measles in these islands, in 20 deg. S. latitude, or within the tropics, corresponds very closely to the facts recorded of measles in the Faroe islands, in 70 deg. N. latitude, or near the polar circle. The epidemic only ceased when every person had been attacked. All the innate dangers of the disease, differing not in kind but only in degree from those which are commonly guarded against amongst ourselves by simple nursing, are here revealed. We need invoke no special susceptibility of race or peculiarity of constitution to explain the great mortality. Among people closely related to us, a similar fatality from measles occurred among the new levies during the last American war, when the number of cases exceeded thirty-eight thousand, the mortality in two large hospitals being over 20 per cent. Even this rate of mortality was doubled among the Garde Mobile in the month of January 1871, during the siege of Paris, when, of two hundred and fifteen cases of measles, eighty-six died, or exactly 40 per cent.; the proportional mortality from measles exceeding that from small-pox.

## ASSOCIATION INTELLIGENCE.

### MIDLAND BRANCH.

THE fifth monthly meeting of this Branch will be held at the house of the President, Joseph White, Esq., Oxford Street, Nottingham, on Friday, March 16th, 1877. Coffee at 7.30 P.M.

Papers, etc., at 8 o'clock.

Mr. J. Wright Baker: A Case of Rupture of Femoral Artery.

Dr. Brookhouse: Aortic Aneurism and Aortic Dilatation, with Cases.

Mr. Dolman of Derby and Mr. Hatherly of Nottingham have also promised cases.

L. W. MARSHALL, M.D., *Hon. Local Secretary*.

Nottingham, March 1st, 1877.

### THAMES VALLEY BRANCH.

A MEETING will be held at the Board Room, Richmond Infirmary, on March 21st, at 5 o'clock.

Dr. Gibbes has promised to read a paper on a Case of Empyema treated successfully by Aspiration; and Dr. Barry one on Diseases of the Scalp in Children.

Any other members who may be willing to contribute are requested to communicate with the Honorary Secretary as soon as possible.

There will be a dinner after the meeting (7 o'clock), at The Greyhound Hotel. Charge, 7s. 6d., exclusive of wine.

F. P. ATKINSON, M.D., *Honorary Secretary*.

Surbiton Road, Kingston-on-Thames, March 5th, 1877.

### WEST SOMERSET BRANCH.

THE spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 5th, at 5 P.M.

The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner:—"What in your opinion is the best mode of feeding infants artificially, both as regards food and method?"

Dinner 5s. a head, exclusive of wine.

W. M. KELLY, M.D., *Honorary Secretary*.

Taunton, March 5th, 1877.



### SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT MEETINGS.

THE first meeting for the present year of the above District will be held at the Star Hotel, Lewes, on Wednesday, March 21st, at 3.15 P.M.: Dr. H. MARTIN HOLMAN, of Hurstpierpoint, in the Chair.

Dinner at 5.30 P.M. Charge, 6s., exclusive of wine.

1. The Discussion on Dr. Fussell's paper on "Some Outbreaks of Diphtheria" will be resumed.

2. Mr. Penfold promises Notes of cases of interest in Ophthalmic Practice.

3. Dr. C. Holman: "Clinical Cases, with Remarks."

4. Mr. A. R. Ticehurst will exhibit specimens of (a) Fractured Lumbar Vertebra; (c) Cystic Disease of Kidney Fatal in a Puerperal Woman.

Notice of other intended communications is requested by the Secretary on or before Tuesday, the 13th instant, that they may be inserted in the circular convening the meeting.

THOMAS TROLLOPE, M.D., *Honorary Secretary.*

35, Marina, St. Leonards-on-Sea, March 6th, 1877.

### YORKSHIRE BRANCH.

THE spring meeting of this Branch will be held at the Mansion House, Doncaster, on Wednesday, March 28th, at 2.30 P.M.

The members will dine together at the Elephant Hotel, a 5 P.M. Tickets (exclusive of wine), 6s. 6d. each.

Gentlemen intending to join the dinner, or bring forward any communication, are requested to inform the Secretary.

W. PROCTER, M.D., *Honorary Secretary.*

24, Petergate, York, March 3rd, 1877.

### PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

At a meeting of the Committee of Council, held at the office of the Association, 36, Great Queen Street, London, on Wednesday, the 10th day of January, 1877: Present—Dr. Falconer (President of the Council), in the Chair, Dr. Martin De Bartolomé (President), Dr. Eason Wilkinson (President-Elect), Mr. W. D. Husband (Treasurer), Dr. Clifford Allbutt, Mr. Alfred Baker, Mr. J. Wright Baker, Dr. Alfred Carpenter, Dr. Charles Chadwick, Dr. B. Chevallier, Dr. J. W. Eastwood, Dr. Robert Farquharson, Dr. E. L. Fox, Dr. B. Foster, Dr. C. Holman, Mr. Arthur Jackson, Dr. D. J. Leech, Mr. F. E. Manby, Dr. E. Morris, Mr. R. H. B. Nicholson, Dr. C. Parsons, Dr. W. F. Wade, and Mr. C. G. Wheelhouse.

The minutes of the last meeting of October 18th, and of the last special meeting of November 8th, 1876, were read and found correct.

Read letters of apology for non-attendance from Mr. Callender, F.R.S., and Dr. E. Waters.

Moved by Dr. Morris, seconded by Dr. Chevallier, and

Resolved: That the forty-seven candidates whose names appear on the circular convening the meeting be, and they are hereby elected, members of the Association.

Read abstract of letter from Dr. J. W. Moore, Dublin, resigning the office of Honorary Secretary for Ireland.

Resolved unanimously: That the best thanks of the Association be given to Dr. J. W. Moore for his services as Honorary Secretary for Ireland, an office which he has most courteously and ably filled for the past six and a half years.

Resolved: That Dr. George F. Duffey, Dublin, be, appointed Honorary Secretary to the Association in Ireland in the place of Dr. J. W. Moore.

Resolved: That any paper contributed to the annual meeting, and not printed in the JOURNAL within nine months, may be used as the author shall see fit.

Resolved: That the consideration of a Hastings Address be deferred till the report of the adjudicators of the Hastings Essays be received.

Resolved: That the recommendations of the Annual Meeting Arrangement Subcommittee of this day's date be approved and carried into effect.

Resolved: That the following members be recommended for the various offices as follows:

SECTION A. MEDICINE.—*President:* Sir William Jenner, Bart., M.D., K.C.B., F.R.S. *Vice-Presidents:* Wilson Fox, M.D., F.R.S., London; Samuel Crompton, M.D., Manchester; Henry Simpson, M.D., Manchester. *Secretaries:* Julius Dreschfeld, M.D., Manchester; F. T. Roberts, M.D., London.

SECTION B. SURGERY.—*President:* Edward Lund, F.R.C.S., Manchester. *Vice-Presidents:* W. Adams, F.R.C.S., London; F. A.

Heath, M.R.C.S., Manchester. *Secretaries:* S. M. Bradley, F.R.C.S., Manchester; Henry Morris, F.R.C.S., London.

SECTION C. OBSTETRIC MEDICINE.—*President:* W. O. Priestley, M.D., F.R.C.P., London. *Vice-Presidents:* A. H. McClintock, M.D., LL.D., Dublin; James Whitehead, M.D., Manchester. *Secretaries:* John Thorburn, M.D., Manchester; David Lloyd Roberts, M.D., Manchester.

SECTION D. PUBLIC MEDICINE.—*President:* Surgeon-Major F. S. B. De Chaumont, M.D., Netley; *Vice-Presidents:* Alfred Aspland, F.R.C.S., Ashton-under-Lyne; W. H. Corfield, M.D., F.R.C.P., London. *Secretaries:* John Haddon, M.D., Manchester; William Armistead, M.B., Cambridge.

SECTION E. PHYSIOLOGY.—*President:* Arthur Gamgee, M.D., F.R.S., Manchester. *Vice-Presidents:* John Cleland, M.D., F.R.S., Galway; Thos. Lauder Brunton, M.D., F.R.S., London. *Secretaries:* Joseph Coats, M.D., Glasgow; William Stirling, M.D., Edinburgh.

SECTION F. PSYCHOLOGY.—*President:* J. C. Bucknill, M.D., F.R.S., London. *Vice-Presidents:* G. W. Mould, M.R.C.S., Manchester; H. Rooke Ley, M.R.C.S., Prestwich. *Secretaries:* P. M. Deas, M.B., Macclesfield; T. Clay Shaw, M.D., Banstead.

Resolved: That it be recommended that the following be the arrangements of the annual meeting to be held on the 7th, 8th, 9th, and 10th days of August next.

*Tuesday, August 7th.*

1 P.M.—Meeting of Committee of Council.

3 P.M.—Meeting of the Council, 1876-77.

8 P.M.—General Meeting.—*President's Address.*—Annual Report of Council, and other business.

*Wednesday, August 8th.*

9.30 A.M.—Meeting of Council, 1877-78.

11.30 A.M.—Second General Meeting.

11.30 A.M.—Address in Medicine.

2 to 5 P.M.—Sectional Meetings.

*Thursday, August 9th.*

9 A.M.—Meeting of the Committee of Council.

10 A.M.—Third General Meeting.—Reports of Committees.

11 A.M.—Address in Surgery.

2 to 5 P.M.—Sectional Meetings.

6.30 P.M.—Public Dinner.

*Friday, August 10th.*

10 A.M.—Address in Obstetric Medicine.

11 A.M.—Sectional Meetings.

1.30 P.M.—Concluding General Meeting.

## CORRESPONDENCE.

### THE TEACHING OF CLINICAL SURGERY IN LONDON.

SIR,—Presuming that the report of Professor Lister's speech in your last issue is a correct one, I beg to be allowed to reply to his sweeping strictures on the clinical teaching of surgery, so far as concerns the school at which he formerly studied, and at which I have the honour to hold the special chair of clinical surgery.

My duty is to meet my class on three afternoons in the week. On Monday, I give a clinical lecture on cases actually or recently under treatment, illustrated as far as possible by the patients and specimens of disease. The remaining hour and a half I devote to visiting my wards, giving clinical instruction at the bedside, and examining the pupils on the patients before them. On Wednesday, operations are performed and explained publicly, and a short visit to the wards made, if time allow. On Friday, after visiting the wards, the surgical class assembles in the theatre, and cases are brought before the seniors (who are in the area) for examination and diagnosis; while the juniors have the opportunity of hearing me correct and illustrate the suggestions for treatment made by their fellows.

The same method of teaching by clinical lectures and bedside instruction is carried on by my colleagues Mr. Marshall and Mr. Hill; whilst Messrs. Beck and Barker give systematic instruction in the out-patient department, where the number of patients is restrained, so that time may be given to teaching.

If this teaching be not "demonstrative," the word must have a different meaning in Edinburgh from what it has here. What changes Professor Lister might have introduced, had he been successful in his candidature for the Chair of Surgery in the University College ten years ago, I cannot tell; but, should he now obtain the Chair vacated by my old master at King's College, I shall be quite content to enter upon

a friendly rivalry between my old and my adopted school, since in London all clinical results are published.—Yours obediently,

CHRISTOPHER HEATH.

36, Cavendish Square, March 6th, 1877.

## THE AFTER-TREATMENT OF EXCISION OF THE HIP-JOINT.

SIR,—From Surgeon-Major Porter's "Remarks on the After-treatment of Excision of the Hip-Joint" in your impression of February 24th, he would seem not to be acquainted with a splint which, during several years, has been much used in the Middlesex Hospital in the treatment of coxitis, and also after excision. I had previously tried most of the well-known apparatus, such as the hammock, bracketed and interrupted splints, weight and pulley, sand-bags, plaster of Paris spica, and had been disappointed with all as suitable and convenient appliances during the first weeks after excision, when ten years since I began to use the splint known by us as De Morgan's; and I have been so satisfied with it that I have from this time, with hardly a single exception, used nothing else. It is easily applied; it allows, if nicely regulated, extension; it is much less cumbersome than a special bed or stretcher (to the merits of which I am not insensible); and it permits the most free access to the wound. My patients are always placed on a horse-hair mattress laid on boards to insure a level bearing-surface. A circular ring water- or air-cushion (which should not be too much distended) is put under the pelvis, with the double object of obviating bed-sores and preventing pressure on the wound, which might hinder the free escape of the discharges, which latter is always specially provided for by drainage-tubes.

The splint may be described as a long Liston's thigh-splint, having at its foot-end a cross-bar, in which is a longitudinal slit for a pulley, which can be shifted in it to any required distance. There is another pulley where the short and long pieces of the splint join. The splint is applied to the sound limb, and counter-extension is obtained by a perineal band on this side, whose extension of the operated limb is affected with a cord fastened to a stirrup of plaster, or better to a loop of bandage stitched to the sides of the leg of an ordinary stocking, which clings sufficiently to the limb when secured by a few circular turns of roller. The cord running over the pulleys passes up the outside of the long piece of the splint, and is kept tense by an India-rubber accelerator attached to the upper or trunk end of this. A little perforated slip of wood such as is used for tightening tent-ropes allows easy regulation of the tension.

For dressing the wound or the use of a bed-pan, the patient may be rolled easily towards the sound side, and, if this be done gently, the attendant placing one hand on the iliac crest and the other on the limb to insure their simultaneous and congruent motion, it entails little disturbance or suffering.

Should any of your readers feel sufficient interest in the subject as to wish to see the splint in working, the House-Surgeon will be happy to show it if they will call at the Middlesex Hospital.—I am, etc.,  
London, February 26th, 1877. J. W. HULKE.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

AT Belper, a communication has been received from the Local Government Board, assenting to the application to form it into a Local Government District, with a board of nine members.

THE Local Government Board have made an order under Section 276 of the Public Health Act (1875), declaring that Sections 157, 158, 169 (except so much thereof as relates to providing slaughter-houses), and 170, shall be enforced within the contributory places of Blackfordby, Coleorton, Hartshorne, Heather, Hugglescote and Donnington, Measham, Oakthorpe and Donisthorpe, Over and Nether Seals, Swanington, and Thringstone, all within the Ashby-de-la-Zouch Rural Sanitary District.

### POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

AT a meeting of the Council, held at 3, Bolt Court, Tuesday, March 6th, it was resolved that this Council, having taken into consideration the statement of Mr. Ashburner, Medical Officer of the Horsham Workhouse, in reference to the conduct of Dr. Kelly, Medical Officer of Health for West Sussex Combined District, begs to express its con-

demnation of the course pursued by that gentleman, and trusts that the Local Government Board will issue such general instructions as will preclude the possibility of such action being followed by any medical officer of health towards any Poor-law medical officer in future. That a copy of this resolution be forwarded to the medical journals and to the Local Government Board.

### HOSPITAL ACCOMMODATION FOR INFECTIOUS DISEASES IN LONDON.

A MOST important circular on this subject has been issued by the Managers of the Metropolitan Asylum District Hospitals to the Sanitary Authorities of London and their Medical Officers of Health, requesting their opinions thereon. The report, which accompanied the circular, sets out that, after duly considering various communications referred to them, including copies of the answers received by the Local Government Board from the vestries and boards of works of the metropolis, the managers find that only five of these authorities have made any provision for the sick, other than paupers, who may be attacked with infectious disease; that seven say that they do not possess any building or site for making such provision; six state their opinion that provision can be best made by a Central Board; and others adopt the erroneous view that it is partly the duty of the managers to make such provision.

The managers also state that the experience of the small-pox epidemic of 1871, and of that now existing, shows that a large proportion of the patients received into their hospitals are of a class above paupers; and also that special inquiries, made at the hospitals on February 10th, prove that only 10 per cent. of the patients then under treatment had previously received parochial relief. The Committee to whom the matter was referred came to the decision that there is not adequate provision at present for the isolation and treatment of infectious disease in the metropolis; and, therefore, arrived at the following conclusions.

1. Such provision could be best made by one central authority acting for the whole of London, not only for pauper patients, but for all others desirous of hospital accommodation.

2. Such central authority should not be merely a department of Poor-law administration, but should have the powers of the Sanitary Act conferred upon it.

3. Either the Metropolitan Asylums Board should be that authority, or be merged into it; in the former case, its constitution should be altered and enlarged, so as to be adapted to its new responsibilities.

This is one of the most important circulars that has been lately issued, and fairly meets the exigencies of the case. At present, no one can say that there is proper provision for the isolation and treatment of infectious diseases in London; and, when the matter was under discussion at the Society of Medical Officers of Health, whilst this was admitted, there was an almost unanimous opinion expressed as to the inadvisability, not to say impossibility, of each sanitary authority having an hospital of its own. It is obvious, if this course were carried out, that enormous unnecessary expense would be incurred by having thirty-six different buildings and establishments sprinkled over all London; that conflict of jurisdiction would be constantly occurring between the Poor-law and sanitary staffs; and that, whilst applicants were being sent from one set of offices to another, the time for safely and effectually isolating a patient would be rapidly passing away. There are other reasons why the vestries and boards should not have their own separate establishments; one of the most important being that all the patients admitted would become a charge on the local, instead of the general, rates, without the local authority having any power to charge, except by a special agreement made at the time of or prior to admission; and that there would, therefore, be in many parochial districts a disinclination to admit those who could have a separate room at their own houses. Now, it is well known that, in many instances, these diseases are spread by the washing being sent out, or through the children being allowed to go about before they have perfectly recovered from the disease. The plan proposed by the managers of the Asylums Board would do away with nearly all those objections, especially if they were allowed to charge those who could afford to pay, and who were desirous of being treated in a ward into which paupers were not admitted. It has been felt to be a great grievance by respectable persons that they cannot be admitted, for a small fee, to a hospital where they would not be subject to intermixture with the poor and their peculiar habits of thought and expression. Indeed, the annoyance felt by educated people at hearing low words uttered in a coarse manner by those around would tend, in some cases, to protraction, to say the least of it, of their illness. The experience of most metropolitan medical officers of health and others is, that very few persons who can afford a good fee would be



removed, but that large numbers of those who live in lodgings would go to a hospital, if they were not classed with paupers, but had accommodation separate from them. It is, therefore, to be hoped that, whilst provision be made for all who may apply through the proper channel, whatever their condition in life may be, that there will be beds set apart for those who are able and desirous to pay a small fee for their treatment. The simplest plan for the removal of the sick and their admission into a hospital would be that a certificate, by any registered medical practitioner, should entitle those requiring it to the use of a proper ambulance and to admittance into the hospital. If these suggestions were adopted, and a separate wing, or at any rate wards, be provided for paying cases, and the intervention of the Poor-law officers be in no case absolutely necessary, there would be every reason to hope for a much lower death-rate in London from infectious diseases than has hitherto obtained.

## MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS—Thursday, March 1st.

*The Dietary at Millbank.*—Mr. CROSS, in answer to Sir E. Watkin, said that certain alterations in the diet-table for military prisoners at Millbank had been adopted for all the prisoners; and the diet of civil and military prisons was now the same.

Friday, March 2nd.

*The Sanitary State of the War Office.*—Mr. NOEL, in reply to Mr. Kay-Shuttleworth, said that plans and estimates were prepared to carry out the expenses to be incurred in accordance with the report of the commissioners as to the sanitary state of the War Office. When they were ready they would be immediately sent to the Treasury for their sanction and approval, when every effort would be made to carry out the work as speedily as possible. The erection of a new War Office would be a very formidable undertaking; and he was unable to state whether Her Majesty's Government had any scheme under consideration for the erection of a War Office.

*The Arctic Expedition.*—Captain PIM asked the First Lord of the Admiralty whether the three medical officers who were promoted from the late Arctic Expedition were so promoted on the recommendation of the Director-General of the Medical Department of the Navy; and, if not, whether any reference was made to that officer before such promotions were made, and why Fleet-Surgeon Colan, the senior medical officer, was not included in those promotions; and if it was his intention to bestow any reward on that meritorious officer?—Mr. HUNT was sorry to be obliged, on the ground of general principle, to decline to satisfy the curiosity of the honourable and gallant gentleman. Promotions in the Navy were made on the responsibility of the First Lord of the Admiralty; and the latter part of the question seemed to imply an ignorance of the rule that no promotions should be made unless there was a vacancy.

Monday, March 5th.

*Army Medical Department.*—In moving the Army Estimates, Mr. HARDY said: I come now to what has been a trouble to me ever since I have been in office, and will ever be a trouble, I am afraid, as long as medical men exist. I can assure them that I have done my very best to arrive at a knowledge of their grievance, but there has been a difference of opinion as to the merits of the regimental system and the staff system. Besides, there was also a sort of half-and-half system, as an attempt had been made to combine the two others; but it had not been satisfactory. I come to the conclusion that what was the arrangement and regulation in time of war should be the regulation in time of peace, namely, the unification system. The health of the army, both at home and abroad, has been satisfactory during the past year, with the exception of on one point, which sometimes gives us a great deal of painful discussion. I know that the medical officers would like to remain on full pay as long as they possibly could; yet, from the necessities of promotion, we are obliged to give them retirements, but I think those retirements are of such a character that they cannot be complained of. The unification system must be allowed a fair trial; it has been answering well, and I think will continue to do so. Something has been said about the employment of civil practitioners, and I believe that in certain instances this will be found to be advisable.

NOTICES OF MOTION.

Tuesday, March 13th.—Mr. Bruen (Pauper Lunatics in Workhouses): To call attention to the maintenance of pauper lunatics in Workhouses in Ireland and in Scotland, and to move: "That the contribution out of Imperial funds, which is given in aid of the maintenance of lunatics in the insane wards in workhouses in Scotland, is consistent with the

principle of a capitation grant towards the support of lunatics already sanctioned by Parliament, and this House is of opinion that a similar contribution ought to be paid in Ireland under parallel circumstances."

Friday, March 16th.—Mr. Alexander Brown: To call attention to the state of the water-supply for domestic purposes in the villages and rural parts of the country; and to move "That, in the opinion of this House, it is desirable to confer upon the local authorities further powers in order to remedy the existing evils".

*Vaccination Law (Penalties).*—A Bill to amend the Law relating to Vaccination, so far as accumulating penalties are concerned, has been prepared and brought in by Mr. Pease, Mr. James, Mr. Mundella, and Mr. Leman. The principal Clause provides that, "after the passing of this Act, no parent of a child shall be liable to be convicted for neglecting to take, or to cause to be taken, such child to be vaccinated, or for disobedience to any order directing such child to be vaccinated, if either—(a.) He has been previously adjudged to pay the full penalty of twenty shillings for any of such offences with respect to such child; or (b.) He has been previously twice adjudged to pay any penalty for any of such offences in respect of such child."

This Bill is to be read a second time on Wednesday, March 14th. Earl Percy has given the following notice of motion: On second reading of Vaccination Law (Penalties) Bill, to move "That, before considering any proposal for the readjustment of the penalties imposed by law on its neglect, it is desirable that an inquiry should be instituted with regard to the practice of vaccination in this country, for the purpose of ascertaining whether it cannot be conducted in such a manner as to remove all reasonable objections to it."

## MEDICAL NEWS.

### MEDICAL VACANCIES.

THE following vacancies are announced:—

- BRADFORD INFIRMARY—Resident Medical Officer. Salary, £110 per annum, with board and residence. Applications to be sent in on or before the 24th inst.
- BRECKNOCK COUNTY AND BOROUGH GENERAL INFIRMARY—Resident House-Surgeon. Salary, £100 per annum, with furnished apartments and attendance. Applications to be made on or before the 20th inst.
- CARLISLE DISPENSARY—Junior House-Surgeon. Salary, £90 per annum, with apartments, coals, gas, and attendance.
- CHORLTON-ON-MEDLOCK DISPENSARY—House-Surgeon. Applications to be sent in on or before the 26th inst.
- CREDITON UNION—Medical Officer for the Bow and Colebrooke Districts.
- CROYDON UNION—Medical Officer for the Ninth District.
- DENTAL HOSPITAL OF LONDON, Leicester Square—Assistant Dental Surgeon. Applications to be sent in on or before the 14th inst.
- EAST LONDON HOSPITAL FOR CHILDREN—Physician. Applications to be sent in on or before the 22nd inst.
- HULME DISPENSARY, Manchester—Resident Medical Officer. Salary, £130 per annum, with furnished apartments, coal, gas, and attendance. Application to be made on or before the 24th inst.
- INGHAM INFIRMARY AND SOUTH SHIELDS AND WESTOE DISPENSARY—Assistant House-Surgeon. Salary, £60 per annum, with board and lodging.
- LIVERPOOL ROYAL SOUTHERN HOSPITAL—Senior House-Surgeon. Salary, 100 guineas per annum, with board and lodging. Applications to be sent in on or before the 21st inst.
- MALDON UNION—Medical Officer for the All Saints' District. Salary, £30 per annum, and fees. Applications to be sent in on or before the 22nd inst.
- MARTLEY UNION—Medical Officer for the Martley District and Workhouse.
- PORTLAND TOWN FREE DISPENSARY—Resident Surgeon and Dispenser. Salary, £100 per annum, with furnished apartments, gas, and attendance. Applications to be sent in on or before the 17th inst.
- ROYSTON UNION—Medical Officer for the Fifth District. Salary, about £67 per annum. Applications to be sent in on or before the 13th inst.
- ST. GEORGE'S AND ST. JAMES'S DISPENSARY—Physician. Applications to be sent in on or before the 29th inst.
- ST. SAVIOUR'S UNION, Surrey—District Medical Officer for the Ninth District. Salary, £130 per annum. Applications to be sent in on or before the 12th inst.
- UNIVERSITY COLLEGE HOSPITAL—Resident Medical Officer. Applications to be made on or before the 10th inst.
- WEST BROMWICH UNION—Medical Officer for the Handsworth District.
- WHITEHAVEN UNION—Medical Officer for the Gosforth District.
- WIMBORNE AND CRANBORNE UNION—Medical Officer for No. 4 District. Salary, £80 per annum, and fees. Applications to be sent in on or before the 21st inst.

### BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

#### BIRTHS.

- GAYTON.—On February 26th, at the Homerton Small-Pox Hospital, the wife of \*W. Gayton, M.D., M.R.C.P.E., Medical Superintendent, of a daughter.
- LEWIS.—At Rosemount, Houston, Renfrewshire, on March 3rd, the wife of \*Wm. Lewis, M.D., C.M., L.R.C.P. & S. Edin., etc., of a son.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.—Charing Cross, 2 P.M.—
FRIDAY.....	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—	Medical Society of London, 8.30 P.M. Dr. Buchanan, the President, will address the Society on taking the Chair. The adjourned discussion on Dr. Edwards's paper on Vegetarianism will be opened by Dr. Lawson.
WEDNESDAY.—	Hunterian Society, 7.30 P.M.: Council Meeting, 9 P.M.: Mr. C. H. Golding-Bird, "Cases of Subcutaneous Osteotomy of Femur"; "The Treatment of Strumous Glands by Electrolytic Caustery";—Epidemiological Society, 8.30 P.M. Surgeon-Major Colville, "On the recent History of the Plague in the Province of Baghdad".
THURSDAY.—	Harveian Society of London, 8 P.M. Dr. Hughlings Jackson, "Affections of the Ear, with Nervous Symptoms".
FRIDAY.—	Medical Microscopical Society, 8 P.M.

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## VACCINATION AND REVACCINATION.

We cannot think the plan proposed in a manuscript forwarded to us by Dr. Gill for the prevention of erysipelas after revaccination ought to be encouraged; for, although erysipelas may occur under every precaution at certain seasons in certain subjects, and from the lymph of certain vaccinifers, yet, with discrimination, care, and circumspection on all these points, its occurrence need not be to such an extent as to justify the adoption of the suggested deviation from the approved mode of vaccination so properly inculcated by authority and experience. Moreover, although the application of the solution of the nitrate of silver may restrict the extent of areola—the propriety of which may be questioned—it cannot at all times be depended on to control erysipelas under this any more than under other circumstances.

## BRAVAIS' DIALYSED IRON.

SIR,—Referring to your notice of our "Fer. Bravais" (Bravais' dialysed iron), I should feel obliged if you would state in your next issue that I have an office in London, No. 2, Philpot Lane, E.C., for receiving orders from all the wholesale druggists. Messrs. Burgoine, Burbridges, and Co. keep a supply always on hand, but it may be obtained through all the leading wholesale houses in London, as well as of all the principal chemists throughout the kingdom.—I am, etc.,  
March 1877.

RAOUL BRAVAIS.

AN ANXIOUS PARENT AND MR. MITCHELL.—Should your respective sons pass the preliminary examination, they could at once commence their professional studies. Pupilage to the gentleman mentioned at the Sussex County Hospital, Brighton, would be recognised by the College of Surgeons.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## AN APPEAL.

SIR,—Since my last communication to you, I have received the following sums on behalf of Mrs. Stevens.

Mrs. Ellen Cooper, Appleton, Lancashire	£	s.	d.
Dr. France, Princess Square, Plymouth	..	..	0 5 0
Henry Stear, Esq., Saffron Walden, Essex	..	..	5 0 0
I am, sir, your obedient servant,	..	..	2 2 1

EDWARD E. MEEBEE,  
9, Princess Square, Plymouth, March 6th, 1877.

## CORONERS' POST MORTEM EXAMINATIONS.

SIR,—May I trouble you to answer the following? I am summoned by the coroner to attend an inquest. He sends me a short distance to view the body, and to examine it minutely for external marks of violence. Is such inspection a *post mortem* examination? and am I entitled to a fee for a necropsy?—Faithfully yours,  
F. J. FARRER.

\*. Such a minute inspection as our correspondent describes is a *post mortem* examination, and ought to be paid for.

## DR. BLOXAM AND ST. GEORGE'S UNION.

SIR,—In your JOURNAL of February 24th, I notice Dr. Bloxam's letter, in which he states "it would not be pleasant to me to tell the actual reasons why I was applied to in this case, let us hope they will never recur". This statement must surely be either intended as a reflection upon my professional character, or as a most offensive insinuation; and, therefore, it is incumbent upon Dr. Bloxam to explain what he intends to convey by these remarks.

I can only say that my interest in "Dr. Bloxam and his doings" was solely caused by the challenge contained in his letter, published in your JOURNAL of January 27th, in answer to your annotation of January 26th.

With regard to his other replies, I need only refer your readers to his productions of January 27th and February 24th to show how most thoroughly he contradicts himself.

If Dr. Bloxam would rely upon facts, instead of sheltering himself behind vague insinuations, I cannot but think that it would conduce to a much more happy state of mind than he appears to possess at the present time.—I remain, sir, yours very obediently,  
ARTHUR PRICE.

10, Waterloo Bridge Road, February 27th, 1877.

## THE MIDWIFE'S LICENCE OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS.

W. C. J.—The following are the regulations for the midwife's licence of the King and Queen's College of Physicians in Ireland.

"By-law (adopted April 4th, 1874) as to rules and regulations respecting female candidates for examination for a licence to practise as midwives and nurses."

"Qualifications.—Age, not less than twenty-one years; certificates of character. Preliminary Examination: Reading, writing, and arithmetic. Course of Instruction; Six months' attendance on systematic lectures on midwifery, and not less than six months' attendance on bedside instruction in a lying-in hospital, or maternity, recognised by the College. Subjects for Examination: Midwifery (not including operations) and nursing. Examination Fee: One guinea.

"Form of Licence.—We, the President and Fellows of the King and Queen's College of Physicians in Ireland, having duly examined in midwifery and nursing, and having found her to possess a competent knowledge of the same, do hereby licence and authorise the said to exercise the calling of a midwife and nurse."

This licence is quite a distinct thing from the diploma in Midwifery granted by the College to qualified practitioners in medicine.

We (*Pall Mall Gazette*) are asked to print the following story for the benefit of those who are in the habit of using four-wheeled cabs. A gentleman happened to be passing a door in a certain street in London before which stood a hack cab. As he passed, an invalid, bearing on his face the eruption of small-pox, came out from the house and entered the cab. The observer followed the vehicle as rapidly as he could, and was just in time to see it deposit its fare at a small-pox hospital. Endeavouring to ascertain the number of the cab, our informant still followed, and saw the driver hailed by a lady and gentleman, whom he vainly endeavoured to warn by shouts not to enter the cab. They took no notice, got in, and drove off. Being a resolute man, the observer still followed, and was just in time to see the pair descend at the door of a house in one of the best squares in London. Having failed in his efforts either to deter the passengers or to get near enough to the cab to take its number, the pursuer now gave up the chase. Some time afterwards, being again in London, our informant thought he would call at the house at which the lady and gentleman had alighted, with the view of explaining what might have seemed his frantic behaviour in shouting to them and in pursuing the cab. He found the blinds of the house down. The master had died on the previous day of small-pox, and his wife was not expected to recover from the same malady. How the patient fared at the hospital is not known; nor, in the event of his recovery, with what feelings he would be likely to receive the information now at his service.

## THE LINTON CAB.

SIR,—In the JOURNAL of February 24th, your description of the Linton Cab, "devised in some measure at the instance of the late Sir William Ferguson", corresponds in every particular, so far as my memory serves me, with that given by the late Professor Goodsir of Edinburgh. Many of your readers will remember the vehicle and white horse as they appeared in the University quadrangle—Yours truly,  
S. F. HAWTHORNE.

Dremore, co. Down, February 26th, 1877.

## CARRIAGES.

SIR,—I see one of your correspondents is inquiring about the best form of carriage. I have an "Oliver", which is very like the "Imperial". The fore wheels of mine are higher (three feet six inches), and run nearer to the hind wheels. I should think it is as light as any four-wheeled carriage could be made, and is much lighter in appearance than any four-wheeled carriage; it will turn in almost as little room as a two-wheeler. On good roads, I should say there is no better carriage. It is not suited for rough roads or commons. Mine was made at Bedford, price £45—1 am, sir, yours faithfully,  
A. STEPMAN.

Great Bookham, Leatherhead, February 26th, 1877.



**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

#### TREATMENT OF SYPHILITIC WARTS.

SIR,—In replying to your correspondent respecting the above subject, I venture to suggest the possibility that commonly so-called venereal may have been mistaken for syphilitic warts. The former, however, are not necessarily even venereal, but may arise from prolonged local irritation. The remedy is—removal with scissors on a level with the skin, but without cutting away this latter, and then the local application of perchloride of iron, followed by frequent ablation, will prevent recurrence. If the patient be a male, circumcision should be the first step in the treatment. Syphilitic warts of recent appearance will quickly vanish under the internal administration of mercury.—I am, etc.,  
C. F. MAUNDER.  
February 26th, 1877.

SIR,—I would recommend *Medicus* to try the effect of acetate of copper and savin powder in equal parts: a little applied on a penknife to parts in his treatment of the above.—Yours truly,  
L. S. A.  
February 24th, 1877.

SIR,—If *Medicus* will apply a solution of the acid nitrate of mercury to his cases, I think he will be satisfied with the result. One might expect that this solution would have no better effect than strong nitric acid, but I can confidently state that it has, and will often remove large masses of warts when nitric acid has had little or no effect. If *Medicus* will refer to a paper of mine on the subject in the *Medical Press and Circular* for 1874, vol. i, page 487, he will there find a few useful hints, and the directions for applying the acid to similar cases. I had numerous opportunities of witnessing the results of this plan of treatment whilst in charge of the syphilitic wards at the Manchester Workhouse Hospital, and had no reason to change my opinion of its effects.

Perhaps *Medicus* will oblige us with the results of this treatment if he try it in his cases.—I am, yours, etc.,  
WM. BERRY.  
Wigan, February 26th, 1877.

SIR,—If your correspondent *Medicus* in last week's *JOURNAL* will try a powder made of equal parts of acetate of copper and savin, I think he will be gratified on finding the syphilitic warts speedily disappear. I have used it for many years, and never with failure. It must be dusted upon the diseased mass daily, carefully washing before each application.—Yours truly,  
J. ACWORTH ANGUS.  
Newcastle-upon-Tyne, February 26th, 1877.

SIR,—I have found the best treatment to be "snipping off the warts with curved scissors", and then applying nitrate of silver (solid) to the cut surface. Of course, every vestige of a wart or warts must be removed completely. I then give, constitutionally, perchloride of mercury, iodide of potassium, and infusion of gentian combined.—Yours truly,  
W. LEAVENS WHITE, M.B., Medical Superintendent.  
Southport Convalescent Hospital, Feb. 28th.

"*MEDICUS*" is recommended to try the application of glacial acetic acid.—J. H. P.

#### POISONING BY BELLADONNA.

SIR,—I should be extremely obliged if any of your numerous readers could give me a formula for making brown bread.—Yours,  
A NEW MEMBER.  
February 26th, 1877.

#### NOCTURNAL CRAMP.

SIR,—I beg to say, in reply to "Anxious M.D." in the *JOURNAL* for March 3rd, that the cramp in the leg and pain in the instep of his aged patient are probably caused by the irritation of a calculus in the pelvis of the kidney of the same side where the pain is felt. If "Anxious M.D." were to give one of the following prescriptions, according to the state of the urine, it might relieve the patient. R. Potassii bromidi ʒss; potassii tetratis ʒss; tincture hyoscyami ʒj; infus. columb. concentr. ʒss; aq. ʒv. Fiat mistura, cujus capiat cochlearia ampla duo sextis horis. If the urine give an alkaline reaction, then "M.D." might give the following. R. Chloral. hydratis gra i; acid. hydrochlor. dil. ʒj; tincture hyoscyami ʒj; infus. quassæ concentr. ʒss; aq. ʒv ʒij. Fiat mistura, cujus sumatur ʒj ter die. A copious draught of barley-water or other demulcent, made with distilled or filtered rain-water, should be taken after each dose; and if a belladonna-plaster were applied over the kidneys, it would also assist.—I am, etc.,  
J. CARRICK MURRAY, M.D.  
Newcastle-upon-Tyne, March 5th, 1877.

SIR,—In answer to the letter of "An Anxious M.D.", I would suggest to him that he try the administration of five-grain doses of citrate of lithia twice or three times a day, with the application (moderately light) of a rough flannel or serge bandage from the toes to the knee every night at bedtime. My experience is that cramp is usually associated with rheumatic or gouty diathesis. Of course, the lithia might be combined with other remedies necessary to correct any irregularity of secretions which may coexist with the cramp.—I am, yours truly,  
A. C. MAYO.  
Mildenhall, March 1876.

SIR,—If the late Dr. Bardsley of Manchester had been living, and had seen the question of "An Anxious M.D." at the end of the *JOURNAL*, he would have felt much interested in having the plan tried of "raising the two front feet of the bed about the height of two bricks, without the patient's knowledge of what had been done".—Yours truly,  
FAITHLESS.

SIR,—Has "An Anxious M.D." given camphor a full trial for the relief of his case of nocturnal cramp? The spirit of camphor applied externally on a flannel, and given internally at night in full doses, has always succeeded in my hands in giving relief to the cramp of the aged.—Yours truly,  
ANOTHER M.D.

SIR,—I would recommend "An Anxious M.D." to advise his patient to have his bed warmed, and to have a foot-warmer in the bed as well. I have found such means very useful indeed in cases of nocturnal cramp in those advanced in life.—I am, sir, yours truly,  
D. O. F.

#### STATE MEDICINE EXAMINATIONS.

If "Sanitas" apply to the registrars of the Universities of London and Cambridge, he will get copies of the regulations as to the State Medicine examinations, and with them a programme of the subjects, and a list of text-books recommended. We have not space to publish the examination-papers, but we believe they are from time to time published in the pages of the *Sanitary Record*.

#### POISONING BY BELLADONNA.

SIR,—In reference to the case of Poisoning by Belladonna in to-day's number of your *JOURNAL*, I beg to state, from repeated experience, that the linimentum belladonnæ of the *British Pharmacopœia* is, in my opinion, too strong a preparation to be used without dilution.—I am, sir, yours obediently,  
March 3rd, 1877.  
AUGUSTUS HESS, M.D.

**NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL**, should arrive at the Office not later than 10 A.M. on Thursday.

SIR,—As Honorary Secretary to the Committee appointed by the Council of the Medical Defence Association, to report what amendments were necessary to render the Medical Act of 1858 more effective to prevent illegal practice, I have to inform you that the draft of proposed amendments commented upon in your issue of February 24th has in no way emanated from the Medical Defence Association, but is the independent production of a member of the profession.

As some misconception has arisen with regard to the authorship of this document, I trust, on behalf of the Committee, you will give this disclaimer early publicity.—I have the honour to remain, sir, your obedient servant,  
P. C. MACLEAN, M.D.

Office of the Medical Defence Association, 6, John Street,  
Bedford Row, W.C., March 6th, 1877.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Sheffield Daily Telegraph; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Warrington Express; The Croydon Chronicle; The Northampton Herald; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; The Hull Criterion; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The High Peak News; The Metropolitan; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Middlesex Advertiser; The Rock; The St. Andrew's Gazette; The West Cork Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Richmond and Twickenham Times; The Western Morning News; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; etc.

\* \* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. T. Lauder Brunton, London; Dr. W. R. Gowers, London; Dr. W. Fairlie Clarke, Southborough; Mr. Sampson Gamgee, Birmingham; Dr. Bradbury, Cambridge; Dr. Smith, Redditch; Dr. Urquhart, Aberdeen; Mr. Stephens, Ilminster; Dr. A. S. Taylor, London; Dr. Crichton Browne, London; M.D.; Mr. Lloyd Owen, Birmingham; Dr. Hughlings Jackson, London; Dr. Bruce Low, Helmsley; Dr. George Johnson, London; Dr. J. Milner Fothergill, London; The Registrar-General of England; Mr. Wanklyn, London; The Secretary of Apothecaries' Hall; Mr. T. M. Stone, London; The Registrar-General of Ireland; Dr. Edis, London; Mr. G. Gaskoin, London; Dr. F. P. Atkinson, Kingston-on-Thames; The Secretary of the Harveian Society; Dr. Mackey, London; Dr. Lory Marsh, London; Dr. Wallace, Liverpool; Mr. W. F. Jebb, London; Dr. Laidlaw Purves, London; Dr. Arthur Sandberg, Norwich; Mr. Stewart, Barnsley; Mr. James Barr, Liverpool; Dr. Augustus Hess, London; Dr. Tripe, London; Mr. Chubb, Torpoint; Dr. Kelly, Taunton; Dr. Scott, Ilkley; Dr. F. Goodchild, Leamington; Mr. W. A. Leslie, Hampstead; Mr. E. Nettleship, London; Mr. M. C. Tudway, Bristol; Mr. A. D. Mayo, Mildenhall; Mr. Husband, York; "Faithless"; Dr. Procter, York; Mr. H. Sewill, London; The Secretary of the Pathological Society; Mr. J. W. Hicks, London; Dr. J. Carrick Murray, Newcastle-upon-Tyne; Mr. J. Acworth Angus, Newcastle-upon-Tyne; Our Edinburgh Correspondent; Mr. E. Dresley, Bristol; Galen; Parish Medical Officer; D.; Mr. B. Rygate, London; Dr. Smart, Haslar; Mr. Christopher Heath, London; Dr. T. Spencer Cobbold, London; Mr. Edmund Lloyd, London; Mr. Nelson Hardy, London; Mr. Richard Davy, London; Mr. N. A. Humphreys, London; The Secretary of the Hunterian Society; Dr. Joseph Rogers, London; Mr. George Brown, London; Dr. Pye-Smith, London; Surgeon-Major Whittaker, Aldershot; Mr. C. H. Golding-Bird, London; Dr. G. de Gorreque Griffith, London; Mr. Edwin Child, New Malden; Dr. Poore, London; Our Paris Correspondent; Mr. E. F. Flower, London; An Associate; Dr. Sturges, London; Mr. Arthur Jackson, Sheffield; Dr. Holland, London; Dr. Trollope, St. Leonard's-on-Sea; Mr. Herbert Page, Redditch; Mr. C. Ashenden, Hastings; Mr. George Meadows, Hastings; Dr. Edward E. Meeres, Plymouth; Mr. Vawdrey, Handsworth; Mr. Chauncy Puzey, Liverpool; Our Dublin Correspondent; Mr. S. Lawrence Gill, London; Mr. Joseph Bell, Edinburgh; Dr. Cassells, Glasgow; Dr. Maclean, London; Sanitas; Another M.D.; Dr. W. Lewis, Rosemount; The Secretary of the Epidemiological Society; Dr. J. Braxton Hicks, London; Dr. Ord, London; An Apprentice; Mr. Sheard, Putney; Mr. Robt. Ceely, Aylesbury; Philippos; Mr. J. W. Groves, London; Dr. Orange, Broadmoor; Dr. Donald Napier, London; Mr. Hugh Robinson, Preston; Mr. J. H. Walters, Faringdon; Mr. McReddie, Wanstead; Dr. Kelly, Worthing; Dr. Sausom, London; Dr. C. E. Hoar, Maidstone.

#### BOOKS, ETC., RECEIVED.

Medicinal Plants; being Descriptions with Original Figures. By Robert Bentley, F.L.S., and Henry Trimen, M.B., F.L.S. London: J. and A. Churchill. 1877.



## THE GOULSTONIAN LECTURES

ON

## PHARMACOLOGY AND ITS RELATION TO THERAPEUTICS.

*Delivered at the Royal College of Physicians, London.*

By T. LAUDER BRUNTON, M.D., D.Sc., F.R.S.,

Fellow of the Royal College of Physicians; Assistant-Physician and Lecturer on Materia Medica and Therapeutics at St. Bartholomew's Hospital.

## LECTURE II.

IN my former lecture, I considered the reasons why therapeutics has made such slow progress; and I tried to show that one of the chief obstacles to its advance has been the habit of mind which induced physicians to act like children at play, and to mistake imagination for realities. This habit led them into two errors. In one, they attributed disease to occult powers; in the other, to disturbances of the body of an entirely imaginary nature. I now purpose to consider the methods by which therapeutics is at present advancing, and this leads us at the same time to the third method of studying medicine.\* This method consists in comparing the ideas of the physician with objective facts. In my previous lecture, I insisted upon the folly of mistaking fancies for facts, and upon the necessity of accepting the latter and not dallying with the former. I illustrated my meaning by the trivial incident of a child attempting to open a lock. I shall again ask you to turn with me to this illustration, and to try to imagine a child following the plan which we are now about to discuss. On doing so, however, we at once recognise that this method differs from the two former in being no longer that of a child, but that of a grown-up man. There are two ways in which the child might attempt the lock: either he may take a succession of keys, one after the other, until he finds the one which fits, and thus may, and very possibly will, succeed; but he will require numerous trials and may be finally baffled. The second plan may be the slower at first, but is in the end the surer of the two. He takes as many locks as he can find, separates the different parts from each other, and examines their positions until he thoroughly knows the anatomy of the lock. He then studies the action of the parts, at first singly, then two by two, and lastly all together, until he discovers the working of the whole. He then tries the action of the key, first upon each part, and then upon the entire lock, adjusting it as he finds necessary, until at last he is able to open any lock, however complicated, even although he was previously unacquainted with its construction.

Comparing this example with what we find in the history of medicine, we recognise that the first method corresponds to the so-called empirical method in medicine, and the second to its rational or scientific study. The first method was the earliest. It was that by which the priests of Æsculapius treated those who were brought to the temple of their god. Numerous histories of their different patients having been gradually collected, Hippocrates, the greatest of the Asclepiades, was able to compile an admirable empirical system.† His successors, however, as we have seen, departed from these rules,‡ and, launching out into mere hypothesis, founded the dogmatic school of medicine. The study of anatomy under Herophilus and Erasistratus showed that the absurd notions of this school were utterly incompatible with the real construction of the human body. Many of the physicians of Alexandria, under the leading of Philinus and Serapion, consequently discarded theories altogether,§ and based their practice solely upon a consideration of the symptoms of disease and of those produced by the administration of drugs. It was impossible for any man to learn how to treat diseases simply from his own experience. Careful records of cases were, therefore, kept; and a physician of this school was expected to treat a patient by comparing the symptoms not only with those of a similar case he might have already seen, but with those recorded by others, and learning from their experience as well as his own the remedies most likely to prove beneficial. The commerce of Alexandria brought medicines and poisons from all parts of the known world, and, by trying these, the empirics obtained many

remedies of great value. But it would seem as if men cannot be satisfied without a theory of some sort to guide their practice; they will not be content slowly and painfully to feel their way. They will have a light of some kind to show them where they are going and enable them to step forth freely; and they will rather have a false light than none at all. Thus the empirics began to attribute to various substances qualities which they did not possess, but which they desired them to have; and they administered such remedies as the brain of a camel, the dung of a crocodile, the heart of a hare, and the testicles of a boar. By the use of such measures, their practice became at length as absurd as that of the pneumatic or dogmatic schools; and, as they disdained any theoretical knowledge, their ignorance and folly caused the name of empiric to become a term of opprobrium. So it has continued even to our own day. Their method of practice was long cast aside; but at length it was again taken up by an English physician well termed the modern Hippocrates, who revived the practice of his great predecessor, and gave to English medicine a practical tendency which it has ever since retained. In spite of theories, English practice from the time of Sydenham has been regulated more by the teaching of experience than by the doctrines of the schools. For this reason, English physicians are justly trusted. They may sometimes be behind those of other countries in their theoretical knowledge, but in skilful and successful treatment of their patients they are second to none. So long as we lack a sufficient basis of facts experimentally ascertained in pathology and pharmacology, on which to found a rational system of therapeutics, we must be guided by clinical experience and practise empirically. Only as our knowledge slowly extends will we be able to cast aside empiric rules and confidently trust to the aid of science. Very slow indeed has been the progress of the medical sciences; for, although it is now forty-five centuries since the Egyptian Athothis is said to have written the first book on anatomy, it is little more than as many years since pharmacology, the youngest of the medical sciences, began to be systematically studied.

If we turn again to the illustration we have already frequently employed, of the child and the lock, we will readily see that the study of the various parts of the lock in our illustration corresponds to anatomy, that of their use and actions to physiology, that of the derangements to which they are liable to pathology, and that of the actions of the keys by which they may be affected to pharmacology. As the physician must know the action of his drugs, just as the locksmith does that of his keys, before therapeutics can become a science, it is little wonder, since pharmacology is still so young, that medicine is yet only an art.

Let us now glance briefly at the history of these various branches of medical science, and see the way in which the ideas of its students were one by one corrected, when erroneous, by reference to fact. Amongst the early Greeks, there were several who studied the anatomy of animals; but it does not appear that human anatomy received any attention until the scholars of Praxagoras of Cos, coming to Alexandria, founded a new school. Transplanted to this new soil, the old school seems to have found free room for its development. Numerous were the discoveries made by its heads, Herophilus and Erasistratus; and their works upon anatomy remained, indeed, the only worthy guide to the subject for ages together; for, although some of their scholars followed in their footsteps, yet the prejudices of the people soon put a stop to their pursuits. It seemed to them natural and right that slaves should be crucified; that Christians should be covered with pitch and burned alive like torches; that thousands should be made to slaughter one another, or should be devoured by wild beasts in the amphitheatres; but the idea that a single dead body should be profaned by the dissecting scalpel was too horrible to be contemplated. Consequently, the refined, the cultivated, the compassionate, the sensitive Romans put a stop to the infamous study of anatomy, and then went with a clear conscience to enjoy the sight of a gladiatorial combat or the writhings of a Christian in the jaws of a tiger. History repeats itself: then it was anatomy; to-day it is physiology.\*

\* Herophilus lived about the same time as Erasistratus, and was, like him, anxious for his knowledge of the anatomy of man; but so hateful was the study to a mass of many, that these anatomists were charged by writers who ought to have known better, with the cruelty of cutting men open while alive. They had few followers in the hated use of the dissecting knife. It was from their writings that Galen borrowed the anatomical parts of his work; and thus it was to the credit of these two great men—helped, indeed, by opening the bodies of animals—that the world owed almost the whole of its knowledge of the anatomy of man till the fifteenth century, when surgeons were again bold enough to face the outcry of the mob, and to study the human body with the scalpel (Sharpe's *History of Egypt*, sixth edition, vol. i, p. 292). For a parallel case, both in respect to the charges brought against students of an important branch of medical science by those who ought to know better, and the small number of persons engaged in experimental physiological research in this country, *see* Report of the Royal Commission on Vivisection and advertisements of the anti-vivisectionists in the daily papers.

\* BRITISH MEDICAL JOURNAL, March 3rd, page 252.

† Works of Hippocrates, Sydenham Society edition.

‡ Sprengel, *Histoire Pragmatique de la Médecine*. Paris, 1869, t. i, page 361.

§ Sprengel, *loc. cit.*, page 528.



The prejudices of his countrymen prevented Galen from studying human anatomy for himself; and he was thus obliged to trust to the discoveries of his predecessors, and to supplement them so far as he could by dissections of animals. His writings remained the text-book of anatomy for nearly thirteen centuries. In 1315, Mondini again commenced the dissection of human bodies, and found that the descriptions contained in these writings were not always correct; yet the authority of Galen remained paramount for more than two centuries afterwards, until, indeed, Vesalius dared boldly to dispute it, with the result of drawing down upon himself the anger of the Church, and dying during a pilgrimage which he was compelled to undertake to avoid persecution and expiate his supposed crimes. From this time onwards, the forms and relations of the different organs of the body were carefully studied, until little remained to be learned. A second impulse was, however, given by the application of the microscope under Malpighi; and another new era was inaugurated by Bichat's division of the body, not into organs merely, but into tissues. Another step, not less important than that made by Bichat, was taken by one still alive; for it was in 1838 that Professor Schwann applied to the animal body the discoveries of his colleague Professor Schleiden, and recognised the cell as the ultimate constituent of animal tissues.

A knowledge of the construction of the body was naturally followed by an inquiry into the functions of its various organs. The conclusions, however, which were drawn from appearances found in a dead body were frequently erroneous, and could only be corrected by comparison with the conditions existing in the living animal. Thus Erasistratus, misled by the empty condition of the arteries after death, concluded that during life they served for the transmission of air throughout the body. This opinion, when examined by Galen experimentally, was found to be wrong; for, wherever the arteries were cut during life, blood issued, not air. Galen was on the brink of making the discovery of the circulation, and one would have thought that his immediate successors could hardly have avoided it; but, unfortunately, the plan which he followed of subjecting theory to the test of experiment seems to have been forsaken by them, and it was reserved for our countryman Harvey to discover and demonstrate this great truth. Harvey employed the same method as Galen, and, like him, obtained great results. Before Harvey, Cæsalpinus seems to have arrived at an idea of the course taken by the blood, almost if not quite correct. Harvey himself was led to form his ideas regarding it from the position of the valves in the veins, and might possibly have been able to describe it exactly without making a single experiment. Had he done so, Cæsalpinus and he would have stood nearly on the same level. Both would have given utterance to opinions, correct indeed, but unsupported by a sufficient array of facts to establish their truth. Thus they would have remained opinions only, liable to acceptance or rejection at the fancy of each succeeding student. But Harvey did not stop here; he submitted his opinion to the test of experiment; he saw that everything that his theory assured him ought to exist did exist; and then, strong in the consciousness of truth, gave to the world, in an unpretending treatise of fifty-six pages, the results of his cogitations, now no longer mere opinions, but attested as facts by his experiments.

As physiology is intimately connected with pharmacology, and we shall be obliged to consider them together at a later period, we will not pursue its history farther at present, but pass on to pathology.

Just as the structure and functions of the healthy body are studied under two divisions—*anatomy* and *physiology*—so do its structures and functions in disease fall under the heads of *pathological anatomy* and *pathology proper*. Pathological anatomy shows what structural changes the disease produces; pathology proper informs us of the processes by which these changes are produced.

Although the study of pathological anatomy was first pursued by Beneveni, it received its first essential impulse from Morgagni. The discoveries of Bichat inaugurated in it a new era, just as they had done in normal anatomy. The development of disease, so far as it could be traced from the alterations it had produced in the structures of the body at different stages of its progress, was examined by Rokitsky; and to Virchow we owe the recognition of the cell as a pathological unit. Pathology proper—the study of disease in the living body—may be said to have begun with John Hunter. It was taken up and greatly developed by Magendie and his scholars, amongst whom may be specially mentioned Claude Bernard and Brown-Séquard; nor must Gaspard be forgotten, who, in the endeavour to produce typhus, injected putrid matter into the veins of a living animal. He failed, indeed, to obtain the result he expected and desired; but he discovered what was still more important—the effect of septic poisons.

The study of pharmacology, or the investigation of the action of drugs upon the body apart from their use in disease, appears to have

had its origin in men's desire to discover poisons by which the lives of their enemies might be destroyed, or antidotes whereby their own might be saved. The general action of many drugs has long been known, and some of the most graphic descriptions ever given of them are those of Nicander of Colophon; but the analysis of their mode of action, like the study of microscopic anatomy, is of very recent origin. After localising the seats of disease more exactly than had ever been done before, Bichat began to feel how vague and unsatisfactory were the notions then prevalent regarding the action of drugs, and how necessary it was to localise this action. His early death prevented him from attempting the task; but it was taken up by his scholar Magendie, who not only laid the foundation-stone of modern pharmacology, but left behind him works which may still serve as a model for investigators. The plan he pursued was exceedingly simple. It consisted, first, in preventing the drug which he wished to examine from reaching the particular part of the body on which it was supposed to act, and observing whether its action was abolished by this procedure; secondly, in applying the drug to that part of the body only, and noting whether it still exerted the same action as when applied to the whole body. The first poison with which he experimented was the upas, which was afterwards discovered to owe its activity to the presence of strychnia.\* Introducing a little of this poison under the skin of the thigh of a dog (at A in the accompanying diagram), he found that for the first three minutes no symptoms at all were produced. Then succeeded general *malaise*. The animal took shelter in a corner of the laboratory; and almost immediately afterwards convulsive contraction of all the muscles of the body occurred, the fore-feet quitting the ground for a moment on account of the sudden extension of the spine. This contraction was only momentary, and almost immediately afterwards ceased; the animal remained calm for several seconds, and was then seized with a second convulsion, more marked and prolonged than the first. These convulsions succeeded each other at short intervals, gradually becoming more severe. The respiration was hurried, the pulse quick; and it was observed that, each time the animal was touched, a convulsion immediately followed. Finally, death occurred at an interval increasing with the age and strength of the animal. These symptoms suggested to Magendie the following explanation of the action of the poison. It was, he thought, absorbed from the wound into the blood, by which it was carried to the heart, and thence to all the organs of the body. On arriving at the spinal cord, it acted upon it as a violent excitant, producing the same symptoms as mechanical irritation or the application of electricity. But, just as Harvey was not to be satisfied with the mere probability suggested by the position of the valves in the veins, so Magendie was not content until he had tested his theory by experiment. The first question to be settled was, *whether the poison*

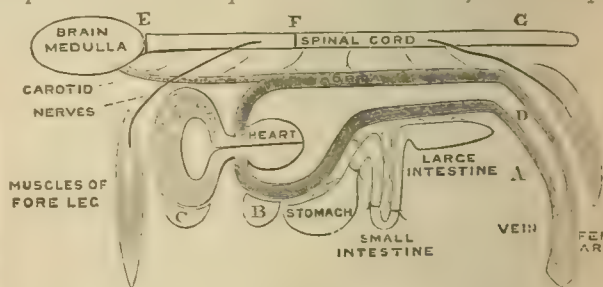


Fig. 1.

were absorbed or not. To test this supposition, he applied the upas first to the serous membranes, the peritoneum and pleura (B, C), from which, as he had learned by previous experiments, absorption takes place with extreme rapidity. The result showed that his supposition was correct. The symptoms appeared almost immediately after the injection of the poison into the pleura, and within twenty seconds after it had been injected into the peritoneum. In order to ascertain whether absorption took place from mucous as well as from serous surfaces, he isolated a loop of small intestine by means of two ligatures, and injected a little of the poison into the part between them. In six minutes, symptoms of poisoning occurred, showing that absorption had occurred; but they were less intense than when the poison was applied to a serous surface. Further experiments showed that absorption took place from the large intestine, from the bladder, and from the vagina; but that it was comparatively feeble and slow. When introduced into the stomach

\* Examen de l'Action de quelques Végétaux sur la Moelle Epinière: lu à l'Institut, 24 Avril, 1809.



along with food, the poison invariably caused death; but the symptoms did not appear until half an hour after it had been taken. This delay might have been due either to absorption from the stomach having taken place very slowly or not at all; so that the drug had passed on to the small intestine, and thence been absorbed into the blood. To determine this point, Magendie isolated the stomach by ligatures applied to its cardiac and pyloric orifices, and then injected a little of the poison into its cavity. Under such conditions, symptoms of poisoning were only observed after the lapse of an hour. This showed that, while absorption from the stomach did occur, it was much slower than from the small intestine.

The second question was, *Does the poison act through the circulation?* If so, reasoned Magendie, the first symptoms of the poisonous action will come on more slowly when it has far to travel to the spinal cord from the point of introduction; and *vice versa*. On testing this by experiment, he found that, when the poison was injected into the jugular vein, tetanus occurred almost instantaneously, and death took place in less than three minutes. When it was injected into the femoral artery (D), the distance to be travelled before reaching the cord would be greatly increased, for the poison must first pass through the artery itself, through the capillaries and veins, through the pulmonary circulation, and through the arteries of the cord. Under these conditions, its action should be slow; and experiment proved that no symptoms appeared until seven minutes after the injection.

The next question was, *whether the convulsions were caused by the action of the drug on the brain or on the cord.* To ascertain its action upon the brain, a little of the solution was injected into the carotid artery. The effects produced were the same as those of any irritating liquid. The intellectual faculties disappeared, the head was laid between the paws, and the animal rolled over and over like a ball. These effects passed off as the circulating blood removed a quantity of the drug from the brain, and were succeeded by the ordinary symptoms when sufficient time had elapsed for it to reach the spinal cord.

The question, *whether it really acted upon the cord,* still remained to be put to a crucial test. If its effects were really due to its action upon the spinal cord, they ought to cease upon the destruction of that part of the nervous system, and to occur when the drug was applied to it alone. The cord was, therefore, destroyed by running a piece of whalebone down the vertebral canal at the moment of injection. When this was done, no tetanus occurred. In another experiment, Magendie waited until tetanic spasms had been induced by the upas, and then destroyed the spinal cord by slowly pushing the whalebone down the vertebral canal. As the whalebone advanced, the tetanus disappeared, first in the fore-legs, when the dorsal part of the cord was destroyed, and then in the hind legs, when the whalebone had reached the lumbar vertebrae. In another experiment, an animal was narcotised by means of opium, and the spinal canal laid freely open. The upas was then directly placed on a part of the spinal cord (e.g., E F). Tetanus immediately occurred in the part of the body, and in that part only, to which the nerves arising from this portion of the cord were distributed (e.g., F C). When the poison was successively applied to other parts of the cord (muscles of fore-legs), the convulsions spread to the corresponding regions of the body (muscles of hind-legs).

Having thus clearly demonstrated the *modus operandi* of the poison, his next thought was to turn this discovery to practical use. I here quote the passage in which he suggests the therapeutical employment of the first fruits of modern pharmacological research.

"Medicine would, perhaps, derive great advantage from the knowledge of a substance whose property is to act especially on the spinal cord, for we know that many very severe diseases have their seat in this part of the nervous system; but upas does not occur in commerce, and, even though experience should show it to be a precious medicine, how is it to be procured?"

This question, Magendie himself answered by investigating the physiological action of a substance obtained from the same natural order of plants as that from which the upas was derived. This was *nux vomica*, which is found abundantly in commerce. The extract obtained from it was shown by experiment to have an action almost exactly like that of upas. While seeking an opportunity to apply this in practice, his intentions were forestalled by M. Fouquier, who was induced, probably by the publication of Magendie's research, to use *nux vomica* in cases of paralysis. His success was great, and the results he obtained were shortly afterwards confirmed by Magendie himself, who had used the drug as he originally intended, before becoming aware of Fouquier's experiments. To pharmacological research we, therefore, owe one of the most valuable remedies we possess.

The second example that we shall take of pharmacological research is the investigation of the curare poison by Magendie's pupil, Claude Bernard. This poison, under the various names of curare, woorara,

wourali, urari, ticunas, etc., is used by the natives of Demerara and the valley of the Amazon to poison their arrows. An animal, wounded by one of these arrows, soon lags behind the rest of the herd, becomes powerless, quietly dies without any sign of suffering, and appears indeed to go quietly to sleep. After the animal is apparently dead, however, the heart can be felt beating vigorously for a considerable time; and it occurred to Sir Benjamin Brodie, so long ago as 1812, that, if he could only keep up the respiration artificially until the poison was eliminated, the animal would be saved. Although he was unsuccessful in his first attempts, a little perseverance enabled him to overcome all obstacles, and his endeavours were rewarded by perfect success. Brodie thus proved that curare caused death by paralysing the respiration; but he did not discover how this paralysis was produced; nor was it until 1844 that the researches of Bernard solved the problem. Paralysis may depend either on the muscles which, by their contraction, effect movements; or on the motor-nerves which excite these muscles to action; or on the nervous centres from which the stimuli to these motor-nerves usually proceed. Working backwards, Bernard found that curare did not produce paralysis by acting on the muscles, for, on stimulating them by a galvanic current in a frog killed by this poison, he observed that they contracted as readily and strongly, and continued to do so for as long a time after the death of the animal, as when it had been killed by decapitation. But when he applied the current to the nerves the result was very different. Then the muscles to which the nerves were distributed contracted readily in the decapitated frog, but did not contract at all in the one poisoned by curare. The motor nerves were thus proved to have lost their power, and the abolition of their function might be fairly regarded as the cause of the paralysis and death produced by the poison.

Was this loss due to the action of the curare on the nerve-trunks, or on their terminations within the muscles? This question Bernard settled by steeping a nerve and a muscle for a short time in a solution of the poison and then stimulating them by a galvanic current. When



Fig. 2.

the trunk of the nerve alone had been exposed to the action of the curare, its irritability and power over the muscle remained apparently unimpaired; but when the muscle had been soaked in the solution, so that the poison reached the ends of the nerves within it, the power of the nerve to cause contraction was perfectly destroyed. The action of the poison was thus localised to the ends of the motor-nerves, and the



Fig. 3.

abolition of their functions might be fairly regarded as the cause of the paralysis and death produced by the poison. But it was also possible that other parts of the nervous system might be affected in a similar way; and, to ascertain whether this was so or not, Bernard adopted a most ingenious method of experiment. It was evident that the paralysis of the motor nerves, which the curare produced, would completely destroy the usual means of communication between the nerve-centres and the muscles, and thus prevent the brain or spinal cord from setting the muscles into action. These centres might, therefore, still retain their functions unimpaired, although they had no power to manifest them. In order to give them an opportunity of doing this, it was necessary to exclude one limb from the action of the poison, in order that, by retaining its power to move, it might act as an index to what was going on in the nerve centres. Bernard accordingly tied the artery and vein in the leg of a frog, close to the knee, and then introduced some curare under the skin of the back. The poison was soon carried by the blood to every part of the body, excepting that from which the circulation had been cut off by the ligature.

When the whole frog was poisoned, he had observed that pinching the skin produced no movement in any part of the body; but he now found that, while no movement took place in the poisoned part, pinching the skin on any part of the body was followed by movements of the non-poisoned leg. It was then clear that the sensory nerves and spinal cord retained their functions, and that the want of movement in the poisoned parts of the body was due only to the paralysis of the motor nerves, which prevented the spinal cord from setting the



muscles in these parts into action. When, for example, the skin of the poisoned leg was pinched, the irritation was transmitted up the sensory nerves, in the direction of the arrows, towards the spinal cord, and reflected by it down the motor nerves of the other limb to the muscles both above and below the knee. But it was only below the knee, in the part protected from the poison, that they responded to the stimulus. As he had previously determined that the contractility of the muscles was not affected by the poison, this experiment seemed to prove that the action of the poison was limited to the peripheral ends of the motor nerves. For the sensory nerves, the spinal cord, and the trunks of the motor nerves above the knee had all been exposed to the action of the poison, and yet they still continued to do their work. Thus, it appears that the fault must lie with the terminations of the motor nerves within the muscles, and with them only.

It often happens that the discovery of some prominent fact throws others into the shade for a while, and it is only after some time that its importance, at first overlooked, begins to be recognised. Thus it was with curare. Its action seemed at first to have been so strictly limited to the motor nerves, by Bernard's experiments, that any slight indication to the contrary would have been passed over without attention. But, after some time, Van Bezold noticed that reflex action ceased before the nerves had completely lost their power over the muscles; and Schiff observed that, when the circulation in a frog was arrested at the knee, a pinch below the ligatured point caused movement, while it had no effect on the poisoned skin of the thigh. Bezold's observation showed that the spinal cord was affected by the poison, and Schiff's, which I have myself repeated and confirmed, shows that the sensory nerves have their conducting power destroyed by curare, but that they are less affected, and after a longer interval, than the motor nerves.

Magendie noticed, in his experiment with the upas, that the symptoms not only came on more slowly, but were less violent, when the poison was introduced into the intestines, than when applied to a wound, and that when they might be controlled by arresting the return of blood from the point of introduction. In Bernard's experiments with curare, he observed that, although invariably poisonous when introduced into a wound or injected directly into the circulation, it apparently did not act at all when taken into the stomach, unless the dose was very large. At first, Bernard imagined that this might be due to the destruction of the poison by the juices of the stomach. Mixing it, however, with gastric juice, he found that its activity remained unimpaired. Another reason then suggested itself, viz., that while absorption was taking place from the stomach, excretion of the poison might occur by the kidneys. If these were to go on *pari passu*, the amount of poison present in the blood at one time would be too small to produce its characteristic effects. This hypothesis he at once tested by extirpating the kidneys of a frog, and thus entirely checking excretion through those organs. When curare was then administered by the stomach, poisoning took place more slowly, but quite as surely, as when it was applied to an open wound. The same result was arrived at independently by Ludimar Hermann, who was unaware of Bernard's researches. In his experiments, he used warm-blooded animals, and tied the renal artery, instead of extirpating the kidneys. These researches enable us to understand how it is that drugs exert a more rapid action when introduced into the empty stomach than when given along with a full meal; why a dose of morphia, injected under the skin, should not only act more quickly, but more powerfully, than the same quantity given by the mouth or by rectum.

[To be continued.]

PADDINGTON.—Dr. James Stevenson commences his report by reminding the vestry that he only took office at Midsummer 1874, and stating that he has adopted the statistical forms of the Society of Medical Officers of Health, which is commendable. He estimates the population at 105,221, and the inhabited houses at 12,746. There were 2,927 births and 1,992 deaths, which would give a birth-rate of 27.8 and a death-rate of 17.6 per 1,000 population, or, including the deaths in hospitals, 18.9; whilst there were only 2.7 deaths from zymotic diseases per 1,000 population. The deaths of children under one year were 14.1 in each 100 births; the deaths of children under five years, 38.4 per cent. of total deaths. These figures certainly indicate a satisfactory condition of the public health. Dr. Stevenson obtained some milk from cows infected with foot-and-mouth disease, and submitted it to Dr. Sanderson, Mr. Wanklyn, and Professor Anderson, neither of whom could detect any difference, either chemically or microscopically, between it and ordinary milk. As, however, it readily took on fermentative action, they came to the conclusion, and especially Mr. Wanklyn, that it was unfit for food.

## THE CROONIAN LECTURES

ON

### THE DIFFERENCE BETWEEN THE SEXES IN REGARD TO THE ASPECT AND TREATMENT OF DISEASE.

*Delivered at the Royal College of Physicians of London.*

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#### LECTURE I.

IN endeavouring to respond to the kind permission with which you have favoured me, to give this year's Croonian Lectures, I thought it might be of some advantage if I brought together the principal points in respect of which the human male and female differed; because, although writers on pathology have noticed very fully the difference between the sexes in the several diseases of which they have treated, yet I have not been able to find any separate monograph of these variations. As many, if not most, of these are well known to you all, I must crave your indulgence if I seem to introduce topics by no means new.

Since I ventured to select this subject, I feel more than ever diffident, because one of your Fellows and late Censor has said, in a recent address, that he almost envied me this opportunity. One difficulty has specially presented itself to me, namely, the limitation of my remarks to disease; because the physiological differences are so interwoven, as indeed it is in all clinical pathology, with disease. But specially this is shown in women, who are so prone to functional disturbances, because the border between the maximum of natural function and disease is ill-defined. To enter into the physiological aspect would be to lead me too far, and would introduce subjects which scarcely come under the consideration of so august a body of gentlemen, except in their social functions. I will, therefore, endeavour to keep as closely as possible to the clinical aspect of the variations of disease.

The divergencies, although rather of degree than of essence, present some very salient appearances, valuable for reflection; for the obscure condition of the one may receive light by the more prominent state of the other sex. Thus, as Dr. Barnes has recently pointed out, the condition of pregnancy affords a series of ready-made experiments, throwing light both on physiology and pathology. And it must be borne in mind that woman differs from man in having given to her an organ intimately connected with the sympathetic system, almost entirely supplied by ganglionic nerves, subject to great changes of form, size, and structure; capable of being seen, handled, and treated with an ease denied to any similar organ, at least in extent. Only in rare cases has the stomach been so immediately under examination; the bladder rather more frequently so; but then there is in it but little variation of form and growth. It is, then, by taking advantage of the opportunity of observing the effect of the greater changes in the uterus, and its various sympathies, that we gain some insight into the minor changes in other parts supplied in like manner.

It is not my intention to discuss the differences of sexual organs, excepting so far as their form, shape, and actions tend to disease more in one than in another. But, first of all, it will be well to consider some points connected with the differentiation of the sexes, which, as we all know, occur very early—from the third to the fifth day of foetal life. It has been the habit of many to consider that the two sexes remain very much the same in the condition of the general body and mind, till near the change of puberty; but a little consideration of various facts will show that the difference, although not so manifest, takes place *ab initio*, and that, whatever the first impetus may be which produces that change, it gradually progresses till it culminates in the mature man and woman. It would be difficult to say whether the man or the woman may be considered as most typical of the human race. The general opinion of mankind has been that the man is the standard; but Darwin, as far as I gather from his remarks, looks upon the man as having diverged from and advanced upon the woman. Referring to the secondary sexual characters, he says (*Origin of Man*, vol. ii, page 321): "This fact indicates that, so far as these (size and height), it is the male which is chiefly modified, since the races diverged from their common and primeval source." However, in regard to hairiness, he considers it is the woman that has diverged from the more hairy progenitor. Again, with regard to mental powers, he considers the



woman, as a rule, inferior; the result of the transmission "to the male at mature life of those qualities required, in his male ancestors, in the struggle for life and keen competition with other males". And again: "It is generally admitted that, with women, the powers of intuition, of rapid perception, and perhaps imitation, are more strongly marked than in man; but at least these faculties are characteristic of the lower races, and therefore of a past and lower state of civilisation."

We know nothing of the initial force which causes the differentiation of the sexes; but we can watch the progress of development almost from the first. I do not wish to detain you long on the development of the sexual differences in the fetus; but some interesting points have recently been added by Waldeyer to those already made out. It is this: that in both sexes, about the second or third day, there is a "sexual eminence", extending the whole length of the Wolffian body, covered by cylindrical cells, some of which are conspicuous on account of their size. In the male, these remain for a time, and shortly disappear; while in the female, on the contrary, they remain, enlarge, and gradually the larger cells apparently sink into the interior, by the exuberant growth of the underlying mesoblast rising up between them. These depressions are seen with the large-sized epithelium-cells at the bottom, while the sides are lined by the cylindrical epithelium. After a time, the walls of the depression close in, and thus is formed the Graafian follicle; the large cells being the future ova, and hence called the primordial ovum. Thus, it will be seen that both sexes begin with ovaries. Now, the testis springs from a different spot, though not far from the ovary. Hence, though we have been accustomed to consider the ovary and testis to be homologous, they cannot be, supposing the observations just mentioned are correct.

Both the male and female have been long known to be supplied by two filaments called ducts of Müller, one on each side, which in the male dwindle and become useless, but in the female remain, forming the oviduct or Fallopian tube; and, uniting below, become fused into a single tube—the future uterus. It is curious to observe that in birds, where the left ovary generally disappears, the corresponding Müller's duct also dwindles.

Thus, we have in both sexes ovaries and their ducts; these in the male becoming obliterated, while the testis is added at a slightly later period, joining and making use of the Wolffian body and its duct; while, on the contrary, the Wolffian body becomes effete in the female. Thus, we seem to have an explanation sufficiently satisfactory for those curious anomalies where, in the same animal, a testis is found on one side and an ovary on the other.

Bureau, in his work *Maladies des Ovaires*, mentions the names of Hunter, Rudolph, Verdier, and others, as having met with instances.

A point of interest arises here: how far the general differences in the sexes—I mean the secondary sexual characters—are dependent on these changes in the sexual organs; or how far they are only part of the mutation, the common result of a primary force extending to the whole body. Is woman (to quote Van Helmont) a woman because of the womb, or does the uterus exist because belonging to the woman? And before this can be answered, we require solution to another question, very difficult to answer: How are the tissues first formed, or what relation do the nervous structures bear to the parts they supply?

Perhaps the following remarks may help us. Recent microscopical investigations have shown that the nerves enter more intimately into the tissues than had before been supposed; that the ultimate fibres, for instance, of the nerves supplying the muscles enter a branch into each fibre; that the epithelium of the mucous membranes, instead of being an inert effete layer of cells without sensation, is closely associated with and pervaded by expanded terminations of the nerves, in such a manner that it is difficult to separate them. For instance, Longet, in his *Traité de Physiologie*, 1869, tom. iii, page 893, says to this effect: "The nerves are not produced as prolongations from the cord into the various tissues, nor do they extend from the various tissues to the cord; but they are developed in each tissue by a separation of histological elements, from the cells of which the parts are originally constituted, which at first appear to be identical in their morphological characters." This being the case, it leads one to ask the question: whether we should not consider the elementary tissues to which the nerves go rather the exponents of the qualities of the nerves, than look upon the nerves as simply conductors from and to the tissues.

This idea will not seem so very improbable when we consider that, in the early forms of animal life, the nervous element and sarcoid are intimately mixed; and that, as we ascend the scale, the nerve-cords keep up an intimate connection between them, though separate. And thus, may we not look upon the genital organs, as well as the other parts of the body, as intimately associated with the nervous system, so intimately that we may look upon the one as the counterpart of the other? If this be so, then any change which takes place in one will to

an equal degree influence the other; the nervous elements and the organs are correlated. Therefore, we may argue that it is neither from the ovaries, uterus, nor testes alone, nor from the nervous system alone, that the influence springs which makes the difference between man and woman; but rather this distinction is a consequence of an influence acting before the appearance of either. In support of this view, we may point to those cases of total absence of ovaries, uterus, and vagina, where the rest of the body and habit is essentially feminine in character.

There is, of course, no doubt that the sexual organs react in their influence on the nervous centres, and *vice versa*; and also, this impression extends to those parts in sympathy with them, and thus, in due course, the whole economy is swayed. Let us now trace the effects of this differentiation through the various stages of life, so far as concerns the relative liability of each sex to disease.

These effects are shown in many ways, even during intra-uterine existence, exercising important influence on the welfare of the fetus.

Now, as to the relative frequency of errors of development, there is a marked difference in the sexes.

With regard to the heart, Geoffroy St. Hilaire, in his work *Anomalies de l'Organisation*, endorses the fact pointed out by Schüier, Nasse, and Meckel, that cyanosis is much more frequent in the male. Most of these cases result from deficiencies of development, either before or immediately after birth. And this fact coincides very much with the relative frequency of occurrence of congenital deformities, resulting from defect of development in other parts. This is well shown in the following table, for which I am indebted to my colleague Mr. Bryant, being taken from his note-book.

	No. of Cases	Male.	Female.
1. Spina Bifida .. .. .	30	13	17
2. Ectop. a Vesicæ .. .. .	20	14	2
3. Epispadias, or Hypospadias .. ..	25	22	2
4. Harelip .. .. .	64	44	20
5. Harelip, with Cleft Palate* .. ..	21	17	4
6. Malformation of Bowel .. .. .	8	2	6
7. Malformation of Extremities (not including Talipes) .. .. .	26	27	13
8. Malformed Ears .. .. .	4	3	1

(doubtful)  
2 (?)

It is curious to note that, whilst in deficiencies of the anterior median line males far exceed, in deficiencies in the posterior females rather preponderate. Altogether, it appears that the male is peculiarly exposed to deficiencies of development; although one would have been prepared for the opposite result, if we consider the male a development upward from the female. I mean that one would have expected a more vigorous action in the male than in the female, more at least than enough to carry it further than the female: in actions common to both; though one might have not been surprised if there had been any arrest in the male genitals, as in some forms of hermaphrodites.

In regard to the general group of congenital and developmental diseases of children, we find, in the Statistical Report of Dr. Farr, the deaths, for instance, in 1866, of 7,027 males and 5,311 females up to one year old; and up to the end of the second year, 1,067 males and 941 females. In 1868, the deaths under one year were 6,797 males and 5,395 females; whilst in the second year, there were 994 males and 910 females; thus showing a marked difference between the male and female.

There is also a greater tendency to cerebro-spinal disease in the male before birth. M. Duval shows that, out of 145 cases of congenital talipes, 97 were males and 48 females.

How far the difference in the rapidity of circulation, which has been pointed out by Frankenhäuser, has to do with the variation, it is impossible to say; but there seems no doubt that the male pulse beats, on the average, at 124 per minute, while in the female it is 144, according to Frankenhäuser, though stated at less by other observers. This fact has been put forth as a means of diagnosing the sex before birth.

This difference is less noticeable at birth, and the rapidity of the pulse in the two sexes remains nearly the same till the seventh year, when again gradually the pulsations of the female increase in frequency, till in adult life they exceed the male by from 6 to 14 beats.

Let us now pass on to the consideration of circumstances which remarkably influence the existence of the fetus at birth. It is a well-ascertained fact, universally sustained and very regularly so, that more males are born than females, in the proportion of 105.8 males to 100 females. But this excess of life on the part of males is reduced in the

\* Almost all the cases of double harelip are met with in males.



following manner. The male infant is well-known to be larger than the female at full term; so that, on the average, the male is ten ounces heavier than the female, while the length is half-an-inch greater. This, perhaps, would not be of so great importance had not the cranium of the male been more completely ossified than that of the female; so that this, coupled with an increase of circumference, on an average half-an-inch, renders its delivery through a narrow pelvis more difficult than the female's, because of its being less capable of being moulded to a shape easy for passing. In consequence of this, the birth of a male child is more difficult and dangerous to the mother. Sir James Simpson considered the difference in the sexes of great importance; for he calculated that, between the years 1834 and 1837, in Great Britain, from 46 to 47 per 1,000 male infants lost their lives at birth, owing to the excess of size; and three to four thousand mothers also, from the same cause. This may be overrated, because the calculations were made from the statistics of lying-in hospitals, where a considerable number of difficult cases were admitted in labour for operation; and thus the foetal death-rate would be increased above the general average. Still, doubtless, after labour, although the child may be born alive, the effects of the difficulty are felt for some time, and many deaths take place in consequence, in a diminishing ratio, for one, two, or even three or four years.

Dr. Langdon Down has recently, in a paper read before the Obstetrical Society, shown that, according to his notes, there is a marked preponderance in the number of male over female idiots, in the proportion of 2.1 to .9; or rather more than twice as many. He has also noticed that infantile convulsions have occurred among males who have become idiots much more frequently than among females. Dr. Langdon Down attributes these calamities to the increased length and difficulty at the birth of the male by reason of its enlarged cranium, whereby pressure on the circulation produces a kind of asphyxia. He found that first-born children were more frequently afflicted than others; and, as prolonged and difficult labour generally attended the birth of a first child, he considered it probably the result of the pressure.

Exceedingly interesting tables are given by Dr. Collins, of the Rotunda Lying-in Hospital, Dublin, as to the relative death-rate of the sexes shortly after delivery. I will not detain you on this point, but I cannot refrain from quoting the first three lines, which show that, within half-an-hour after birth, 16 males died against 1 female; within the first hour, 19 males died against 2 females; within the first six hours, 29 males died against 7 females. There can be no doubt, therefore, that the male runs a greater risk in its nativity than the female; and this risk is caused by the more protracted and laborious labour which its larger and harder head necessitates. The more firm ossification of the male head, though doubtless a protection to the brain, is more obstructive to delivery than that of the female; and this tells upon the male, more especially in cases where the mother's pelvis is somewhat reduced in size, either generally or partially.

From these considerations, therefore, it would appear that the death of the male in birth and shortly afterwards is not so much the result of direct pressure on the brain, but rather the ill result is owing to obstruction to the circulation in the uterus, placenta, and funis, causing effusion of blood in various organs, and provoking inspiratory movements, which cause an invasion of the larynx and bronchi by the fluids in the passages; in other words, chronic or sudden asphyxia. This being the case, a further deduction is capable of being made; namely, that the longer the labour, if the pains are forcible, the greater the risk to the child, *ceteris paribus*; and, indeed, the truth of this inference is clearly supported by examination of the facts, which need not here be detailed, as they can be found in all modern works on obstetrics. The full recognition of this leads one at once to make a practical rule, viz., that, if the head of the child in labour be detained in the parturient canal after this is fairly opened and the uterus in full action, then the abstraction of the child by art is the more likely to save its life, the earlier assistance is given; and not only to save its life at the time, but to save it from the evils which continue their force after birth. No doubt it is difficult precisely to lay down rules as to the time when assistance should be given; this is not the place to discuss this question; opinions vary, but all modern practitioners, I think, accept the rule given above as a guide in practice, which, indeed, has redeemed modern obstetrics from the old opprobrium of "meddlesome midwifery".

For the increased risks to the mother by exhaustion, internal bruising, by inertia of the uterus tending to floodings, and septicæmia after labour, I must refer you to the treatise of Sir James Simpson quoted above, entitled "Sex of Child as a Cause of Difficulty and Danger in Human Parturition", in his *Selected Obstetric Works*, 1871.

The influence which the additional difficulty and length of labour produce on the child, and for how long it was felt by it, it is impossible to gauge exactly, because we cannot deny that the male brain

from earliest age is more prone to active disease than the female. The human male, from earliest history, has had to employ its mental faculties to a much greater degree than the female; and hence, doubtless, that tendency (so well pointed out by Darwin) for each sex to transmit its acquired peculiarities has had an influence in this matter; and this activity, we shall admit, tends to disease and disturbance in a higher degree than if a less activity were present.

Before leaving this subject, I mean the effects of pressure at birth, I must recall to your recollection a paper by Dr. Little, in which he has discussed how far the asphyxia consequent on difficult labour had to do with the production of mental impairment, hemiplegia, and spastic rigidity observed in children in their early years. Of course, at so late a period of life, with so many causes of disturbance existing, notably dentition and imperfect nutrition, it would be difficult to say how far Dr. Little's opinion is correct, wholly or in part.

But there is one more circumstance which cannot be overlooked when we seek for explanation why the severer affections of the brain are more frequent and dangerous in the male child than in the female, and this particularly up to nearly the end of the second year. I have mentioned already that at birth the skull of the male head is in a more advanced state of ossification than the female. This is so noticeable that, before the child is born, one is able to pronounce rightly in eight or even nine out of ten cases whether it be male or female.

The protection the more solid skull offers to the male brain during birth exempts this latter from the disturbance and sometimes injury to which the brain of the female is exposed in consequence of the mobility of the skull; though, as before shown, it may increase its risks by asphyxia.

These observations tend rather to oppose the opinion of some, who put against the forceps-pressure all those evils which afflict the brain of the child; whereas it is generally in the more ossified skull, and therefore less yielding, that we employ them, consequently more in males than in females.

But, when irritation and hyperæmia of the encephalon occur after birth, as specially during dentition, this solidity tends to increase the effects of pressure from within as compared with the more yielding and mobile skull of the female; for probably all have noticed that where the sutures and fontanelles are late in closing, the effects of dentition are not so severe, whether in male or female. At the same time, we must not forget that to which I have just now alluded; the easily moulded skull of the female gives some risk to its owner, in that the brain is subjected to greater pressure, and sometimes severe disturbance to its shape; while, the sutures being more capable of overlapping, the edges are apt to penetrate the longitudinal sinus, and thus cause effusion of blood, or internal cephal hæmatoma, as I have occasionally noticed.

[To be continued.]

## A CASE OF EXOPHTHALMIC GOÏTRE, WITH NEW PHENOMENA.\*

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CASES of exophthalmic goitre, although always of great interest, both on account of the remarkable phenomena which attend them and the obscurity which still rests on their pathology, are not so seldom seen as to merit any extraordinary attention from a Society like this. Nor should I have solicited the attention of the members of the Clinical Society to the case I am about to show them, were it not that, besides the ordinary phenomena commonly noticed in cases of a like kind, certain others have been developed in the course of this one, which, I believe, have not hitherto been observed, or, at any rate, placed on record. And I take it to be the duty of every clinical observer, whenever he meets with unrecorded phenomena, in cases the precise pathology of which still remains doubtful, to take the earliest opportunity of bringing them to the notice of such a Society as this, where they can be examined and discussed, and their precise relation to the pathological state which has given rise to them, can be either suggested or determined.

The patient in question, who is thirty-five years of age, married, and with four children, first came under my observation on the 6th of May last, when she complained chiefly of palpitation and pain in the left side; she had had a cough for six weeks, and suffered also from shortness of breath; she was losing flesh, had no appetite, vomited frequently, and had a tendency to diarrhoea after every meal, or if she

\* Read before the Clinical Society of London, March 9th, 1877.



made any exertion. She frequently got very flushed and hot and perspired profusely. The palpitations had troubled her for about three months, but some prominence of the eyeballs had been noticed more than eighteen months previously. I shall call attention hereafter to this order in the evolution of the symptoms, the exophthalmos preceding the palpitation by some considerable time. She had not noticed any swelling in the neck until I called her attention to [its existence. She states that she has always been of a highly "nervous" temperament, but that she had enjoyed good health up to the period of her last confinement, in May 1874. She was then given "ergot" every ten minutes for four doses, and her labour only lasted one hour and a half, instead of fourteen hours as with her three previous children. Soon after her confinement, she had an attack of fever; she does not know exactly what kind of fever, but it was attended with sickness, purging, and delirium. It lasted three weeks. On getting up from this illness, she says her friends would not let her look at herself in the glass, "she looked so wild". Hence, I think, we may fairly conclude that the exophthalmos was apparent at that time. She comes of a healthy family; her father and mother are both living, but the latter is "rather nervous".

When I first saw her, I found her heart beating 136 times in a minute; there was considerable enlargement of the right lobe of the thyroid, but very little increase in size of the left lobe; there was and is still an entirely distinct small round body, just over the upper part of the larynx, about the size of a hazel-nut. There was marked exophthalmos of the *left* eye, but it was difficult to say whether the right eye was or was not, at that time, more prominent than natural. Both the enlargement of the thyroid and the exophthalmos presented a decidedly unilateral character; the goitre being on the *right* side, the exophthalmos on the *left*. No bellows-murmur was at this time audible

was clean. Urine occasionally very abundant, pale, and of low specific gravity; no sugar or albumen. She was ordered a mixture of digitalis and belladonna, which she took three times a day for a week without any effect on the palpitations; the temperature was, however, reduced to 99.4 deg. She continued to take this medicine for four weeks without any influence on the palpitations. She was then ordered small doses of strychnia twice a day and bromide of potassium at night, and with this treatment the pulse dropped to 120. At this time (June 7th), she called my attention to a new and singular phenomenon, which she had hitherto, by a very rudimentary form of art, contrived to conceal. As the left eye had become prominent, the hairs of the eyebrow, all the eyelashes of the lower lid, and the inner two-thirds of those of the upper-lid, had slowly disappeared. She was also conscious of some irritation about the left eyebrow and eyelid, but there was never the slightest appearance of any eruption on the skin there.

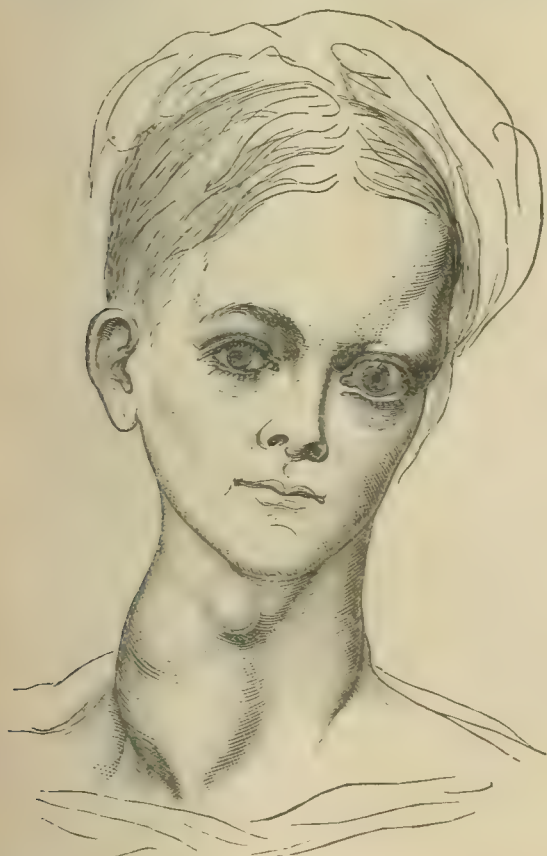
Towards the end of July, she complained so much of the profuse perspirations, that I again gave her belladonna; and, as she had taken quarter-grain doses before without much effect, I gave her half a grain of the extract three times a day. She could not, however, take this dose, as it gave rise to toxic effects: swelling and dryness of the throat, giddiness, and the appearance of large red patches on the skin. It also aggravated the diarrhoea, which had long been, at times, a troublesome symptom. In order to keep this symptom under control, she had to take bismuth, with an occasional opium pill, for nearly two months.

I did not see her from August 2nd to October 18th. She had then just returned from a fortnight's stay at Ramsgate, which had been most beneficial to her. The tendency to diarrhoea had ceased, and she had been getting stouter. Her left eye was, however, still very prominent, and the right lobe of the thyroid was large and quite hard, and, on listening over it, tracheal breathing was conducted very loudly to the ear. Notwithstanding what has been said by some writers against the use of iodide of potassium in this disease, I thought it desirable, as the thyroid enlargement was very hard and appeared to be exercising some slight pressure on the trachea, to give the iodide internally, three grains three times a day, and to order the iodide of potassium liniment to be rubbed in over the thyroid swelling. The iodide certainly had a good effect for a time; the pulse fell during its use from 132 to 112, and the general health seemed better and the thyroid enlargement lessened.

During the very cold weather in the beginning of last November, the diarrhoea returned, and the other symptoms of the disease became aggravated. The pulse rose to 132 (temperature 99 deg.), and a faint systolic bellows-sound became audible at the cardiac base and along the carotids. She again took digitalis, but without any effect. The pulse remained about 132; the bowels acted five or six times a day, and the systolic murmur at the base became louder and more distinct, and was now (December 11th) heard all over the cardiac area. At this date, I noticed that the *right* eye had recently been getting more prominent, *simultaneously* with some enlargement of the *left* lobe of the thyroid. She had been altogether feeling worse, and the left eye had become more prominent, and there was much systolic impulse over the enlarged gland. In January, the patient called my attention to the circumstance that, since the right eye had begun to get prominent, the *hairs* of the *eyebrow* and the *eyelashes* on the *right* side had been disappearing, with the same feeling of irritation as had been before noticed on the left side.

From the beginning of January to the present time, I may summarise her history by the brief statement that she has been getting worse. Both eyes are now prominent, but the *left* eye is much more so than the right. There is a loud systolic murmur heard over the whole præcordium, loudest about mid-sternum. There is also a loud systolic murmur over both carotids, and this same murmur is heard over the enlarged thyroid, through which the pulsations of the carotids can be felt; but there does not appear to be any pulsation in the thyroid itself distinct from that of the carotids. Both lobes of the thyroid are enlarged; the right, however, much more so than the left. The diarrhoea continues to return from time to time, without any obvious cause, and is kept somewhat under control by pills of sulphate of copper and opium. She is easily fatigued on the least exertion; gets quickly flushed, and perspires freely. The catamenia have ceased for three months. She also complains now of a troublesome cough, with occasionally blood-stained expectorations. The pulse, during the last three months, has ranged between 112 and 130.

Mr. Soelberg Wells has been good enough to make an examination of this patient's eyes for me with the ophthalmoscope. He reports that "the fundus of the eye is quite healthy and there is no spontaneous arterial pulsation". He calls attention to the fact that "the exophthalmos in the left eye is accompanied by a very interesting symp-



over the heart or large vessels, nor over the thyroid body; nor any impulse over this body save that communicated from the carotids. She was looking thin, pale, and worn, and had a nervous hasty manner. Her skin was hot and perspiring, and on the slightest pressure became covered with red patches. Her temperature was 100.4 deg. The catamenia had been regular for the last eighteen months. The tongue



tom (usual in such cases), namely, a drawing up of the upper eyelid, so that a portion of the sclerotic above the cornea is exposed. This retraction is due to irritation of the unstriped muscular fibres of Müller, which are found in the upper eyelid, and are supplied by the sympathetic". Her sight is good, though her eyes are readily fatigued in reading, etc., owing to her being considerably hypermetropic.

Before I proceed to make any comments on this interesting case, I wish to call your attention to another case of the same disease also present here this evening. In some respects it is a great contrast to the other one. This patient is a young single woman, twenty-three years of age, robust and strong-looking. She shows no signs of the pronounced cachexia so evident in the other patient. But she is especially interesting now, as being also the subject of unilateral exophthalmos. In her case, the right eye only is prominent. There is very little, if any, enlargement of the thyroid, but there is constant palpitation. The pulse has varied during the time she has been under observation from 116 to 140. She comes of a healthy family, and has always had good health till lately. She first noticed the prominence of the right eye about a year ago. All this time she has been feeling nervous and excitable. She came to King's College Hospital about nine months ago, complaining of pains in the back of the head, and palpitation. She stated also that she suffered frequently from "bilious attacks", attacks of vomiting which would last a whole day, after which her throat would get very large. She complained also of frequent profuse perspirations, coming on twice and three times a day, sometimes without any cause, and sometimes on the slightest exertion. The hands and feet are always perspiring, and her hair is sometimes "wringing wet". She is easily fatigued, has lost her appetite, and is much thinner than she used to be. She suffers much from dysmenorrhoea, and all her symptoms are worse at her periods. She says her throat was much more enlarged nine months ago than it is now.

Having thus briefly called attention to the history of these two cases, I will now point out what I think are the facts which especially merit consideration.

1. *The order of evolution of the phenomena.* It has usually been assumed that the cardiac excitement precedes the enlargement of the thyroid and the exophthalmos, and many seem to look upon the two latter symptoms as in some degree consequences of the former. I doubt if this be true. Trousseau also seemed to doubt this, and he called attention to cases where all the characteristic phenomena appeared suddenly and simultaneously; and he justly remarks, "palpitation first attracts attention because the least disturbance of the heart's action cannot escape notice". In the first of my cases, it seems certain that the exophthalmos preceded the cardiac excitement by a considerable period. I should suggest that there is no other relation between these phenomena than that of the effects of a common cause.

2. *The occurrence of unilateral exophthalmos as well as unilateral enlargement of the thyroid.* It has been stated by most writers on this subject that the exophthalmos has been always bilateral and equal; but I have shown the Society two cases in which this is not the case, and if I had thought it necessary I could have shown a third.

3. *I would call special attention to the remarkable phenomena in my first case of the falling out of the hairs of the eyebrow and eyelids* coincidently with the protrusion of the eyeballs, and to what is perhaps of more consequence still, the peculiar crossed manner in which the phenomena were developed: first, the projection of the left eye and enlargement of the right lobe of the thyroid, with the shedding of the hairs of the left eyebrow and eyelashes, and then the slighter enlargement of the left lobe of the thyroid with the slighter but simultaneous projection of the right eyeball and shedding of the hairs of the right eyebrow and eyelids.

4. *I would suggest that, in considering the pathology of this disease, we have thought too exclusively of the striking local phenomena, and neglected somewhat the consideration of what, perhaps, I may be permitted to call the more diffused phenomena of this disease.* I allude especially to the constantly recurring diarrhoea, so troublesome a symptom in many cases; to the profuse perspirations arising without any obvious cause, and common to nearly all cases of this affection; and to the emotional excitability of the nervous system which is also generally present.

Many text-books do not even notice the occurrence of diarrhoea and perspirations in these cases, although they form a very important and characteristic part of their clinical history.

I call attention to these points, because they seem to me to suggest very strongly a central nervous lesion as the pathological basis of these phenomena, a lesion the disturbing influence of which is, no doubt, radiated preferentially along special tracts of the sympathetic nervous system, and thus gives rise to those special phenomena to which attention has been too exclusively directed. But this disturbing effect is by

no means thus restricted in the most pronounced examples of this disease; for such diffused phenomena as profuse perspirations, paresis of the cutaneous vessels, obstinate diarrhoea, and an abnormal irritability and mobility of the nervous system are almost constant phenomena. The occasional sudden and simultaneous onset of the characteristic symptoms of the disease, or their equally sudden aggravation after fright or other emotional influences, lend weight to this view; while the irregularity with which the three local affections are developed, one or other being not seldom absent, appears inconsistent with any constant limited local change in any of the sympathetic ganglia. Moreover, the crossed manner in which the peculiar phenomena to which I have called attention in my first case were evolved strongly support the suggestion of the central origin of this affection.

The results of treatment also, I think, countenance this view; for no kind of medicinal treatment that I am acquainted with is attended with the same marked benefit that arises from change of air and scene. This I look upon as the most valuable remedy for exophthalmic goitre, an affection which I believe to be primarily a neurosis of the emotional nervous centres.

## EAR-DISEASE AND LIFE ASSURANCE.\*

By JAMES PATTERSON CASSELLS, M.D., M.R.C.S. Lond.,

Fellow of the Faculty of Physicians and Surgeons; Surgeon to, and Lecturer on Aural Surgery at, the Dispensary for Diseases of the Ear, Glasgow; etc.

IN 1875, a gentleman, aged 30, applied to an old-established and wealthy insurance company to effect an insurance on his life. The medical officer of the company, having examined the proposer, was quite satisfied with the life, save in one respect, and that referred to the condition of the gentleman's right ear, from which there came a constant but scant discharge of pus-like fluid. I have no means of knowing whether the proposer gave voluntarily the information concerning the existence of this ear-discharge to the medical examiner, or whether it was discovered by this gentleman in the course of the examination; in either circumstance, it may be inferred, on the one hand, that the patient did not regard the fact of an ear-discharge as prejudicial to his acceptance by the company, and therefore as not injurious to his health; on the other, that the examination had been unusually exhaustive. From the knowledge that an ear-discharge betokened "incalculable dangers" to the life of the individual who had such a symptom, the medical referee already referred to had decided to report unfavourably upon this case, notwithstanding the otherwise highly favourable circumstances that pertained to it. With an earnest wish, however, to give the proposer every chance of acceptance, he recommended to the society that the applicant be sent to me for a special opinion as to the state of the ear. When the gentleman presented himself before me, he was in excellent general health, and had always been, he said, in an equally good condition. His family history was unexceptionable; as regarded the local affection of the ear, he gave the following history. In 1860, without any apparent cause, and preceded by no defect of the sense of hearing, the right ear began to discharge matter, and this discharge had continued from then till now—sixteen years. Except on one occasion, some years after the institution of the discharge, he never had pain in his ear at any time. On the occasion referred to, he attributed the occurrence of pain to cold caught by imprudent exposure. In reply to the direct question, whether during this painful attack the ear-discharge were in any way affected, he could give no definite reply; but thought that, from its first appearance till now, the discharge had continued unchanged, either as to quantity or to quality. It was noticed that the expression of his face was peculiar; when he laughed, it was seen that the muscles of the left side of the face were alone thrown into action, but motion in those of the right side was not quite abolished. The sensation of both sides seemed equal.

The state of the diseased ear was as follows. He was quite deaf to ordinary conversation on the right ear, and could not even hear a watch on contact, the normal hearing distance of which is six feet. The inner third of the meatus was highly congested; there was no pus or other fluid in this canal, probably owing to the fact that it had been recently cleaned out in preparation for my examination. The right membrana tympani presented numerous signs of old-standing disease, to which particular reference need not be made here. The point which interested me was the following. Traversing the whole upper segment of the membrana tympani, close to the annulus, was to be seen an oblong somewhat semilunar-shaped lesion of the membrana flaccida (Shrapnell's membrane). A probe, introduced through this aperture, passed

\* Read before the Glasgow Medico-Chirurgical Society.



inwards and upwards till it was arrested by the roof of the tympanum. At the moment of this contact, the patient affirmed that he felt a distinctly grating sensation, although I was quite insensible myself, not only to this, but to any similar sensation, such as one experiences when, with a probe in hand, he comes into contact with diseased bone. The left ear, though not complained of, was, nevertheless, not free from defect—defect that time and circumstances may develop.

In the report which I made, I spoke of this case as follows. "The result of the examination is to show that X. Z. suffers now from chronic inflammation and suppuration of the 'drum' of the ear, or tympanum. The ear-discharge, though moderate in quantity, and not accompanied with pain, has been, nevertheless, continuously present for a period of sixteen years. I have good grounds, therefore, to fear that latterly this suppuration is the consequence of an ulceration of the bone forming the roof of the drum-cavity. With this belief, I cannot regard his case as free from the possibility of dangerous consequences arising at any moment, so long as the discharge continues."

To this official report I appended, by way of supplement, the following remarks. "The opinion that the roof of the tympanum in this case is carious, though founded on negative evidence, yet amounts almost to a certainty, since I have never met with a case of similar ear-disease, of such long standing, without this grave complication being ascertained to exist on examination, either during life or after the death of the patient. My experience of similar cases in my own practice, during the last few years, has been both varied and extensive, at all ages and in all stages, most of them as like each other as are two peas. From the fact that many of these cases were met with in very old people (some of them being upwards of eighty years of age), and who all life-long had suffered from this form of ear-disease, and yet had been free from trouble as regarded their ears, except that which arises from discharge and deafness, I am not disposed to regard such cases as necessarily fatal; nor indeed so likely to give rise, for obvious pathological reasons, to affections of the brain or general system, as several other forms of ear-disease readily do. But, while saying this, I do not mean to convey the impression that they are not dangerous. On the contrary, they are highly so; and all the more to be feared, in that the complications that may arise are incalculable as to their results. When a case of this kind terminates fatally, as is not seldom the case, one is astonished at the rapidity with which the fatal issue is approached, and the extensive destruction of the tissues, which subsequent examination reveals. For instance, I saw a case which had continued for many years without showing a bad symptom, save constant otorrhoea, and which remained free from any other one till sixteen days before death took place; after which, examination revealed the most extensive destruction of tissues that I have ever seen as a result of ear-disease. The whole of the tissues forming the roof of the tympanum in that case was completely destroyed, as well as that portion of the temporal bone entering into the formation of the external auditory meatus. Was it conceivable, and if so, is it possible that, in sixteen days (reckoning from the onset of the more violent symptoms till the death of the patient), all this havoc was accomplished? Another fact in connection with the case, which forms the subject of these supplementary remarks, is: the duration and source of the ear-discharge; having existed for so many years, and coming from a part of the ear liable at any moment, from its proximity to important and vital parts, to be associated with dangerous complications, it is not prudent to shut one's eyes to the possibilities of the case. Indeed, for general guidance, it may be laid down and accepted as an axiom that, with an ear-discharge—whether moderate or copious in quantity, continuous or interrupted in its flow, short or long in its duration—so long as it exists, one cannot tell where, when, or how the case may terminate. For this reason alone, based as it is upon wide clinical and pathological experience, I cannot venture to predict what may be the future of the present case. The facial paralysis shows that the morbid action has, at some period in its career, implicated the Fallopian canal and its contents;\* and this fact adds to the hidden dangers of the case under notice."

"If," I further added, "I may be allowed to make a suggestion, not valueless I hope, it is that, among the questions submitted to applicants for life assurance, the question be directly asked: Have you at any time suffered from an ear-discharge? Doubtless, some of the questions

even now put by insurance companies to those who propose for life-assurance, give to them, as well as to the medical examiner, the opportunity of mentioning or ascertaining this fact, if it had existed or exists; but the beautiful indefiniteness of the question to which I refer more particularly—viz.: Do you know of any other circumstance not comprehended in the above questions that may render the acceptance of your proposal for insurance more than usually hazardous?—leaves a ready loop-hole for deceit on the one hand, or laxness on the other. Even where neither of these alternatives exist or can be entertained, there yet remains the fact that many of the laity, and not a few of our profession, regard an ear-discharge as not only not dangerous, but as positively salutary; in such circumstances, the true significance of this symptom, even when it is known to be present, is always overlooked, with consequences, now and again, that one may easily imagine."

The sequel of the case upon which I have dwelt remains to be told. The company for which I advised declined to accept the proposal, until the gentleman could offer to them satisfactory evidence that his ear-disease was cured. Being dissatisfied and disappointed with the result above related, he went to one of the celebrated German aural surgeons, from whom he received an opinion, which did not afford him more or greater assurance of safety; and it proved quite valueless in the eyes of the insurance company, to whom it was exhibited, as I was informed. Though I do not know the exact nature of that opinion, I am led, from that circumstance, to believe that it essentially corroborated mine. Another office, in which the gentleman was already insured, and had been for nearly ten years, hearing of this rejection, called upon him to resign his policy had from them, on the ground that no mention was made in their contract of assurance that he had a discharge from the ear. Having done so, he had the opportunity given to him to make a new proposal to the same office; this he did, with the result that the directors refused to accept his life on any terms. Recently, I was informed that he had been examined by a medical gentleman, and accepted by another office, which, in the knowledge of the ear-discharge, added a loading of five years to his age. It is but right to add, however, that the medical gentleman who passed him as a sound life for the first office, which afterwards rejected him on re-proposing, was the same who passed him on this last occasion.

It is this case, together with the knowledge that it is not a solitary one in relation to life-assurance experience, which furnishes me with the title of my paper, and gives me occasion to bring the subject thus prominently before the profession, especially before those who may be advisers to insurance offices. For their consideration, I will suggest two questions that may come up in the relation of ear-disease to life assurance. These are: Suppose that an individual, in good general health, with an unimpeachable family history and regular habits, applies to have a policy of assurance effected, who is either perceptibly dull in the hearing or absolutely deaf, without any ear-discharge or lesion of tissue, ought such a one to be accepted as a first-class life? or, it may be, ought such an individual to be accepted at all? Again: Ought one who does suffer or has suffered from an ear-discharge, irrespective of its quantity and duration, and with or without lesion of tissue, be accepted under any circumstances or conditions?

To attempt to reply to these questions, so as to do justice to them and to my own views as to the Etiology and Evolution of ear-disease, is impossible in the limits of a single paper. At the outset, in reply to the first question, we are brought face to face with a difficulty in the absence of a standard of average hearing distance. What, one may ask, is meant by dulness of hearing? About absolute deafness, there is no difficulty; but inasmuch as hearing is a relative function, what one may regard as dulness of it, may, by another observer, be regarded as very fair and good hearing; and further, the statement, not seldom uttered in self-defence by those who are accused of hearing badly, "that there are as many imperfect speakers as imperfect hearers," must not be lightly set aside in the consideration of this question.

Apart from the consideration that, in direct proportion to the impairment of the function of hearing, so is the individual liable to meet with accidents to which others, not similarly affected, are altogether exempt.\* Apart from this fact, however, I have to say that as clinical observation, and the balance of probabilities as to the etiology of ear-diseases in general, lead me to the conclusion that all idiopathic ear-diseases

\* Since this paper was read, I have examined the ear of a youth aged 16, who died from basilar circumscribed purulent meningitis, arising from a chronic exanthematous catarrh of the tympanic cavity, which had lasted from infancy without a bad or violent symptom, except a continuous discharge from the ear, till two weeks before the fatal issue. In this case, the brain-disease was directly caused by the diseased action in the tympanum being propagated along the Fallopian canal, by the aid of the facial portion of the seventh pair of nerves, which was of a dark colour throughout its entire length. Although there was caries of the mastoid, yet this canal seemed to be the direct channel of communication between the original disease in the tympanum and the fatal disease of the meninges.

\* It may be objected to this latter statement, that among those who make up the total number of victims of street accidents in London, the proportion of deaf people is very small; many accounting for this fact, by saying that those who are deaf have their cautiousness highly developed by their infirmity, and thus are protected in circumstances of danger. On the contrary, deaf people are too conscious of the dangers to which their loss of hearing exposes them, and, with characteristic good sense, avoid all recognised dangers. Of all places, the busy streets of the metropolis are therefore shunned, except by that very small number of those whom necessity or recklessness compel to go thither.



causing deafness, and tissue-changes accompanying them, evolve themselves from a common cause; that the gravity of the various abnormal tissue-changes is determined solely by some of the many predisposing constitutional tendencies which the general organism may inherit or acquire anew; that the possibilities of such abnormal tissue-changes, in degree of gravity, are beyond calculation, so soon as the normal tympanic tension is altered or disturbed, from whatsoever cause, I would recommend that no one who is deaf should be accepted as a first-class life; but the amount of loading ought to be determined by the risks to which his life is exposed by the defective hearing, as compared with that position were he free from all deafness. If there were, in addition, a syphilitic diathesis, or a well-marked catarrhal constitution, under no circumstances would I recommend such an individual to be accepted. In such a case, time and other influences may bring to issue such results, in the tissues of the ears, as are hardly realisable by general practitioners.

In answer to the second question, there is less difficulty in giving a reply; indeed, most assurance offices in this country are following the example of those in America and on the Continent of Europe, which refuse, under any conditions, to accept the proposals of those who suffer from otorrhœa. My own opinion on this point is, that this mode of procedure is too absolute; for there are many cases of ear-disease, with lesion of tissue, in which there are reasonable grounds for saying that, inasmuch as the ear-discharge is simply an excessive secretion from the hypertrophied tissues, or at all events not the result of an ulcerative process, either of those or the underlying bone, it may in a healthy constitution not only not increase, but spontaneously and permanently arrest itself; therefore, such cases should be accepted, with the addition of a small "loading" to the ordinary premium.

Finally, I would urge upon Assurance Companies that the state of the organ of hearing be specially considered in all life-assurance transactions; and especially that the exact pathological condition of the tissues, in a given case of ear-discharge, should be had regard to by their examining medical officers, before recommending the life for acceptance; otherwise time, or, it may be, greater care and better knowledge on the part of a future examiner, may show that this recommendation was to some extent unreliable.

### PROTRACTED SUSPENSION OF THE MORAL AND INTELLECTUAL CONSCIOUSNESS IN EPILEPSY.

By EDMUND HOLLAND, M.D., M.R.C.P., F.R.C.S.,  
Assistant-Physician to the Hospital for Women, etc.

THE reprieve of Treadaway rangles in the depths of many lay and professional minds, and heavy indeed was the responsibility of those gentlemen whose evidence averted his death on the gallows. The duration of unconsciousness after an attack of epilepsy is very variable, and, in some few cases, exceptionally protracted; and not only so, but during this period the automatic motility may be above par in force, and exerted with the appearance of rational volition. In corroboration of these views, I have briefly to relate the circumstances of a case recently imposed upon my consideration. Mrs. B., a widow aged 32, multipara, dull and lethargic in habit, and a member of a somewhat peculiar family, had epilepsy in childhood; had drunk freely of gin in married life, and to more decided excess in her widowhood. She came on a visit to her friends at 4 P.M., bearing the appearances of her ordinary health, and, whilst taking a glass of ale, fell down in an epileptic paroxysm, which was only partially exhausted when I arrived. After the fit, there was a brief restoration of consciousness to such a degree as to allow her expressing some contrition for her depraved habits; but she soon lapsed into somnolency, and slept somewhat restlessly about eight hours. Upon awakening from this sleep, the intellectual and moral faculties were suspended; her face pale, expressionless, and calm; her eyes rather widely opened, her pupils very sluggish, and the left one contracted; she did nothing she was told to do; shocked all propriety and decency; refused all food, drink, and medicine; but, with the air of a somnambulist, she quietly glided about the house until thwarted, obstructed, or taken hold of, when her force became excessive, quasi-convulsive, and her bearing so threatening as to alarm all around her; it was obvious that any show of provocation or persistent resistance would impel her to acts of extreme violence. She remained in this condition for thirty hours before she recognised her friends or accepted food, and then complained of severe headache, which was eventually relieved by sleep, conciliated by chloral and bromide of potassium, leaving her much in her usual health, but utterly unconscious of the seizure, or of its subsequent automatic phenomena.

*Commentary.*—The medico-legal teachings of this case are of considerable importance, and may aid in the solution of the want of motive frequently mystifying the elucidation of great crimes. The protracted unconsciousness, associated with the capacity of exerting exaggerated muscular force, the easily induced rage, and the ability to see and to hear, rendered her an extremely dangerous animal machine, to which suicide might readily have accrued as an accident, and by which homicide was clearly possible under irresponsible cerebration, when any obstruction to its automatic progression supervened.

### PECULIAR WOUND BY A KNIFE CAUSING SPEEDY DEATH.

By CHARLES E. HOAR, M.B.Lond., Physician to the  
West Kent General Hospital, Maidstone.

On January 9th, 1877, about 4.30 P.M., Mr. Guy was sitting at dinner opposite his wife at a table three feet square, when, in a moment of passion, Mrs. Guy stood up with a carving-knife (the blade of which was eight inches in length, and sharp, through wear, at each edge), and threw it at him. It entered the left side of his neck: he snatched it out at once, got up from the table, and walked up stairs, bleeding freely, sat on the edge of his bed, and died within thirty minutes after receiving the wound.

When seen, half an hour later, his face was pale; the pupils were widely dilated; his tongue was pressed forward between the teeth; bloody froth was in and exuded from the mouth and nostrils. A small wound was visible on the left side of the neck, from which dark blood was oozing.

*Post Mortem Examination Twenty-one Hours after Death.*—There was slight rigor mortis. The body was well nourished and of healthy appearance. There was a punctured oblique wound, three-quarters of an inch in length, in the skin of the left side of the front of the neck, anterior to the sterno-mastoid muscle, three inches (in an extended position) above the sternal end of the clavicle. On removing the skin, the left anterior jugular vein was found to be perforated vertically, and empty of blood; the left sterno-hyoid muscle was cut through diagonally. There was extravasation of blood in and around this muscle. The left sterno-thyroid muscle was cut through; the first and second cartilages of the trachea on the left side of the front were obliquely cut through, and the lower part of the second cartilage was also perforated towards the back on the right side. Some small deep veins at the base of the neck on the right side were wounded; and there was considerable extravasation of blood directly connected with the posterior aperture in the trachea. The wound penetrated between the bodies of the vertebrae and the inner side of the anterior part of the first rib (nearly wounding the right pleura) to a distance of five inches (in an extended position) from the skin. The thyroid gland was large, but uninjured. The carotid artery and internal jugular vein of each side were also uninjured. The bronchi were full of dark blood. On opening the chest, the lungs did not collapse: they were pale in front, but distended with frothy blood and air. The large veins of the chest and right cavities of the heart were full of dark fluid blood. The left cavities of the heart were empty, and ventricle firmly contracted. The stomach contained dark matter.

The case is interesting in many points. The cause of death was undoubtedly suffocation, in consequence of the blood flowing into the trachea, principally through the posterior aperture, and filling the bronchial tubes. Whether syncope from loss of blood accelerated the decease or not, it is hardly necessary to inquire, as the suffocation must have soon occurred. It is said that he spoke a few words after he went up stairs. The very small external wound, the depth which the knife penetrated, the transfixion of the trachea, and the immunity from injury of the carotid arteries and internal jugular veins, were peculiar features of this case.

It is attested by a witness sitting at the dinner-table at the time of the event, that the handle of the knife left the hand of Mrs. Guy before it entered the neck of her husband. The knife, being two-edged, resembled a short dagger, which accounts for the severity of the wound.

The Bill indicting Charlotte Guy for the murder of her husband was thrown out by the Grand Jury at the recent Assizes. She pleaded "Guilty" to the charge of manslaughter, and was sentenced by Sir Wm. Balguy to ten years' penal servitude.

JAMES FREDERICK WHITE, herbalist, member of the Leeds Town Council, and an ex-member of the Board of Guardians, was, on the 8th instant, fined twenty shillings for refusing to have his children vaccinated.



## CLINICAL MEMORANDA.

## DISEASE OF THE SUPRARENAL CAPSULES.

I AM glad that the remarks I ventured to make on Dr. Bramwell's paper (in the JOURNAL of January 27th) have added to his previous cases the very interesting one which he has published in the JOURNAL of March 3rd. He will, no doubt, admit that the disease was not tubercular or quasi-tubercular, but, as in his other cases, lymphosarcoma. The discoloration observed was probably, as he frankly suggests, not the bronzing of Addison's disease. I had lately a patient suffering from spinal curvature and phthisis, whose aspect suggested a doubt whether his adrenals were not diseased; but the local distribution of the pigment, the absence of black stigmata and of ink-stains in the mouth, the want of ingravescence, and the absence of constitutional symptoms, decided the question in the negative; and, after death, both organs were found healthy.

I have not forgotten the case I saw in the late Professor Bennett's wards in Edinburgh in 1864; but, if the readers of the JOURNAL will refer to Dr. Murchison's account of it in the seventeenth volume of the *Pathological Transactions* (p. 396), when the symptoms and the lesion were so curiously brought together, they will, I think, agree that the condition of the other adrenal (which Dr. Murchison never saw) is not beyond doubt. Even admitting this as a case of unilateral Addison's disease, there is only one other to bear it company in the two hundred and thirty cases which the industry of Dr. Greenhow has collected—that recorded by Guttman (No. 30 in Dr. Greenhow's first group of cases); so that we may regard such an occurrence, like unilateral phthisis or Bright's disease, as an exception which proves the rule, by its extreme rarity.

I need not repeat what I said before on the distinction between the suprarenal capsules and cytogenic or lymphatic organs—spleen and lymph-glands, tonsils, Peyer's patches, thymus, and solitary follicles; for I am sure that, whatever statements may still be found in text-books, all anatomists know how entirely different their structure is. The absurd title "ductless gland" is really the only bond of connection between the adrenals, the thyroid, and lymphatic structures. What the functions of the first two organs may be, no one has yet discovered. They are so different in development and in histology from each other and from lymph-glands, that it is no wonder that their pathology is also entirely distinct.

P. H. PYE-SMITH, M.D.

## A SHAWL-PIN PASSED PER RECTUM.

IT may be interesting to the readers of the JOURNAL to have the particulars of the undermentioned case. E. W., a child aged 2½ years, was allowed to play with a shawl-pin two inches and a half in length, with a globular head of the size of a pea. This mysteriously disappeared on Friday last; and on Sunday evening, the child complaining of a pain in the lower part of the abdomen, a dose of castor-oil was administered, when shortly afterwards the pin was ejected into the utensil, it having passed through the alimentary tract without injury to the patient. I think this is a case which suggests that "it is better to let the well alone".

EDWARD R. DENTON, Leicester.

## THERAPEUTIC MEMORANDA.

## SALICYLATE OF SODA.

AN error is appended to my last week's communication which needs correction. It was as one of the Physicians to the St. George's Dispensary that I was consulted in the case of rheumatic fever sketched by me under this heading in the last number of the JOURNAL.

I wish also to report that the swelling and thickening of the right knee, the only joint that threatened chronic enlargement, entirely disappeared during another week's continuance of the salicylate of soda. The last dose of this medicine was given on March 8th at 10 P.M. The urine passed at 11.30 was high-coloured, and gave a very dark purple or violet reaction with the iron-test for salicylic acid. This reaction was well-marked in the urine passed four hours later. After eight hours, the reaction was still marked; so also after twelve hours. At 4 P.M. on March 9th, the urine gave a faint reaction, which was not quite absent from that passed at 7 P.M.; no trace could be detected after this. Ten hours had sufficed to eliminate all the salicylic acid when a drachm of its soda-salt had been taken daily for four days. Now that this had been steadily continued for ten days, nearly all was

eliminated in twelve hours; after twenty hours, all had disappeared. During its use, one or two small doses of castor-oil were required. Total cessation of cough and of night-perspiration also point to an astringent effect. Sleep at night was sound throughout. Slight hebetude by day, not noticed since the 9th, may indicate some influence on the nervous system. The man is now well, and takes salicylate of iron as a tonic.

WILLIAM SQUIRE, M.D., M.R.C.P.

## REPORTS

OF

## MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

## LONDON HOSPITAL.

## CASE OF HYDROPHOBIA.

(Under the care of Dr. SANSOM.)

FOR the notes of the following case we are indebted to Dr. CLIPPINGDALE, House-Physician; who, in reporting the case, acknowledges the aid of Mr. Herman Tribe, medical assistant.

P. B., a lad aged 17, was admitted on February 19th, 1877. The history obtained was that, either in July or August last, while the patient was in the street, a dog had bitten the forefinger of his left hand. The wound was merely an abrasion, and did not bleed; it was bathed in warm water, but not cauterised; it tingled considerably, and was long in healing. The patient had apparently good health until about three weeks before admission, when he began to suffer from the following symptoms:—headache, sleeplessness, loss of appetite, alternate heats and chills, a sense of discomfort about the præcordium, and melancholy; the melancholy having been so great, that he had once attempted to commit suicide. On February 17th, two days before admission, he complained of shooting pains in his left arm, running from the hand, the forefinger of which had been bitten to the axilla. The day following, he kept his bed, on account of these pains, and, in the evening, refused to drink, because of a feeling he had of fulness in the throat. The following day (day of admission), he was seized with convulsions whenever he attempted to drink.

When admitted, at 9 P.M., his condition was as follows. He was in a very excited condition; his countenance wore an expression of much anxiety and alarm; his skin was hot and sweating profusely; his cheeks were flushed; the conjunctivæ were suffused; the pupils were dilated; the retinæ hyperæmic, with arteries almost of the size of veins; respiration hurried, 48 in the minute; pulse rapid, 132, and moderately full; temperature 100 deg. Fahr. The secretion of saliva seemed to be much increased; the saliva itself was viscid and frothy; the patient constantly removed this from his mouth with a handkerchief; when any was allowed to enter the œsophagus, a convulsion was immediately produced. Upon the buccal mucous membrane and beneath the tongue were some spots believed to be *lyssi*; there were papules, in some places vesicles, about the size of pins' heads, each surrounded by a broad dark ring of congestion. The patient complained of pain and numbness of his left arm; but there were no abnormal marks to be seen, and no remains of the dog-bite. Fanning the air near the patient, or splashing water, instantly produced a convulsion, but the continuous pattering of rain upon the window of his room had no such effect. He seemed unwilling to drink; but, when urged to do so, took a cup of milk in his hand and carried it to his mouth; but, as soon as it touched his lips, a convulsion was produced and he thrust it away. He seemed anxious to overcome his difficulty, and, taking the cup again, carried it to his lips more slowly and cautiously, but with the same result. This was repeated two or three times; he then made a determined effort to drink; throwing back his head, he held the cup above, and, opening his mouth widely, allowed the milk to drop into it; this immediately produced a convulsion; but, pressing both hands tightly to his mouth to keep the milk in, he threw his head back again and kept his hands to his mouth until the liquid had gravitated down the œsophagus.

After admission, the convulsions increased in frequency and severity; the temperature rose to 101 deg.; the pulse increased to 80 and the respirations to 56. At about 3 A.M. on the 20th (six hours after admission), he first showed signs of prostration; his skin then became clammy and covered with a cold sweat; his cheeks became less flushed and his pupils smaller; the convulsions became less severe, and were separated by longer intervals. At about 4 A.M., he asked for some



milk; this he drank quietly without any convulsion, and expired a few minutes later.

The patient twice voided urine. That passed first was found to have a very alkaline reaction, specific gravity 1032, albumen one-seventh, urea 1.9 per cent. That passed two hours later was also very alkaline; specific gravity 1030, albumen one-fourth, urea 1.8 per cent. It contained sugar, the presence of which was demonstrated by all the ordinary tests, and by Fehling's process it was found to amount to 2.2 per cent. The urine had a reddish colour, and gave with ozone and guaiacum the characteristic reaction of blood, and with the spectro-scope the absorption-bands of oxidised hæmoglobin. It was carefully examined for blood-corpuscles, but none were found. The deposit contained epithelial casts of the uriniferous tubes, loose epithelial cells, triple phosphate crystals and small round crystals of urate of ammonia.

No specific treatment was adopted in this case. The *lyssi* were cauterised with a fine pencil of nitrate of silver; hypodermic injections of morphia were given, and the patient was fed by enemata of milk and beef-tea.

The *post mortem* examination was made by Dr. Sansom twelve hours after death. Rigor mortis had entirely passed off. The lungs were congested, and the lower part of each cedematous. The left ventricle of the heart was contracted and nearly empty; the right ventricle was accidentally wounded in opening the chest; there was violet injection of the muscular structure of the heart, as seen from the interior, otherwise the organ was healthy. The liver, spleen, and kidneys were venously congested. In the mucous membrane, at the back of the tongue, were some whitish bodies, apparently distended mucous follicles, oval or spherical in shape, varying in size from a pin's head to a small pea. The mucous membrane of the larynx was congested. The stomach contained mucus, unusually ropy, and there were hæmorrhages beneath the mucous membrane, especially along the greater curvature. There was general venous congestion of the spinal cord and its membranes; the grey matter was unusually distinct. The brain was soft and much congested. Specimens of the various tissues and organs for microscopical examination are in the hands of Dr. Stephen Mackenzie, whose report is necessarily deferred.

REMARKS BY DR. SANSON.—The foregoing is a painful instance of this distressing and appalling malady. Its clinical features may be thus summarised:—*Incubation*, between six and seven months (about the average); *prodromata*, three weeks; *initial symptoms of pain*, three days; *convulsions*, two days. During the short time that the case was under observation, one or two noteworthy points were recorded, in addition to those symptoms which have been so often described. Thus the extreme arterial distension was shown in the manifest dilatation of the retinal arteries. Again, blood was detected in the urine, not only by the guaiacum test, but by the blood-bands seen by means of the spectro-scope by many observers. Another noticeable fact was the occurrence of glycosuria. I have not seen this recorded as a phenomenon of hydrophobia, though it has been observed in tetanus and, as Dr. Dickinson has said, in examples of violent muscular effort. The rapid evolution of symptoms whilst the patient was in the hospital gave no time for experimental therapeutics. Supposing a similar case were to present itself in the initial stage whilst pain was proceeding from the situation of the bite to the centres, I should incline to advise the treatment suggested by Dr. Bowman of Manchester (*vide* BRITISH MEDICAL JOURNAL, March 3rd, 1877), based on the experience of Professor Vogt's successful case of traumatic tetanus. The brachial plexus was exposed and the nerve-trunks drawn out and stretched, and the result was that the tetanic symptoms ceased and the patient was cured. (*Centralblatt für Chirurgie*, No. 40, 1876: BRITISH MEDICAL JOURNAL, February 3rd, 1877, p. 137.) Should other such successes be recorded, the *quæstio vexata* of the nature of tetanus will have a new light thrown upon it, the zymotic theory of its origin must be cast aside, and we must conclude that the disease is one of neural change or centripetal irritation. And as tetanus, so may be hydrophobia.

#### DERBYSHIRE GENERAL INFIRMARY.

##### FOUR CASES OF ACUTE RHEUMATISM TREATED WITH SALICYLIC ACID.

(Under the care of Dr. OGLE.)

CASE I.—J. C., a labourer aged 19, was admitted into Fearn Ward on June 19th, stating that he had been taken ill five days before with pain in his knees. On admission, his knees and ankles were swollen, hot and painful, and he complained of considerable pain in his chest. Præcordial dulness was much increased, while the heart-sounds were muffled; and there was a very decided friction-sound at the base. His temperature on admission, about 5 P.M., was 101.6. He was ordered

a mixture containing fifteen grains of salicylic acid with five grains of bicarbonate of soda every four, and the temperature to be taken every four hours. The temperatures were as follows: 19th, 5 P.M., 101.6; 9 P.M., 100. 20th, 1 A.M., 99.2; 5 A.M., 99; 9 A.M., 99; 1 P.M., 100.6; 5 P.M., 100.6; 9 P.M., 100. 21st, 1 A.M., 99; 5 A.M., 98.8. Thus, after ten doses, his temperature fell to the normal. In the course of three days, his pericardial symptoms entirely disappeared. The effusion rapidly diminished in his knees; and, although he complained of some aching for some time afterwards, their appearance was quite normal. On June 28th, the acid was discontinued, and he was ordered perchloride of iron mixture; but, on the 30th, he had a slight relapse. The salicylic acid was returned to on July 4th, his temperature having gone up to 100 and 101; but, on the morning of the 6th, it had fallen to the normal, and he was discharged on July 11th.

CASE II.—J. D., labourer, aged 24, was admitted into Fearn Ward on July 12th, stating that he had been ill for fourteen days, with pain in his joints. On admission, his knees were swollen and painful. The heart-sounds were clear, with the exception of a slight pericardial friction-sound. Temperature on admission 100.2. He was ordered twenty grains of salicylic acid with seven grains of bicarbonate of soda every hour for the first six hours, and every succeeding four hours afterwards. The temperature taken at the time of the administration of each dose of the medicine were as follows: July 12th, 12 noon, 100.2; 1 P.M., 100.1; 2 P.M., 100; 3 P.M., 101; 4 P.M., 101.2; 5 P.M., 100.6; 6 P.M., 99.8; 10 P.M., 100.2. July 13th, 2 A.M., 99; 6 A.M., 98.6. From this time, that is, after the administration of ten doses, the temperature never again rose, whilst his joint-affection rapidly disappeared, as also the slight pericardial friction. The salicylic acid was discontinued on the 21st. He was ordered quinine and iodide of potassium, and was discharged on August 7th.

CASE III.—J. G., domestic servant, aged 16, very anæmic and weakly in appearance, was admitted into Wright Ward on July 16th, stating that she had been ill for a week. On examination, both wrists were very much swollen, red, and acutely painful, as also her knees to a less extent. She also complained of severe and sharp pain in the chest; there was increased pericardial dulness, and slight pericardial friction-sound. Temperature on admission 100.4. She was ordered the same mixture as the last case, to be taken every hour for the first six hours, and every succeeding four hours. The temperatures were as follows: July 16th, 11.30 A.M., 100.4; 1.30 P.M., 100.3; 2.30 P.M., 99.8; 3.30 P.M., 98.8; 4.40 P.M., 100.3; 5.30 P.M., 99.2; 6.30 P.M., 98.9; 10.30 P.M., 98.2. After seven doses, her temperature never again rose above the normal. On July 17th, after nine doses had been taken, the redness and swelling of her wrists and knees very much diminished, but she complained of dimness of sight, of intense headache, with buzzing and noises in her head, while she appeared to be almost deaf. The salicylic acid was stopped, and she was ordered effervescing medicine. All these symptoms had disappeared by the next day, while her joints in two days were perfectly normal. On July 21st, she was ordered quinine and iodide of potassium, and was discharged on August 21st, having been retained in the infirmary for a considerable period after her rheumatism had completely disappeared on account of her general debility.

CASE IV.—G. D., farm-servant, aged 20, was admitted into Fearn Ward on July 17th, having been ill for a few days. On examination, both ankles and his right knee were the seat of considerable inflammation, with effusion, and very painful. Temperature on admission 102.8. The same mixture as in the two previous cases was ordered every hour for six hours, and every succeeding four hours. The temperatures taken at the times of administration of the medicine were as follows: July 17th, 6 P.M., 102.8; 7 P.M., 101.6; 8 P.M., 101.4; 9 P.M., 101.3; 10 P.M., 101.4; 11 P.M., 100.6; 12 P.M., 99.8. July 18th, 4 A.M., 100; 8 A.M., 99.8; 10 P.M., 99.8. July 19th, 10 A.M., 99; 10 P.M., 98.8. After seven doses, then, his temperature fell from 102.8 to 99.8, but it did not fall at once to the normal, remaining slightly above it for another day. On July 21st, rheumatic symptoms having completely disappeared, he was put on quinine and iodide of potassium, and discharged on August 7th.

REMARKS.—In the above cases, the marked and rapid disappearance of all the physical signs of the disease was manifest. The heart-complication which existed in three out of the four, and in one of them to a serious extent, seemed equally benefited. During the treatment with the acid, the patients were bathed with their copious perspiration; the bedding having frequently to be changed. In the last three cases, where the large and frequent doses of the acid were taken, the drug seemed to produce very great depression, with a very slow and soft pulse, and perhaps convalescence was protracted (after the rheumatic symptoms disappeared) on that account. But it seems probable that a stimulant, as ammonia, given in small doses with each dose of the acid,



might obviate this result to some extent. The third case is somewhat remarkable, inasmuch as the patient, a girl of sixteen, after taking one hundred and eighty grains in eighteen hours, appeared to be suffering from all the effects of severe cinchonism, and a similar result has been noticed in a more recent case. This would decidedly seem to point to a similarity of its action with that of quinine. In all the cases, the acid was given in solution with bicarbonate of soda, just sufficient to dissolve it. It was found preferable to giving a large dose of an insoluble powder; while, with the soda, it forms a pleasant and agreeable mixture, almost without taste, quite in contrast with the solution of the acid in borate of soda, which is decidedly the reverse of pleasant.

## REPORTS OF SOCIETIES.

### CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 9TH, 1877.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

*Rules respecting Papers to be Read before the Society.*—The PRESIDENT directed the attention of members desirous of contributing papers for reading and discussion to the rule which requires such papers to be forwarded to the Secretary, one week at least before the meeting at which they are to be brought forward.

*Exophthalmic Goitre, with New Phenomena.*—Dr. BURNEY YEO read a paper on this subject, which will be found published *in extenso* at page 320 of this week's BRITISH MEDICAL JOURNAL.

When the patients had been exhibited, Dr. GREENHOW said that he agreed with most of the points mentioned in the paper, though there were a few upon which he would like to speak. He had recently been treating a lady who suffered from profuse perspirations and falling off of the eyebrows, rather more on the right than on the left side. He recollected two other cases in which the disease was more obvious on the right than on the left side, and in the lady the right eye was more prominent than the left. He thought the cross character of the disease had not been observed by others than Dr. Yeo. In his patient, the right eye and the corresponding right lobe of the thyroid were the larger, not the opposite eye and lobe. The treatment of his patient had been conducted with all kinds of drugs, in the country, before the case came to Dr. Greenhow; he himself had tried iodide of potassium in five-grain doses, with syrup of the iodide of iron in half-drachm doses, given thrice daily, and the patient had done very well. Great benefit was also obtained from change of air. Two other patients had also received benefit from change of air and the administration of the iodides. As regarded the origin of the disease, in two of his cases it had originated from great mental shock. One lady lost three children at once from scarlet fever, and within a fortnight had exophthalmos. The second case was also traceable to great mental shock. A third patient had suckled her baby too long. Dr. Greenhow hardly thought Dr. Yeo should draw the conclusions he had done respecting the cross character of the exophthalmos and the goitre; he himself having seen both most developed on the same side.—Dr. THEODORE WILLIAMS said that a patient of his resembled very much Dr. Yeo's first case. In treating her, he had tried tincture of perchloride of iron, beginning at fifteen minims and increasing the dose to forty minims; and the patient had improved wonderfully. He then tried change of air to Norwood, and she was still further benefited. Had Dr. Yeo tried iron?—Mr. CASSON had seen many cases of exophthalmos and goitre in Derbyshire. Was the exophthalmic variety different from ordinary goitre? He mentioned the case of a man subject to extreme nervous prostration, who, upon going to consult a dentist, had fainted when he saw the forceps in the dentist's hand, and had remained in the faint for an hour. Any shock caused him to faint. He had a huge bilateral goitre. At length, he was about to be apprehended by the police for a felony, when he cut his throat; however, he merely sliced the goitre, which thus became cured. The man was then imprisoned for one year. The cure in his case was perfect, both as to the goitre and exophthalmos, and the latter affection had with him been extreme.—Dr. YEO traced the origin of the disease in his first case to the patient's fourth confinement and the subsequent fever. As regarded the cross phenomena in his case, he had simply mentioned the fact as a suggestion for the meeting. He, too, had given iron to his patients, but scarcely cared to mention it, as it was usually said to increase the heart's difficulty and the diarrhoea, as were many other remedies. Still, he thought strychnine and iron combined was the best tonic. Change of air should always be recommended. Iodide of potassium was denounced in the usual text-books. Exophthalmic goitre had de-

finite symptoms of its own, apart from ordinary goitre.—Dr. GLOVER thought that it should be noted that, in one of Dr. Yeo's patients, there were patches of loss of hair in other parts as well as in the eyebrows—such bald patches existed on the scalp, whilst the right axilla and right arm had lost all traces of hair.—Mr. CALLENDER spoke of a gentleman who at first lost half his moustache, then the remainder, and, finally, his beard and whiskers.

*Cavity in the Lung sufficiently large to give rise to Tinkling Sounds, undergoing Contraction.*—Dr. THEODORE WILLIAMS exhibited the patient, a middle-aged foundryman, in whom the disease began ten years ago with profuse hæmoptysis, followed by the usual phthisical symptoms. Three years ago, a tinkling cavity was detected in the upper portion of the right lung. Since that date, he had gained flesh, the cough had diminished, and he had been able to return to his occupation; and, on readmission into the Brompton Hospital in December 1876, marked shrinking of the whole of the right chest was noticed. The cavity was found to have contracted, but not to have disappeared, distant cavernous sounds being still audible. The physical signs indicated considerable displacement of the neighbouring organs, the left lung was drawn across the median line, and the liver and heart were both displaced towards the contracting cavity. The general health showed corresponding improvement, a considerable amount of weight having been gained. Dr. Williams remarked that the contraction of an amphyoric cavity was a very rare occurrence, and that this was a good instance of the various changes in the wall of the thorax, amounting here almost to a deformity, and the displacements of the various organs that were necessary to fill up so large a void.

Dr. B. YEO thought that the fact of there being a contracting cavity in the lung was simply accidental, and not due to any special treatment. He mentioned the case of a clerk in the city, who for twelve years had had a cavity in the lung, but who took extremely little care of himself, going on an omnibus in all weathers and from his daily occupation to Brompton, and in whom, without any special treatment or care, the cavity had greatly contracted.

*Three Cases of Gas in the Peritoneal Cavity, without Perforation of the Bowel.*—Mr. R. GODLEE read notes of these cases. He said the condition was not noticed in the ordinary text-books, and was rarely pointed out to students at the bedside. The first patient was a man who, as a soldier, had served in India and suffered from dysentery. He had also had syphilis; had two carious ribs and phthisis, and advanced albuminoid changes with ascites. The abdomen was distended; the enlarged liver reached nearly to the umbilicus, but the area over it had mostly a tympanitic resonance, except when the finger was thrust through the tympanitic region; then the liver was felt and a dull percussion-note elicited. At the necropsy, no gut was found superficial to the liver. There were ulcers in the colon, but no perforation; the portal vein was pressed upon by enlarged glands. The second case was that of a stout woman suffering from obstruction to the bowels from tumour. The obstruction had been complete for three weeks. The abdomen was greatly distended, and there was constant vomiting. Colotomy was performed by Mr. Heath. A large mass of fat was cut through; then a protrusion of peritoneum distended with gas appeared in the wound. It was punctured, as the bowel could not be found, and gas escaped. The bowel was then discovered and opened. The patient died next day. At the necropsy, no perforation of the bowel could be anywhere discovered. There was very early general peritonitis and a little rather older, with some lymph round the cecum, corresponding to an ulcer as large as a threepenny-piece, filled with slough, in the mucous membrane. The bowel at the seat of stricture was entire. The third case was that of a person aged 72, upon whom Mr. Heath had performed colotomy nearly five weeks ago. The obstruction had lasted three weeks before the operation, and there had been much distension. Gas in the peritoneal cavity was suspected, because there was scarcely any liver-dulness, and the percussion-note over the whole abdomen was about equal. The first thing that presented in the wound was a knuckle of peritoneum distended with gas and a little clear fluid. But the bowel was searched for, found, and opened in the usual way. The patient was now alive, and it was, therefore, quite safe to conclude that there had been no perforation in this case. Mr. Godlee thought osmosis might account for this condition, and he brought forward the cases with the intention of pointing out an accident which might happen to anyone in the course of colotomy. He wished also to hear whether the condition he had described was rare or common.

Dr. CAYLEY mentioned the case of an elderly patient, much emaciated, and with the peritoneal cavity greatly distended. Colotomy was being performed, when there was an escape of gas from the peritoneal sac. The patient died half-an-hour afterwards. In that case, there was certainly no perforation of the bowel.—Mr. CHRISTOPHER HEATH



spoke particularly of one point—the general distension of the abdominal cavity. In the elderly patient, coils of intestine were at first to be seen through the wall of the abdomen; but before the operation no bowel could be seen through the abdominal parietes. Colotomy was done in the right loin. In another case, the obstruction permitted the operation to be done on the left side. The sun shone on the wound, and he could thus fortunately see that he had at first come down upon distended peritoneum and not bowel. Sunlight, where obtainable, was, he thought, the best test to employ for distinguishing between bowel and peritoneum.—Mr. MAUNDER said those who were not unfrequently called upon to perform colotomy would be grateful to Mr. Godlee for the hint which the relation of his cases had afforded. Doubtless his explanation of the presence of gas in the peritoneal cavity was the correct one. The same explanation was probably applicable to cases of abscess seated near the intestinal tube, whether about the rectum or to be felt through the anterior abdominal wall, which sometimes contained gas; and this, rendering them tympanitic, was a possible source of error in diagnosis. With regard to Mr. Heath's suggestion, that the drum-like condition of the belly might be regarded as diagnostic of gas in the cavity, Mr. Maunday thought that this condition could not be looked upon as characteristic. The information derived from examination of the abdominal wall was so contradictory and variable in different patients, and even in the same patient at different times, that it was not reliable. In his last colotomy case (*Medical Times and Gazette*, Feb. 3rd, 1877), the small intestines were at first remarkably visible through the abdominal wall; but, at a later period, when the patient had consented to the operation, the surface of the abdomen was so tense that the state of any organ within could not be determined. Right colotomy was performed; and, a month afterwards, this gentleman was out and about his business.—Dr. CAYLEY said that, in his case, the gas which had escaped when Mr. De Morgan operated was not fetid.—Mr. CALLENDER inquired if, in the second case operated upon by Mr. Heath, the colon was attached by a mesentery, and was supported on it loosely in the peritoneal cavity.—Mr. HEATH replied that such was not the case, but that the bowel was reached in the usual way.

*Neuro-retinitis in one Eye, followed by partial Atrophy of the Optic Disc and accompanied by Colour-blindness.*—Mr. B. THOMPSON LOWNE read notes of this case. The patient was a young lady aged 18. The cause of the attack was unknown. The optic disc was much swollen, presented an indefinite outline, and was surrounded by numerous streak-like ecchymoses; and numerous exudation-patches were apparent on the retina. The atrophy commenced about five weeks after the commencement of the attack, and was preceded by colour-blindness. The patient was, and still remained, insensible to red and green. These colours appeared as pale orange and yellow respectively; dark green, however, seemed nearly black, blue and violet were scarcely distinguished, the former appearing like the latter. The field of vision had never been contracted, but, at first, the periphery only was sensitive to light and capable of vision; all power of direct vision was entirely extinct at first, but she now read  $\frac{1}{2}$  of. Indirect vision was, during the attack,  $\frac{1}{4}$  only in the inner portion of the field.

## REPORTS AND ANALYSES

AND

## DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

### SELLERS' BISMUTH MIXTURE.

MESSRS. MACKEY, SELLERS, and Co., 1 and 2, Bouverie Street, London, have brought under our notice an excellent preparation of bismuth, which is, we think, likely to be found useful by many persons, by reason of its elegance and efficacy. Their *mistura bismuthi composita* is a transparent and pleasing preparation, miscible with water in all proportions without precipitation. It is coloured like compound tincture of cardamom. The dose is half a drachm, which contains: *Liquoris bismuthi* 3j; *aether. chlorici* ℥xv; *tinct. nucis vomicae* (P. B.) ℥viij; *acidi hydrocyanici* (P. B.) ℥ij; and *morphine hydrochlor.* gr. 4.

THE Congress of German Surgeons will assemble in Berlin on April 8th, under the presidency of Dr. von Langenbeck.

## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, MARCH 17TH, 1877.

### MEDICAL LEGISLATION.

THE symptoms that the present session may yet be one of active medical legislation are beginning to be sufficiently well-marked to demand attention. Sir Dominic Corrigan has prepared for introduction a Bill, having as its object to require all persons accepting civil public appointments in the Poor-law and Medical Health Services to pass an entrance examination, comparable to that which is imposed on candidates for the Army and Navy Medical Services. This Bill, we may add, was fully drafted, and a copy of the draft has been under the consideration of the Executive Committee of the General Medical Council. We have before alluded to the pressing necessity for an amendment of the Medical Act, which should make the fortieth or penal clause an effective and working clause, as nearly all the prosecutions conducted under it have failed, and very few are attempted, since the clause, as is well known, is so weakly worded as to allow any quack to practise with impunity, provided he do not pretend to registration; and, by this help and that of the bogus degrees which are sold from Jersey and elsewhere, the practice of quacks is more flourishing than ever. The successful prosecutions which are now being undertaken are those of druggists under the Apothecaries' Act; but this touches only a very small part, and that not by any means the most serious part, of the evil. The Medical Act, as such, is valueless for the purpose of arresting the worst class of obscene quacks in their widespread and dangerous operations. We pointed out, however, at the same time, and we have done this many times within the last few years, that, while this amendment is exceedingly urgent, and while the profession and the public alike suffer deeply for the want of it, it would of necessity involve the addition also of those clauses of the Government Bill for amending the Medical Act brought in by Lord Ripon, which provided suitable conditions for the admission to registration of colonial diplomas and of foreign diplomas of such a character as shall be approved by the Medical Council from time to time.

This part of the question has now been brought very urgently under the notice of the General Medical Council, in consequence of official communications which have been passing between the Canadian Government, the Colonial Office, and the Board of Trade. It appears that steamers, coming from Canada and other Colonies, also, we believe, carrying passengers and having on board of them regularly qualified Canadian medical officers, holding diplomas of recognised institutions of the Colony, have been refused outward clearance from British ports, because those diplomas were not registrable in this country; and it is at present required, very properly, that no passenger-ship shall clear the British ports unless provided with a registered medical officer. From India also, from the University of Calcutta, similar claims have come, which are put forward by the India Office for the recognition of the diplomas of that University. These constitute a demand so urgent that they will have to be considered without delay. Moreover, recently the Medical Council has moved the Foreign Office to complain of the proposition of M. Marvais to exclude British diplomas from France. It is quite true that French and other foreign diplomas at present enable those who hold them to practise in England outside the law; but this is owing to the defective wording of

the fortieth clause; and this state of things is so irregular that the Government, we believe, feel that they cannot any longer tolerate the inconvenient position which now prevails. Under the circumstances, further legislation is imminent, and some steps will probably be taken this session.

Looking at this question from a broader point of view, it seems improbable that the Government will or ought to rest satisfied with a short Bill for amending the fortieth clause and for regularising the position of foreign and colonial graduates. During the years which have elapsed since the whole of the Government Bill was accepted by the General Medical Council and by the profession, and in which the necessity for conjoint examinations laid down in the Bill has been admitted and repeatedly affirmed by the General Medical Council, no sufficient progress has been made. The conjoint scheme in England is not yet completed, although forty-five meetings have been held by the delegates of the English bodies. In Ireland, the state is one of complete *fiasco*; and in Scotland no step whatever has been taken. This condition of affairs is serious, and we believe that it is felt to be so by the Government; and we have some reason to believe that, in accordance with the opinion of most highly influential persons in the profession, it is more than probable that the Bill of Lord Ripon will be revived. The question of direct representation of the profession will no doubt, therefore, again arise; and it will behove the Committee which has that part of the question in hand to consider what course they should adopt. On the last occasion, the whole question of medical reform was indefinitely adjourned in consequence of the course taken by the Direct Representation Committee of this Association, which refused to allow the Bill to pass (even at a stage in the session when the refusal was fatal to it) on the promise of the Government to appoint a Select Committee to consider the question of direct representation. We do not know whether they will be disposed again to assume that position, nor do we know whether any definite information exists as to what the views of the profession would now be on the point. Their action on the occasion was fully and entirely confirmed by the vote of the annual meeting of the Association; but we are inclined to think that the subsequent experience of the profession has been such as to modify the view which was then taken. On this score, however, we have no authority to express any opinion; but, at any rate, we think it right to point out that the moment is now at hand when it seems exceedingly probable that Lord Ripon's Bill shall be and will be revived, either in its original shape or with some modifications. The Government, indeed, would not be doing their duty either to the profession or the country, if they were not now to prepare without delay to resume the consideration of this really very important question; and we invite our members also to prepare themselves for the consideration of the subject from a large point of view.

#### INFANTICIDE AND CONCEALED BIRTH.

A TRIAL has recently taken place at the Westmorland Spring Assizes, which strikingly illustrates the powerlessness of the law to deal with some atrocious crimes. A widow, aged 41, described as of superior education, pleaded guilty to three indictments for concealing the births of her children. It appeared from the evidence that, during the twelve years which had elapsed since her husband's death, the accused had had five children, and that she had most probably destroyed them and had secretly disposed of their dead bodies. We say most probably, because the concealment of the dead bodies had been so effectually carried out that there could be no medical evidence of the cause of death, although, from the medical facts, there was the strongest presumption that three of the children at least had been deliberately murdered. Marks of violence sufficient to account for death were found upon each of the bodies, which are described as being in a dried or mummified state. The bodies were found in boxes, in which they must have been lying for several years. In two of the cases, cords were found tied round the necks of the children, deep enough and tight enough to cause death

by strangulation. In the third case, the head had been severed from the body, and in this child the umbilical cord was found tied. Owing to the dried condition of the bodies, no evidence could be obtained from the lungs or other organs to determine whether the children had been born living and had had an independent existence.

In the absence of any proof of life after birth, it was impossible to indict the woman for murder, and thus she escaped by pleading guilty to the minor charge of concealment. The punishment inflicted was disproportionately small—being two years and three months' imprisonment—when, upon the three indictments, six years' imprisonment might have been awarded.

There can be but little moral or medical doubt that these children were murdered, two by strangulation and one by cutting the throat. It was not pretended that they had been born dead, and there is no conceivable reason why cords likely to cause strangulation in the living should be put round the necks of children already dead, nor is there any reason why the throat of a dead child should be cut or the umbilical cord tied.

The absence of technical proof of an independent life in the child was, on this occasion, the bar to a conviction for three inhuman crimes. We do not see why, in cases of this kind, an accused person should not be compelled to give some explanation of the suspicious circumstances under which the body of a new-born child is found. It could not in any way injure a woman really innocent: it might be damaging to one who was guilty of murder, but this surely is of less moment than allowing deliberate acts of murder to be perpetrated in defiance of law. Cases like this point out to criminals that, in order to escape a charge of murder, they have only effectually to conceal the body of an infant in a box for a certain time. They need not even remove from the body the physical marks of the instruments by which life has been destroyed. The law will assume for their defence that the child has been born dead, and that they have only been guilty of concealing the birth.

It has been suggested, in these cases of mummification, that the desiccated body might be so restored by artificial means to something resembling its natural state, as to furnish evidence of an independent existence. The only organs from which any evidence of this kind could be derived, would be the lungs. These, when once completely desiccated, could hardly, by any amount of careful maceration, be restored to their pristine condition; even if air were proved to be present in them, this might be assigned to partial decomposition. The microscope might show its distribution in cells, but a cautious witness would hardly venture to advance this as an absolute proof of an independent life in the child after birth. If such an appearance were found, it might fairly be assigned to possible breathing during birth.

In the cases on which we have here commented, the facts that the instrument of death was found round the necks of the children, that nothing but design could explain this, and that the bodies were concealed, were in themselves sufficient to justify a charge of manslaughter, if not of murder.

#### MILLBANK PRISON AND GUNNER CHARLTON.

THE honourable member for Hythe, who has hitherto distinguished himself by his mastery of numerical details, his great aptitude for railway administration, and a huge appetite for work, has lately presented himself in a new character. His ambition is evidently to be as great in the world of fiction as in the world of fact. Accordingly, on Monday, March 5th, Sir Edward Watkin treated the House of Commons to a grand sensational speech, in which a certain Gunner Charlton, now deceased, described as an "estimable soldier", was represented as "the victim of cruelties as great as any which were perpetrated in Bulgaria"—cruelties inflicted by the officials of Millbank Prison, in which model establishment the "estimable gunner" was being "slowly murdered" as far back as the summer of 1875. Charlton's suffering were not brought forward on Monday week for the first time, for we find Colonel Mure stating that "for a long time the



House was under the painful impression that this man had been done to death". Sir Edward began his thrilling story by designating the deceased gunner as an "estimable soldier", "a man of more than ordinary intelligence, popular with his brother soldiers, as well as of good character". But "no doubt the man had his faults". We will clear the way to a proper understanding of this case by briefly stating what these "faults" were. During the thirteen years that Charlton had been in the service, he had earned sixteen entries against his name in the defaulters' book; had been tried four times by court-martial; and on November 10th, 1874, he was tried by court-martial for insubordination, and sentenced to one hundred and four days' imprisonment with hard labour. We may add that, having been discharged from hospital with upwards of twenty pounds in his pocket, he was found on the last day of last year "dying in the streets of Woolwich"; and that his life was brought to its close in the workhouse four days afterwards. He had spent all his money, with some contribution from Sir Edward Watkin, in the short space of six weeks.

It was soon after November 10th, 1874, that Charlton was sent to Millbank to undergo his sentence of one hundred and four days' imprisonment with hard labour, and then commenced that series of negligences and cruelties which Sir Edward describes as a process of slow murder, and compares to Bulgarian atrocities. At Millbank, as Mr. Hardy tells us, Charlton "complained of slight ill health", "was taken off shot-drill and put upon lighter work. He remained at Millbank up to March 1st, when he was put in charge of a sergeant, with sixpence, the usual allowance for his breakfast, and sent down to Exeter. He then made no complaint;" but (we are still quoting from Mr. Hardy's speech) "no doubt his feet had got into a bad state, not from cold, but from other causes." "He had to walk through the snow to the station, and no doubt had a cold journey; and it was in the course of that journey that the frost laid hold of his feet." "Being taken to the hospital at Exeter, he was afterwards transferred to the Herbert Hospital, where he remained till November 21st in last year." The cell in Millbank in which Charlton was confined was one of the warmest in the prison; and the punishment-cell, in which he spent forty-eight hours on bread and water, is (as Dr. Guy, who has taken the case in hand, shows), warmer, if possible, boarded, dry, and wholesome. It was simply impossible that the prisoner could have been frost-bitten in either of these cells; and this Sir Edward Watkin ought to have known, for he visited Millbank that he might see the state of things with his own eyes.

As everybody who knows anything of prison-life in England must be well aware, Charlton had unlimited opportunities of making complaint, but did not say that he was ill in any way. He starts accordingly for Exeter as a man seeming healthy, and not complaining of any illness; but the weather happens to be against him: hence the frost-bites and their sad consequences—amputation of parts of both feet. Charlton, having survived the process of slow murder at Millbank and its worse than Bulgarian cruelties, and the frost-bites and their consequences to boot, dies, as we have said, in the workhouse, into which all persons who contrive to squander their resources ultimately gravitate.

This is a true history of one of those modern martyrs with whose many virtues and manifold sufferings the pages of fiction abound. We notice the case in our columns, because it is one of the very worst of the class of cases to which it belongs—strangely inaccurate, and to those persons to whom it is addressed, and who believe it because it impugns the conduct and character of those in authority, eminently mischievous. We can only say that, if the true facts of the case are such as we now state them to be, the sooner Sir Edward Watkin makes an ample apology to the authorities of Millbank, and especially to Mr. Gover, to whose merits Dr. Guy bears so just a testimony, the better. This is all that Sir Edward can now do. But the mischief which he has done among all those classes who take delight in the faults and shortcomings of men in authority cannot be undone; for that Sir Edward must remain responsible.

#### DISPUTED VACCINATION STATISTICS.

It is somewhat unfortunate that it is impossible to discuss the value of vaccination, as a protection from small-pox, without having recourse to statistics. The only asserted reason for vaccination is its beneficent protective influence against small-pox, and it is, therefore, undesirable altogether to ignore the continual and reckless attempts of antivaccinationists to discredit all statistics which show advantages derived from vaccination. The Registrar-General's statistics on the subject have been especially attacked by Mr. and Mrs. Hume-Rothery, who appear to be the principal movers of the "National Anti-Compulsory Vaccination League". The primary ground of attack is, that information on vaccination contained in medical certificates relating to deaths from small-pox, furnished by registered medical practitioners, is accepted and published as trustworthy; and further, that all the numerous fatal cases in which medical certificates give no such information are published as "not stated" cases, instead of vaccination cases, as the antivaccinationists make no scruple to assert them to be. It cannot be entirely without interest to inquire as to the nature of the evidence upon which antivaccinationists base their assertion that published government vaccination-statistics are a "barefaced fraud", and that all "not stated" cases are really vaccinated cases. It is evident that, as the death-register is the basis of all government statistics on the subject, attempts to verify the facts by reference to the bodies of the deceased small-pox patients is impossible. Antivaccinationists, however, continually assert that they have ascertained, by "personal inquiry" among the relatives of the deceased victims of small-pox, that persons certified to have been *unvaccinated* were really *vaccinated* persons. Although antivaccinationists boldly assert that medical practitioners give false information in medical certificates furnished in accordance with an Act of Parliament, the only facts they have to support the charge are derived from hearsay evidence collected by themselves from relatives of the deceased, who cannot be considered impartial informants as to neglect of vaccination. It may not be generally known that the Registrar-General, during the epidemic of small-pox in London in 1871-2, attempted to obtain more complete information as to the vaccination of persons dying of small-pox than was furnished in medical certificates. Then, as now, no information as to vaccination was given in a large proportion of medical certificates. The Registrar-General, therefore, requested the local registrars, in cases where the medical certificate was silent on the point, to endeavour to ascertain from the informants of the deaths (almost invariably relatives), and to insert in the Register whether the deceased had or had not been vaccinated. Information derived in this way certainly yielded results very similar to those obtained by the antivaccinationists themselves; relatives almost invariably asserted that the deceased had been vaccinated; but, as inquiries of the medical attendants in a large number of these "not stated" cases elicited the fact that the deceased, the statements of relatives notwithstanding, bore no marks of vaccination, registrars were subsequently instructed to insert in the Register no facts as to vaccination unless certified under the hand of a registered medical practitioner. Relatives of persons dying from small-pox were found, by experience, to furnish untrustworthy information as to vaccination. Moreover, nearly all deaths from small-pox occur among the poor and ignorant, who may be honest enough in their assertion that their child was "taken to the doctor", and yet quite incapable of understanding that lancing a child's arm does not necessarily imply successful vaccination. Antivaccinationists have recently published, in the *Preston Chronicle*, a serious indictment as to the trustworthiness of some vaccination statistics furnished a short time since to the *Preston Guardians* by Dr. Ridley, the medical officer of the workhouse at Fulwood. The letter containing the indictment purports to be written by "honest working men", who have investigated the cases for themselves, but admits that the investigation was made by a committee of the *Preston Anti-Vaccination League*. The usual information was obtained by "visiting the parents or the friends of the alleged unvaccinated persons", and



this forms the basis of the charge of inaccuracy brought against Dr. Ridley. It only remains for the public in this, as in the numerous other similar cases, to decide as to the trustworthiness of the conflicting statements; to decide whether the medical practitioner who attended upon and examined the deceased patient and furnished a certificate under his signature, is not more deserving of credence than hearsay evidence collected from interested parties by antivaccination agents. It is too often forgotten, even by believers in vaccination, that, so far as relates to protection from small-pox, every person may be truly considered to be unvaccinated who does not bear distinct and good vaccination-marks. The popular delusion that every one who has been pricked with a lancet supposed to be charged with lymph is vaccinated, is fraught with mischief, especially during epidemics of small-pox. Legal certificates as to vaccination-marks afford the only valuable evidence as to the true effect of vaccination as a protection from small-pox. Hearsay evidence of relatives has been tried, and has proved to be utterly untrustworthy.

THE Prince of Wales will reopen the wards of Charing Cross Hospital on the 21st. The place has undergone a thorough repair, and is much in want of funds.

At a recent meeting of the Debating Society of the Catholic University College, Kensington, the motion proposed—"That vivisection is an useless cruelty, and ought not to be tolerated, except when restricted to professional men licensed by Government"—was lost.

THE Astronomer Royal reports that there were 17.4 hours of sunshine in London last week, out of 73.7 hours during which the sun was above the horizon. On Thursday, the sun shone, 5.4 hours; and on Saturday, 5.2 hours. On Sunday and Tuesday, it did not shine at all.

MR. CHAMBERLAIN, in his speech in the House of Commons on the Licensing Bill, stated that whereas in 1861 the deaths from excessive drinking were declared by coroners' inquests to be 199, in 1875 they had increased to 516, or 260 per cent.: a much greater ratio of increase than that of the population.

#### THE TREADAWAY CASE.

IN reference to this case, Mr. Secretary Cross has, we think, pursued the only course open to him that was at once wise, humane, and logical, in advising Her Majesty to commute the sentence to penal servitude for life. The medical investigation, ordered at the instance of the judge who tried him, showed that, though the convict is now legally of sound mind, there is no trustworthy evidence to justify those who were deputed by Mr. Cross to conduct the investigation in differing from the decision at which the jury arrived as to the state of his mind at the time of the murder; but he is an undoubted epileptic, with a terrible neurotic history, and the fits have in some degree weakened his mental faculties. His powers of self-control are certainly impaired, so that he would be prone to yield to any criminal impulse. The rational inference from this is, that he committed murder, and ought to be punished, but murder under circumstances that may be regarded as extenuating, and that might warrant a remission of the capital sentence.

#### SAMARITAN HOSPITAL.

THE Committee of this hospital have appointed Mr. Spencer Wells as consulting surgeon in the place of Sir William Fergusson, Bart., lately deceased. Two surgeons for in-patients have been appointed to succeed Mr. Spencer Wells as surgeon to the hospital; namely, Dr. G. Bantock and Mr. Knowsley Thornton, who have for some years past assisted Mr. Wells in the wards, and have regularly attended in the out-patient department. It is probable that two surgeons for out-patients will be appointed in the vacancies created by the promotion of Messrs. Bantock and Thornton.

#### ANTISCORBUTICS.

RAW potatoes rolled over in molasses are largely used in American ships in lieu of lime-juice; and Dr. Harry Leach considers them as a very valuable antiscorbutic.

#### MEDICAL SOCIETY OF LONDON.

THE new session of this Society was opened on March 12th, under the presidency of Dr. George Buchanan, who delivered a short and appropriate address on taking the Chair. The adjourned discussion on Dr. Edmunds' paper on Vegetarianism took place. Dr. Lawson objected to Professor Newman, Mr. Maitland, and Mr. Sibley being regarded as pure vegetarians, as they were all partakers of animal food in the shape of butter, eggs, and milk. They were non-flesh-eaters. Drs. Routh, Drysdale, and Griffiths protested against vegetarianism. Sir Joseph Fayrer related his experience of the effects of this diet among the natives of India, and said he had no doubt that people could live on vegetables alone. He had seen some of the finest specimens of the human race as regards strength, power of endurance, and physical development among the inhabitants of the north-west provinces of India, who were pure vegetarians; but he accounted for their condition by the fact that their food consisted chiefly of leguminous seeds, such as peas, beans, and the like, which contained a larger amount of nitrogen than other vegetables. The President summed up the discussion, saying that Dr. Edmunds had, in his paper, made out a case for the trial of a vegetable diet under certain circumstances. Age was a considerable element; as, no doubt, people advanced in years appeared to thrive on a vegetable diet; whereas children required almost a pure animal diet. Again, climate was a great factor; and in the treatment of disease vegetable diet could be strongly advocated; while, lastly and chiefly, temperance must be our guide, avoiding excess in the use of animal food, and taking, in fact, a middle course.

#### ORAL INSTRUCTION FOR THE DEAF AND DUMB.

A PROSPECTUS has been issued of a Training College for Teachers of the Deaf which it is proposed to establish in London on the German system, as soon as sufficient support is forthcoming from the public. This system dispenses altogether with signs and the manual alphabet, and communicates language by lip-reading and articulation, which it is said possesses a remarkable superiority over other methods. An efficient principal has already been secured, and funds only are wanting to enable him to commence work. One gentleman has kindly offered £1,000, on condition of a further sum of £4,000 being raised by the 1st of June next. Further information can be obtained of the Honorary Secretary, 85, Wigmore Street, W.

#### CHARGE AGAINST A HERBALIST.

AT an inquest held last week, on the body of a child aged ten months, it was alleged by Ellen Kippin, the mother, that she went to a herbalist named Mrs. Comber for some medicine for the child, who was apparently suffering from measles. Mrs. Comber gave her some castor-oil and a purple-coloured medicine. She gave the child a teaspoonful of castor-oil as directed, and afterwards a tablespoonful of the medicine. The medicine put the child in such agonies that the witness could hardly hold her, and about eight o'clock the next morning she died. The husband deposed that he went back to Mrs. Comber and told her that he thought the purple medicine had caused death. She told him to fetch the medicine. He did so, and handed her the bottle. She put it to her mouth, and said "Lord bless my soul! It's a bad job. I cannot do anything for you." She walked up and down the shop, and got out of his sight, and he suddenly heard the tinkling of glass. She then came forward, and handed witness the bottle, saying, "It is no fault of yours or mine; if I could have seen the baby, my partner would have given a certificate". Witness ran home, and upon looking at the bottle saw that the purple liquid had been poured away, and a light-coloured liquid substituted. The coroner said the case had



assumed a very serious aspect, and he therefore adjourned the inquest for a fortnight, for an analysis of the contents of the child's stomach to be made.

#### RESULTS OF OVIOTOMY IN LONDON HOSPITALS.

ON Wednesday, March 14th, Mr. Spencer Wells performed ovariectomy on two patients in the Samaritan Hospital, and made some remarks upon the results of that operation in the Samaritan as compared with those in some of the large general hospitals of London, and in the Hospital for Women in Soho Square. In 1867, tables were published showing that, while in the Samaritan Hospital the mortality was 23 per cent., and in the Hospital for Women 41 per cent., in Guy's Hospital it was 52, and in five other large general hospitals 76, per cent. At a recent meeting of the Royal Medical and Chirurgical Society, doubts were raised whether this diversity in results still existed; and an attempt has been made, by private application and by searching through published volumes of Hospital Reports, to ascertain the truth. From the Hospital for Women no report has been as yet received; but the following table Mr. Wells said, he believed, would represent the result of ovariectomy for the last nine years in four large hospitals and in the Samaritan.

	Cases.	Recoveries.	Deaths.	Mortality per cent.
Guy's .....	82	39	43	53.24
St. Bartholomew's ..	21	8	13	61.90
St. Thomas's.....	29	13	16	55.17
St. George's .....	11	3	8	72.72
Samaritan .....	296	230	66	22.29

Mr. Wells added that, when these results were known, he believed, not only that the larger hospitals would be encouraged to do all that could be done by efficient sanitary precautions, separate rooms, specially trained nurses, and careful attention to every detail likely to assist in ensuring greater success in the future in their cases of ovariectomy, but that similar care bestowed upon every patient in the surgical wards would lead to far better results in all surgical operations. There was no such useful stimulus as a little wholesome rivalry.

#### THE PUBLIC HEALTH.

DURING last week, 6,022 births and 4,152 deaths were registered in London and twenty-two other large towns of the United Kingdom. The mortality from all causes was at the average of 27 deaths annually in every 1,000 persons living. The annual death-rate was 22 per 1,000 in Edinburgh, 34 in Glasgow, and 35 in Dublin. The annual death-rate from the seven principal zymotic diseases averaged 2.7 per 1,000 in the twenty towns, and ranged from 0.5 and 0.6 in Brighton and Oldham to 3.7 and 4.8 in Norwich and Salford. The deaths from small-pox in the twenty towns, which had been 118 and 103 in the two preceding weeks, were 107 last week, of which 96 occurred in London, 7 in Liverpool, and 4 in Manchester and Salford (exclusive of a fatal municipal case in the Monsall Hospital). No death from this disease was registered in any of the sixteen other towns. In Preston, 26 deaths from small-pox have been registered since the 31st of December last, the last of which occurred on February 23rd. The fatal cases of this disease in Rochester, Strood, and Chatham during January and February were 12. In London, 2,543 births and 1,782 deaths were registered. The annual death-rate from all causes, which during the twelve preceding weeks had ranged between 20.1 and 22.6, rose last week, under the influence of the recent lower temperature, to 26.3. The 1,782 deaths included 96 from small-pox, 33 from measles, 17 from scarlet fever, 4 from diphtheria, 28 from whooping-cough, 25 from different forms of fever, and 10 from diarrhoea. The fatal cases of scarlet fever, diphtheria, whooping-cough, and fever were considerably below the corrected average weekly numbers. The 33 deaths from measles, however, exceeded both the numbers in recent weeks and the corrected average. The 25 deaths referred to fever, although 11 below the corrected average, considerably exceeded the numbers in recent weeks; two were certified as typhus, 20 as enteric or typhoid, and three as simple continued fever. The deaths from small-pox, which had been

104 and 84 in the two preceding weeks, rose again last week to 96; 43 were certified as unvaccinated, 25 as vaccinated, and 28 "not stated" as to vaccination. During the past three weeks, the deaths of 51 children under five years of age, certified to have been unvaccinated, have been referred to small-pox; of these, 20 were registered last week, including 12 in the North and 5 in the East groups of districts.

#### METROPOLITAN WATER-SUPPLY.

THE quality of the water supplied to London in February was generally much superior to that distributed in January, as appears from the following extract from the Registrar-General's last weekly return.

Dr. Frankland reports, as the result of his analysis of the waters supplied to the metropolis and its suburbs during February, that, taking the average amount of organic impurity obtained in a given volume of the Kent Company's water during the last nine years as unity, the proportional amount in an equal quantity of water supplied by each of the metropolitan companies, by the Tottenham Local Board, and by the Colne Valley Company, was—Tottenham 0.5, Kent 0.8, Colne Valley 1.0, New River 3.1, Chelsea 3.6, East London 3.6, West Middlesex 3.7, Lambeth 3.8, Southwark 3.9, and Grand Junction 4.3. The Thames and Lea water supplied by each of the metropolitan companies showed a considerable improvement upon that delivered in January, and all the waters were efficiently filtered except that supplied by the Southwark Company, which was slightly turbid and contained moving organisms. The water supplied by the Kent Company, by the Colne Valley Company, and by the Tottenham Local Board, from deep artesian wells in the chalk, was of the usual quality and nearly free from organic impurity. The Kent Company's and the Tottenham Local Board's water was very hard, and therefore unsuitable for washing or cooking purposes; that supplied by the Colne Valley Company was softened by Clarke's process previous to delivery, the original amount of hardness being reduced to less than one-fifth, and the proportion of total solid matters from 38 to 12 parts in 100,000. Dr. Hill reports, that the quality of the water supplied to Birmingham by the Corporation showed an improvement upon that of the water delivered in the preceding month. With reference to the Loch Katrine water supplied to Glasgow, Dr. Mills reports that it was of a "very pale brown colour, decidedly ferruginous, and contained suspended vegetable fibres."

#### PROFESSOR DOLBEAU.

OUR Paris correspondent writes: I have just returned from the funeral of Professor Henri Ferdinand Dolbeau, whose premature death took place on Saturday afternoon, at his residence in Paris, in the forty-seventh year of his age. As he was of the Protestant persuasion, the funeral service was performed by the Rev. Mr. Donders, Principal Chaplain of the Oratoire, who traced, in a few impressive words, the public life of the lamented deceased. At the early age of twenty, he became a Doctor of Medicine; at thirty-one, an Agrégé; and, at the age of thirty-five, Professor of the Faculty of Paris. In this latter capacity, he was charged with teaching of surgical pathology at the School of Medicine, which office he filled with rare talent and distinction. He was also Principal Surgeon to the Beaujon Hospital, Member of the Academy of Medicine, and Chevalier of the Legion of Honour. His body was interred in a family vault in the Père la Chaise cemetery, whither it was followed by a long procession of mourners, the Academy and Faculty of Medicine being fully represented on the melancholy occasion. Professor Dolbeau was a most successful surgeon, and, notwithstanding the precarious state of his health, he had acquired a practice which would have done honour to many of his seniors in years. His name will ever be associated with an operation to which he gave the name of "Lithotritie Périnéale", of which he may be considered the inventor, and for which he always cherished the hope that it will one day supplant lithotomy and lithotripsy as these operations are now generally practised. In the year 1870, a little before the war, he was laid up with empyema, for which he was operated on by Dieulafoy with the aspirator-needle which bears his name, and which was then being introduced into practice. The operation, however, having afforded only temporary relief, he was again operated on, three weeks afterwards, by the lamented Nélaton, who made a free incision into the chest, and let out a large quantity of pus. From this

time forward he rapidly recovered, and he was considered by himself and the *confrères* who attended him as perfectly cured. A change, however, soon came over his constitution, and his friends were alarmed to find him becoming rapidly stout. This condition latterly assumed the form of polysarcia, which may be looked upon as the remote cause of his death. The School of Medicine and the Clinical Lectures have been closed for the day as a sign of mourning.

#### DEATH FROM CHLOROFORM.

A CASE of death whilst under the influence of chloroform recently took place at the Derby Infirmary. Deceased, who was fifty-six years of age, was about to undergo an operation for fistula and hæmorrhoids, but, before he was ready for operation, the respiration suddenly became very irregular, he struggled violently, and the pulse, which had up to this time been good, ceased. In spite of all the means resorted to for a considerable time, he showed no signs of rallying from the first. The quantity of chloroform which had been poured into the lint-holder was in all about three drachms. The *post mortem* examination did not reveal any organic disease.

#### THE LOCAL GOVERNMENT BOARD AND CHEMICAL ANALYSIS.

MR. J. ALFRED WANKLYN complains, in the *Chemical News*, that the Local Government Board objects to the payment of more than three guineas for a complete mineral analysis of water, in addition to the routine work, for which chemists usually charge ten guineas. This seems rather sorry payment; and we are inclined to believe that departments are best served when they are willing to pay fairly for the best service.

#### THE COMPARATIVE SIZE OF BLOOD-CORPUSCLES.

A DISCUSSION which took place last year in the Bordeaux Society of Medicine and Surgery (see *Mémoires* and *Bulletins*, 1876) has shown that fresh observations are necessary to ascertain whether the corpuscles of the blood of the fœtus do or do not differ in size from those of the adult: a very important question both in physiology and in medical jurisprudence. The Society, wishing to come to some scientific conclusion on these points, has offered a prize of 1,000 francs, to be awarded at the end of 1879, on "the microscopic study of human blood, both fresh and dry, in the fœtus and the adult, in comparison with that of the other mammalia, from the medico-legal point of view".

#### HOSPITAL STATISTICS IN ST. PETERSBURG.

ACCORDING to some statistical tables prepared by Dr. Hubner and published in the *Santé*, the number of patients admitted into the hospitals of St. Petersburg in 1876 amounted to 67,879, and the number of deaths to 8,096. The winter quarter gave the greatest number of entries (18,638), and the spring quarter the maximum of deaths (2,372). Typhoid fever contributed the largest number of cases (9,342), and the spring quarter the maximum of deaths (1,225); after which the largest contingent was owing to recurrent fevers and acute affections of the respiratory organs.

#### INFANT MORTALITY IN RUSSIA.

CAPTAIN BURBARY, in his *Ride to Khiva*, gives the following rates of mortality amongst the infantine population of South-Eastern Russia. Out of 1,000 children born, 345 die in the first five years, 40 in the next five, 19 in the subsequent term, and the same number ere two decades have been completed. Thus, out of 1,000 children 423 will not reach their twentieth birthday. From another Russian table of statistics, Captain Burnaby quotes the following figures. Out of 10,000 children born, 3,830 die in the first year, 975 in the second, and 324 in the third. He continues: "Whether this excessive mortality is caused by the extreme rigour of the winter months, or by the love of spirit-drinking on the part of the parents, which causes them to neglect their offspring, is a difficult question to answer. Probably, both these influences have a good deal to do with the matter. I have frequently heard

educated Russians defend this theory, and curse the founding-hospitals, which, originally started to diminish the evil, have, in their opinion, only succeeded in augmenting immorality, whilst they have greatly added to the mortality throughout the empire."

## SCOTLAND.

DEAN STANLEY, Lord Rector of St. Andrews University, was to deliver his valedictory address to the students on Friday the 16th.

IT is gratifying to learn, from the Greenock sanitary returns for last year, that the sanitary improvements made in the burgh are having a marked effect on the health of the town. The death-rate of 1876, 27 per 1,000, was lower than in any of the previous twelve years. It is plain, however, that there is still plenty of room for improvement.

THE Public Health Committee of Edinburgh give a very favourable report of the health of the city: the death-rate had been 18.10 per 1,000 of the population. Whooping-cough had been rather more prevalent than at the time of last report, otherwise the conditions were very favourable. Two mild cases of small-pox had lately been removed to the hospital from houses in a crowded locality, and both were progressing favourably.

#### THE SCIENCE OF METEOROLOGY.

THE Royal Society of Edinburgh have conferred the Makdougall-Brisbane Prize for the biennial period 1875-1876 upon Mr. Alexander Buchan, for a paper on "The Diurnal Oscillation of the Barometer", a paper which seemed to the Chairman, Sir William Thomson, to go further than any previous writing towards giving a foundation for scientific meteorology.

#### SMALL-POX NESTS.

IT was stated this week to the Glasgow Police Board, by the Medical Officer of Health, that a death from small-pox had occurred in a lodging-house in the northern district, and that the fact only became known on the death being registered, and that the inmates of the house refused to submit to revaccination or to go into quarantine.

#### DEATH IN THE MILK-PAIL.

IN the course of last week, a sudden outbreak of typhoid fever occurred in the town of Motherwell; within a very small area, twelve cases appeared nearly simultaneously. Inquiries made by the sanitary inspector showed that a woman suffering from fever was lying in a back room in a milk-dealer's shop in the street where the cases occurred, and that nearly all the families affected have got their milk from this shop. The inspector at once caused the sale of the milk to be stopped. In a report to the local authority, he directed attention to the way in which fever-cases had been imported into the parish. Ordinary fever-patients were sent from the surrounding parishes to the fever-wards of the combination fever-house, which were meant solely for cases of fever occurring among the pauper inmates. Quite recently seven fever-patients, who were not paupers, had been sent in from the parish of Bothwell. It was decided to put an immediate stop to this practice.

#### THE ASYLUM AT MORNINGSID.

THE annual report of the Edinburgh Royal Asylum at Morningside has just been issued, and contains the records of the past year's work at the institution and an interesting *résumé* of the cases by Dr. Clouston. The total number of cases treated during the past twelve months was 1,076; the total number left in the asylum on December 31st being 726; 360 patients were admitted during the year, 280 were discharged, and there were 82 deaths. The number admitted was the largest in the history of the asylum, and the increase has taken place both in the private and in the rate-paid class of patients. The number of private patients were 50 per cent. above the average of the past three years, and the actual number was 125; 235 were paupers, an increase of 13 per cent. above the same average. The latter come from Edinburgh,



Leith, and Orkney; the former from any part of the country. Dr. Clouston considers that the increase of cases sent to asylums every year is due mainly to the following causes. 1. The importance of early and suitable treatment is now more recognised, statistics showing that many more cases are now sent in at an early stage than formerly. 2. Short transient cases, especially those due to alcoholic excess, are sent in in greater numbers than formerly. 3. Cases of slighter mental disturbance, the results of old age, paralysis, and others which formerly would not have been reckoned as insanity at all, are now sent in to be nursed and cared for. 4. The country is richer, and there is less reluctance on the part of the parish authorities to charge the rates with the cost of providing for an insane person in an asylum. 5. The capitation grant of four shillings a patient, from the Imperial exchequer, works in the same direction. The causes of the insanity in the cases admitted have not been of an unusual character. Intemperance, as usual, stands at the head of the list of causes, and, in more than one-fourth of the cases, was put down as having more or less to do with the coming on of the mental disease. The habit of taking chloral, in one case, undoubtedly brought it on. Cases characterised by depression were very numerous last year, no less than 118 of the patients suffering from melancholia, and 95 had threatened or attempted to take away their own lives. Of the 260 patients discharged, 160 have recovered. It is noted that one-sixth of all the patients in the asylum are over sixty years of age, while only ten were under twenty years of age—a very marked contrast to the general population. This interesting report concludes thus. "When a hospital for mental diseases has had within its walls in one year about 1,100 patients of all classes, 360 of whom were new admissions, with the troubles and risks of the symptoms of recent insanity; when 150 patients have left it recovered, and 85 relieved of the worst features of their malady; when there have been no preventable deaths, no epidemics, no suicides, and no accidents implying risks to the lives of patients or officials, I think it may be congratulated on having served the purpose for which it was provided fairly well."

#### THE MORISON LECTURES ON INSANITY.

DR. SIBBALD delivered the first of these lectures for the present year in the hall of the Royal College of Physicians of Edinburgh on March 6th. The subjects selected for the course were, it was stated, the views which are taken of insanity by the community in general and by the physician, and the relation between insanity and responsibility for crime; the object of the first three lectures being to show that the popular conception of insanity in this country has been different at different epochs of history, and that its present character is the result of a process of gradual development, and that it can only be fully understood if its history is studied in connection with that of European civilisation. What the popular conception of insanity is, was deduced from the condition of those persons who were treated by the public as insane. It was shown that in Greece, even at the most brilliant period of its history, there was practically no provision made for the treatment of the insane, except, perhaps, among the wealthy classes. In Rome, laws were passed which formed the basis of the insanity legislation of many countries at the present time. In this period, and also in the Greek era, few seemed to have been regarded as insane except those in a state of raving madness or utterly bereft of reason. The second lecture, delivered on Friday, March 10th, was devoted to a summary of what is known of the position of the insane in Europe during the Middle Ages, from the end of the fifth to the end of the fifteenth century. The first half of this period was one of gross ignorance and of almost universal barbarism. The effect upon the treatment of the insane, of the gradual disappearance of slavery, and of the rising influence of the Church, were considered, the latter being only in part beneficial; the good that she did in providing houses of refuge for the insane in monasteries and elsewhere being counterbalanced by the encouragement she gave to the persecution of the imaginary crime of witchcraft, and by her own persecutions of heretics, among whom, it

was shown, were many insane persons. The most recent instance of burning an insane person for witchcraft that was mentioned was one which occurred at Dornoch in Scotland in 1722. Not until the eighteenth century was any appreciable amount of asylum accommodation provided for the insane, and then it was only for those suffering from the most violent forms of insanity. In conclusion, Dr. Sibbald showed that the general idea, up to the time indicated, was, that a person to be properly considered insane must be so furiously mad as to require incarceration in a madhouse.

## IRELAND.

MR. EDWARD BERWICK, A.M., President of the Queen's College, Galway, died last week.

#### DR. R. N. TOWNSEND OF QUEENSTOWN.

THIS gentleman, who died recently, was dispensary medical officer of his district, physician to Queenstown General Hospital, and a member of the British Medical Association. His funeral took place on the 3rd instant, and was numerously attended, the hearse being preceded by a guard of honour of the Royal Cork City Artillery Militia, of which the deceased was surgeon.

#### ARTISANS' DWELLINGS ACT.

THE Dublin Artisans' Dwellings Company, which was formed about a year since, have obtained possession of two sites for the erection of suitable dwellings for the working classes, and which will be constructed with every regard to health. The company have entered into contracts for a large block of buildings in Buckingham Street and another in Echlin Street. Each house will be set in flats, and, when completed, will be of great utility for the class of people whose condition they are intended to improve.

#### THE IRISH MEDICAL ASSOCIATION AND DR. EGAN.

WE observe that the Irish Medical Association, through their Chairman of Council, Dr. Jacob, has taken steps to test the validity of the proceedings of the Dublin Corporation, by attending before and asking the auditor to disallow and surcharge a sum of £150 paid to Dr. Egan, as coroner's medical witness, during the year under audit. It would appear that for many years past the two Dublin city coroners have, except where a majority of the jury has expressed a desire to call in another medical gentleman, constantly engaged one medical man, Dr. Egan, to make *post mortem* examinations and give evidence in their courts; and, instead of paying the fees which are allowed by the Medical Witnesses Act, the Dublin Corporation has commuted the fees legally payable at inquests by a fixed salary of £150. We are pleased to find that this action has been taken, as it is not only a manifest injustice to medical gentlemen practising in Dublin that they should be thus set aside, but is in flagrant contravention of the Act of Parliament, which directs coroners to call in as medical witnesses the gentlemen who have either seen a body after, or have been in attendance immediately before, death. The auditor, though refusing to disallow the salary for the year in question, was served with notice of appeal against his decision, and we perceive that the subject will be raised in the Court of Queen's Bench. We have no doubt of the result.

#### THE DISPENSARY MEDICAL OFFICERS OF THE SOUTH DUBLIN UNION.

AT a meeting of the guardians of the South Dublin Union held on the 8th instant, a communication was received from the majority of the dispensary medical officers of the union, applying for increased remuneration, and drawing attention to the fact that the Board of the North Dublin Union had recently recognised the claims of their dispensary officers by an increase. Mr. Byrne, one of the guardians and a member of the Dispensary Committee, spoke strongly against adding to the rates by increasing the salaries, unless such were well deserved, which was not the case in regard to their dispensary officers, as, upon



several occasions, the Committee had reason to be strongly dissatisfied with them, on account of the want of attention which they gave to poor persons sick at home. Other guardians supported Mr. Byrne's assertion, and ultimately it was unanimously resolved that the request for increased remuneration should be refused.

#### ADELAIDE HOSPITAL, DUBLIN.

THE annual meeting of the subscribers to this institution was held last week, presided over by Lord Oranmore. From the report of the Committee, we learn that, during the past year, the various departments of the hospital have been maintained in an efficient and satisfactory state. Numerous applications for admission had to be refused, owing to want of room. The department for training nurses was most successful, the fees for the limited number sent out to private families amounting to £241. The enlargement and improvement of the hospital have been under the consideration of the Committee, and steps have been taken to carry out the necessary reform. The additions at present proposed are for some surgical wards, with an operation theatre and detached fever hospital. To meet these expenses, a building fund has been established, and, after various deductions, it amounts to £4,952. Besides this, Colonel Crichton collected from among his friends £3,410, besides being an annual subscriber of £25 to the hospital, and, in deference to his wishes, it has been decided that a new wing of the hospital shall be called the "Madeline Wing", in memory of his wife. The Committee record their appreciation of the ability, zeal, and unwearied attention which the medical officers bring to bear upon the discharge of their duties. During the year, 827 intern patients were admitted, 59 deaths took place, and 26 capital operations were performed.

#### HEALTH OF IRELAND.

THE twelfth detailed annual report of the Registrar General for Ireland for 1875 has but recently been published, a general abstract having been presented to Parliament in the session of 1876. During the year, the births registered were 138,320, being at the rate of 1 in 38.4, or 26.1 per 1,000 of the population; and the deaths to 98,114, or 18.5 per 1,000. The birth-rate was somewhat under, and the death-rate higher, than the average for the previous ten years; the latter due principally to affections of the respiratory organs, caused, it is supposed, by an unusual frequency of easterly winds and a rainfall above the average. The deaths from zymotic diseases registered in 1875 amounted to 16,254, or 306.13 in every 100,000, the average annual number in the preceding ten years being 16,649. During the year, the deaths from small-pox amounted to 535; measles, 898; scarlet fever, 3,845; diphtheria, 443; quinsy, 273; croup, 1,731; whooping-cough, 1,376; fever, 2,854; erysipelas, 392; puerperal fever, 442; influenza, 124; dysentery, 231; diarrhoea, 1,824; simple cholera, 80. Constitutional diseases caused 16,553 deaths, which includes phthisis, 10,240; mesenteric disease, 1,159; hydrocephalus, 1,076; scrofula, 875; cancer, 1,753; gout, 14; dropsy, 1,254. The deaths from diseases of the nervous system were: paralysis, 1,554; apoplexy, 1,042; cephalitis, 599; epilepsy, 333; insanity, 197; convulsions, 3,772; brain-disease, 863. Diseases of the organs of circulation: heart-disease, 3,922; pericarditis, 76; aneurism, 98. Diseases of the respiratory organs produced 14,568 deaths, which included bronchitis, 10,736; pneumonia, 2,138; asthma, 503; pleurisy, 275; laryngitis, 124. Diseases of the digestive organs: enteritis, 552; peritonitis, 297; gastritis, 298; ileus, 337; hernia, 122; ulceration of the intestines, 178; hepatitis, 164; jaundice, 164; liver-disease, 945. Urinary organs: Bright's disease, 312; diabetes, 112; nephritis, 82; cystitis, 75; kidney-disease, etc., 648, of which 174 were from prostatic disease. In 1875, there was one death in every thirty-eight which could not be classed, owing to the cause of death having been either ill-defined or unspecified: an improvement since 1865, when the number was one in every nineteen. There is, however, room for further improvement; but the Registrar-General anticipates that the adoption of the new form of

death certificates, by which some well founded objections of the medical profession are removed, will materially tend, not only to the attainment of the desired result in this respect, but also to the securing of a more precise record of the causes of death in general.

#### THE LEDWICH SCHOOL OF MEDICINE AND THE UNIVERSITY OF DUBLIN.

AT a meeting of the Academic Council of the University of Dublin, held on the 28th ultimo, the Ledwich School of Medicine was struck off the list of schools recognised by the University, because a certificate had been given to a pupil in January last, certifying to his attendance on lectures up to the 1st of next April. In order that our readers may understand fully what caused this unusual procedure, on the part of the authorities of Trinity College, a few preliminary observations may not be out of place. In last January, a hospital-card was signed by Mr. Ledwich, one of the surgeons to Mercer's Hospital, stating that a Mr. Mason, who was taking out an Arts Course in the University of Dublin, had attended the clinical lectures of that hospital for the session ending April 1st, 1877. The Registrar of the Board of Trinity College, on seeing this, wrote for an explanation to Mr. Ledwich, asking how such a certificate could be given, as the 1st of April had not arrived, and stating that unless a satisfactory one could be afforded, after that session the Ledwich School would not be recognised by the University. Mr. Ledwich, in reply, observed that the signing of the card was a mere oversight, and, being dated in January of this year, bore on itself the refutation that it was done for a fraudulent purpose. He likewise drew attention to the fact that, if by mistake he had done so, the Ledwich School should not be implicated in the matter, as the issue simply lay between Mercer's Hospital and the University. Upon the receipt of this communication, Mr. Ledwich was informed that, his letter not being satisfactory, the School could not be recognised after that session. He at once brought the matter before the Board of Proprietors of the Ledwich School of Medicine, a body consisting of eight gentlemen, of whom Mr. Ledwich is one, who forwarded the following document to the Registrar of the Board of Trinity College. "That the Council of the Ledwich School have heard with surprise from Mr. Ledwich the resolution which the Board of Trinity College has communicated to him, that they will no longer receive the certificates of the School for medical or surgical degrees conferred by the University. The ground upon which the Board has based this extreme measure appears to us strange, viz., that an irregular certificate has been issued by Mr. Ledwich, as Surgeon to Mercer's Hospital, an institution wholly unconnected with the Ledwich School, except that Mr. Ledwich is Professor of Anatomy in the School, and Surgeon to Mercer's Hospital. In exactly the same way, the School is connected with the Meath, Adelaide, and Jervis Street Hospitals. With none of these institutions have we any power of interference whatever. We cannot control their actions, and consequently cannot be held responsible for certificates issued by them. We are not aware that any certificate issued from this School to a student of the University has been or can be complained of, and consequently we appeal from the decision of the Board to the Academic Council, undertaking upon our part, should the former recognition be continued, in order to avoid misunderstanding in the future, that we will—1. Send in to the Medical Registrar of the University a list of our University students entered for the winter session on November 25th in each year, and of those entered for the summer session on April 6th of each year. 2. That the attendance of University students shall be verified by a roll kept by each lecturer." This was duly forwarded, but, in despite of this explanation, the Academic Council passed a resolution confirming the decision of the Board disfranchising the school. The matter is under consideration; and we shall duly lay the result before our readers.

THE Blaenavon Local Board and Urban Sanitary Authority have increased the salary of Dr. Ball, the Medical Officer of Health, from £25 to £30 per annum.



## PROFESSOR LISTER.

THE Council of King's College have invited Professor Lister to accept the office of Surgeon and Surgical Lecturer at the College and Hospital; and some hope is entertained, we believe, that he may be induced to accept the appointment. Mr. John Wood, who has long and ably served the Hospital, has received the appointment of Professor of Clinical Surgery.

## THE MILITIA SURGEONS.

THE Secretary of State for War has agreed to receive a deputation from the Parliamentary Committee of the British Association on the subject of the Grievances of the Militia Surgeons at an early date after the Easter recess. Due notice will be given of the date fixed.

## MEDICAL SOCIETY OF LONDON.

THE one hundred and fourth anniversary of the Medical Society of London was celebrated on the 8th instant, at St. James's Hall, by the annual dinner, which was numerously attended. The retiring President, Mr. William Adams, occupied the chair, and was supported by Dr. Risdon Bennett, President of the Royal College of Physicians; Dr. West, President of the Royal Medical and Chirurgical and Obstetrical Societies; Sir Joseph Fayrer; Dr. Sinnett; Dr. Hare; Mr. Bryant; Major Duncan, and many others.

In proposing the toast of the evening, the President had much to say in praise of the all-round practical work of the Society. Dr. Hare responded in a humorous style, personifying the Society as a still young and flourishing lady with many lovers, willing to have many more, and at present showing her affection to sanitary science in the person of Dr. Buchanan. Major Duncan, in returning thanks for the Army, expressed his confidence that army medical matters would come straight at last. Men, when they joined the service, looked for plenty of battles and speedy promotion, and were apt to be disappointed with country garrisons and the hum-drum task of training recruits; but he held it no small matter to educate a number of men in habits of obedience, punctuality, and integrity; and, if need be, we could still furnish men "like those who held the lines of Torres Vedras or the cornfields of Quatre Bras". Dr. Sinnett, of Arctic fame, was very cordially received. Mr. Bryant referred to the conjoint-scheme, and to the suggested alterations as to the Fellowships examination of the College of Surgeons. Dr. Risdon Bennett, in a very interesting speech, alluded to his early recollections of the Society, when meeting in Bolt Court, in the days of knee-breeches, when Dr. Clutterbuck was one of the great lights. He acknowledged much help and many friendships gained there in his earlier days. Dr. West, speaking as President of two Societies, said that honours of that kind were highly valued in youth as an earnest of the future; but when the hair was grey, they were valued more as a gracious recognition, from men with whom one had worked and competed, that on the whole a man had striven to do his duty honourably. Speaking of the work of the Societies, he compared it to mining; they tested the true metal, and they soon rejected an inconvertible paper currency. The health of Mr. Adams was ably proposed by Dr. B. W. Richardson, who dated their friendship from early days and microscopic studies. Dr. Habershon proposed the health of Dr. Buchanan, the new President, with eulogy of his excellent work, which was heartily acknowledged by the Society. The musical arrangements, under Dr. L. Forbes Winslow, were very good, and his amusing song, "The Topics of the Day", seemed to hit the mark very well. Allusions to Turkey and politics, and medical women, brought him at last to a "great physician there" and the city of health:

"When his reforms are carried out,  
I think that you will say  
That all our patients vanish will  
In a quiet sort of way."

But the company seemed by no means disturbed at the prospect. The medals were then given as awarded last week: the Fothergillian gold medal to Dr. Braidwood for his essay on pyæmia, and a silver one to Mr. R. Davy, the retiring Secretary. And when the pleasure and the business of the evening ended, there were none who could remember a pleasanter *réunion* of the Medical Society of London.

## MEDICO-LEGAL CASES.

## PROSECUTION OF AN UNLICENSED PRACTITIONER.

AT the Sligo Assizes, on March 3rd, Owen Sweeney was indicted for the manslaughter of a woman named Bridget Feeney. It appeared that the prisoner practised as a "quack doctor", and more particularly in "bleeding" his patients. The deceased had been ill with inflammation of the lungs, and sent for the prisoner. It was proved that the prisoner had opened a vein in her arm, and took two platefuls of blood from it. From the medical evidence, on cross-examination for the prisoner, it appeared that, although the bleeding might have accelerated the death of the deceased, yet it might not, and several medical practitioners were of opinion that bleeding was a proper treatment in such cases. Mr. Justice O'Brien told the jury that, after that evidence, they could hardly convict. The jury acquitted the prisoner, stating that some stringent measures should be taken by the legislature to put down quack doctors.

## ACTION AGAINST A PRESCRIBING DRUGGIST.

IN the Nottingham County Court, on Tuesday last, Mr. G. Shepperley, chemist and druggist of Long Row, Nottingham, was sued by the Apothecaries' Company, instigated by the Nottingham Medical Defence Association, for having acted as an apothecary, he being unqualified so to do. The case excited great interest amongst the chemists and druggists of Nottingham. The defendant, in his evidence, stated that he had given sarsaparilla to a man with pimples on his face; gallic acid, dissolved in water with another acid, to a female suffering from menorrhagia; and medicine to a man whose throat, being sore, he had examined; that sometimes he had refused to prescribe, whilst on other occasions he had prescribed for different ailments; that he had been in the habit of giving simple remedies for simple complaints, whilst he had sent people suffering from disease or serious complaints to a physician. Defendant had told one of the witnesses for the prosecution that "he had been prescribing, still prescribed, and should go on so doing. If the prosecution went on, he should fight the question, and, if they won, he should appeal." The judge said defendant had done considerably more than to prepare, compound, dispense, and vend, as was permitted to chemists by the 28th section of the Apothecaries' Act. As to the definition of the term "dispense", he thought it was a question for a superior court. Judgment against the defendant for the amount claimed (£20) was then given, also leave for an appeal; Mr. Buszard, who appeared for the defendant and ably argued his case, intimating that the cause would be taken to a superior court.

## AGNEW v. JOBSON AND OTHERS.

A CASE recently tried at Newcastle, Agnew v. Jobson and others, illustrated a point of law as to which error has before existed, but on which it is exceedingly important that medical men should be fully informed; viz., the right which exists—or, rather, which does not exist—on the part of any medical man to make personal examination of a patient or of a criminal, except with the full assent of the individual. In this case, the plaintiff was suspected, and had been arrested on a charge of concealing the birth of her illegitimate child, for which she has since been convicted. The inspector of police, Thomas Banks, thought it would be desirable to have evidence with regard to her physical condition. He, therefore, went to Dr. Alexander Mackay, and gave him authority to examine the plaintiff's person, which Dr. Mackay, upon that authority, proceeded to do. Subsequently, Dr. Mackay appears to have had doubts as to his authority for acting upon the inspector's direction, and obtained further authority from a magistrate (Mr. John Jobson, surgeon) in the form of a written order. Mr. Jobson, Dr. Mackay, and Mr. Christopher Allen, who accompanied Dr. Mackay on the second occasion, were now sued for damages for an assault at the instance of the Association for the Defence of Personal Rights. The facts were proved in evidence, but the two medical men stated that the girl, while not resisting, had not expressly given consent; and that, when about to examine her the second time, she said: "I have already confessed, and there is no use in your examining me." No witnesses were called for the defence, and Mr. Herschell, in his speech, said that he would not allege in point of law any warranty for the examination of either man or woman, but he must appeal to the experience of his lordship as to whether it had not been frequently done. The judge observed that, unless the jury were convinced that the girl had given her consent to the examination, the defendants had no right to do it.

MR. HERSCHELL said that it was to the interest of every one that crime should be punished, and that the innocent should go free; and it was a question whether any examination which tended, without any



violence or infringement of rights further than was necessary, to such an end was not needful. He ventured to say that it was not quite clear that, under some proper restraint, it would be undesirable to make examinations of this description. He quite agreed with what his lordship had said that there was no warrant for the examination in point of law, unless the person who was examined gave her consent. In most of the cases, they assent by not making any objection. He asked them in this case not to believe the plaintiff's evidence, but that consent had really been given. Even though she had consented through misunderstanding the power and authority they had, that still constituted assent.

His LORDSHIP: I think there is a great difference between consenting and submitting. But, if she really consented, thinking they had the power to compel, that would do.

The judge, in summing up, said the main question was, Had the plaintiff consented to the examination? Had she consented even on a misapprehension of their power, the jury would still find for the defendants. With respect to damages, they might return nominal, substantial, or exemplary. The jury, after an absence of a little more than a quarter of an hour, gave a verdict for the plaintiff for £50. The case occupied nearly five hours in hearing.

#### PROSECUTION FOR ILLEGAL PRACTICE.

At the Birmingham Police Court last week, "Dr. Key, M.R.C.P., L.A.," was charged with falsely implying that he was recognised by law as physician or surgeon. The case seems to have been a very bad one, and the man seems to have belonged to a bad class of quacks. A witness who was sent, being a man in good health, gave evidence to the effect that this man had treated him in the usual way, pretending that he was ill when he was not, and prescribing medicine for him unsuited to his condition. The case was fully substantiated, and the full penalty of £20 inflicted. The attorney, however, asked the bench to state a case for the Court of Appeal, and the application was granted. It was stated incidentally, in the course of the case, that, during the last few days, the conviction of "Dr." Thornton had been quashed in the Queen's Bench, because he proved that he had a diploma from a College at Philadelphia.

## HOSPITAL AND DISPENSARY MANAGEMENT.

#### HOSPITAL ABUSE: A CASE IN POINT.

THE *Charity Organisation Reporter* of February 15th, mentions the following case, which came under the notice of the Strand Committee of the Society.

"Referring to their inquiries on behalf of the Ormond Street Children's Hospital, the Committee, in their annual report, quote the following case which recently came before them. 'A. B. applied to have his hospital letter stamped, and stated that his wages, as a tailor, amounted to about twenty-five shillings a week. On inquiry, it was found that the applicant had earned sometimes as much as eight pounds a week, and that his average wages were between two and three pounds. The man, on finding that inquiries had been made, withdrew his application.'"

And then, no doubt, he took his child to some hospital where no inquiries are made.

#### GRATUITOUS MEDICAL ADVICE IN LIVERPOOL.

A RESOLUTION has been adopted by the Liverpool Medical Institution to the effect, "That the members of this Institution, being of opinion that it is desirable that a conference should be held upon the question of gratuitous medical advice as afforded in the public institutions of this town, resolve to appoint a subcommittee of their number to inquire into the subject—preliminary to a more general meeting of the profession—and that the Council be requested to nominate the members of such sub-committee". The following gentlemen have been appointed, and we have no doubt will do full justice to the matter: Drs. Carter, Oxley, Macfie, Campbell, Finegan, Shearer, Bernard, Cormack, and Maunsell; Messrs. Reginald Harrison, W. Mitchell Banks, E. A. Browne, and Rushton Parker. In addition to the articles in the daily papers to which reference was lately made in the JOURNAL, the subject has been under discussion on two successive evenings at the Northern Medical Society, as the result of which, resolutions were passed unanimously condemning the indiscriminate bestowal of gratuitous medical relief. Dr. John Maunsell, who has taken a leading part in these discussions, has also printed a letter addressed to the Committee of the Liverpool Dispensaries, in which he mentions that the number of patients treated at these dispensaries in 1875 was 68,077, equal to more than half the

total amount of gratuitous medical relief given during the same period at all the hospitals and dispensaries in Manchester, and 20,000 more than the total number attended to in the Glasgow hospitals and dispensaries. Appended to Dr. Maunsell's letter is one from Mr. O'Hanlon of Manchester, in which it is stated that "many of us here look to doing away ultimately with all dispensary work in connection with hospitals": an expectation which, if realised, would certainly simplify very much the further treatment of the vexed question of out-patient reform.

#### THE MANAGEMENT OF SICK ASYLUMS.

At the recent meeting of the Metropolitan Asylums Board, an interesting discussion arose respecting the management of the huge asylums under the Board. The Local Government Board, taking advantage of the powers in Mr. Gathorne Hardy's Act relating to medical officers, who are left as free as possible in their actions, desired to make the medical superintendents responsible for the whole management of the asylums. The Asylums Board, by a large majority, protested against this action, contending that the medical officers had quite sufficient responsibility and work in attending to the large numbers of patients, without having the extra duty of superintending the lay work now in the hands of the stewards. Sir William Wyatt and other members of the valued Board said they would not take the responsibility of managing the asylums if the system under which they had been managed from the first should be changed materially; and Sir William Wyatt refused to be again nominated to the Board. The General Purposes Committee, through Mr. Golsworthy, reported upon the subject, and suggested that the department should leave the managers free to appoint a lay superintendent to the asylums, according to the condition of the asylums and the qualifications of the candidates, the medical officers being supreme in their own departments. It was incidentally stated that fifty-six out of the fifty-eight managers on the Board had signed a requisition to Sir William Wyatt asking him to reconsider his decision as to not being reappointed; and Sir William said that, if the Local Government Board acted upon this report, which was adopted, he would continue his work. Sir William also stated that the President of the Local Government Board had paid a special visit to Leavesden Asylum, and had expressed himself as greatly pleased with the system of management which had worked so well in the case of that huge institution.

#### PROVIDENT DISPENSARIES.

SIR,—I observe notices in your JOURNAL from time to time of various provident dispensaries. Can you furnish any information on the principles of formation of these institutions, and if it would be in accordance with professional etiquette for any qualified member of the profession to open one of these dispensaries? I am not aware of a rule governing professional remuneration in this department of practice; but, from the letter of Mr. Palmer in your issue of February 24th, I should think it is of the nature of a gratuity.

Your obedient servant, MEDICUS.

\* \* \* We have referred this question to a well known authority on the subject, who writes:—

"The first step towards the establishment of a provident dispensary in a new district is to procure a copy of rules, which may be obtained from the secretary of the Charity Organisation Society, 15, Buckingham Street, Adelphi, London. Next, a committee of gentlemen interested in the subject should be formed (three or four are quite enough), who, after adopting or altering the rules and appointing the medical officers (two at least), should give such publicity to the undertaking as may be sufficient to bring it to the notice of those classes of society from which it is desired to obtain paying members. This plan is easily carried out in towns, and in them it seems to us very undesirable that any one member of the profession should start what is ostensibly a public institution for his own private benefit. In country places, however, where such an institution could not well be formed, there seems no objection to a practitioner intimating to his poorer patients that he is willing to attend them, in accordance with the provident plan, i.e., on condition of their paying a small fixed sum all the year round to secure medical attendance during illness, only he must take care not to advertise himself, or seek to attract any of his neighbours' patients by the scheme. The subject of professional remuneration in connection with these institutions will be found fully discussed in a leading article in the JOURNAL for January 3rd, 1874. In some, a fixed salary is paid; in others, the cost of drugs only is deducted from the members' payments, the doctors taking the remainder; while, in others, two-thirds of these payments are allotted to the medical officers. In no case, however, ought their remuneration to be considered or spoken of as a gratuity."



## ASSOCIATION INTELLIGENCE.

## SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT MEETINGS.

THE first meeting for the present year of the above District will be held at the Star Hotel, Lewes, on Friday, March 23rd, at 3.15 P.M. : \* Dr. H. MARTIN HOLMAN, of Hurstpierpoint, in the Chair.

Dinner at 5.30 P.M. Charge, 6s., exclusive of wine.

1. The Discussion on Dr. Fussell's paper on "Some Outbreaks of Diphtheria" will be resumed.

2. Mr. Penfold promises Notes of cases of interest in Ophthalmic Practice.

3. Dr. C. Holman: "Clinical Cases, with Remarks."

4. Mr. A. R. Ticehurst will exhibit specimens of (a) Fractured Lumbar Vertebrae; (c) Cystic Disease of Kidney Fatal in a Puerperal Woman.

Papers are also expected from Dr. A. Wiltshire and Dr. Clement Godson of London.

THOMAS TROLLOPE, M.D., *Honorary Secretary.*

35, Marina, St. Leonards-on-Sea, March 6th, 1877.

## YORKSHIRE BRANCH.

THE spring meeting of this Branch will be held at the Mansion House, Doncaster, on Wednesday, March 28th, at 2.30 P.M.

The members will dine together at the Elephant Hotel, a 5 P.M. Tickets (exclusive of wine), 6s. 6d. each.

Gentlemen intending to join the dinner, or bring forward any communication, are requested to inform the Secretary.

W. PROCTER, M.D., *Honorary Secretary.*

24, Petergate, York, March 3rd, 1877.

## SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

THE next meeting will be held at the Ship Hotel, Faversham, on Thursday, March 29th, 1877, at 3 o'clock; R. S. FRANCIS, Esq., of Boughton, in the Chair.

Dinner will be provided at 5 o'clock. Charge, 6s. 6d., exclusive of wine.

The following communications are already promised.

Dr. Walter Beeby: Notes on an Epidemic of Diphtheria at Bromley.

Mr. Arthur Long: Case of supposed Dislocation of the Hip.

Dr. Hutchinson: Cases of Midwifery.

Mr. Garraway: Rotten Teeth, a Rhapsody; with a Remedy.

Mr. Francis: On Inquests in Boroughs and Counties.

Mr. Thurston: Case of Inversion of the Uterus.

Mr. Thurston: Case of Dislocation of the Astragalus.

Gentlemen wishing to make any further communications at the meeting are requested to inform me at once, in order that a notice thereof may be included in the circular convening the meeting.

EDWARD WHITFIELD THURSTON, *Honorary Secretary.*

Ashford, March 14th, 1877.

## WEST SOMERSET BRANCH.

THE spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 5th, at 5 P.M.

The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner:—"What in your opinion is the best mode of feeding infants artificially, both as regards food and method?"

Dinner 7s. a head, exclusive of wine.

W. M. KELLY, M.D., *Honorary Secretary.*

Taunton, March 5th, 1877.

## NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch will be held at South Shields, on Wednesday, April 25th.

Gentlemen who are desirous of reading papers, introducing patients, exhibiting pathological specimens, or making other communications, are requested to give notice to the Secretary.

G. H. PHILIPSON, M.D., *Honorary Secretary.*

Newcastle-upon-Tyne, March 10th, 1877.

\* In place of Wednesday, March 21st, as previously announced.

## THAMES VALLEY BRANCH.

A MEETING will be held at the Board Room, Richmond Infirmary, on March 21st, at 5 o'clock.

Dr. Gibbes has promised to read a paper on a Case of Empyema treated successfully by Aspiration; and Dr. Barry one on Diseases of the Scalp in Children.

Any other members who may be willing to contribute are requested to communicate with the Honorary Secretary as soon as possible.

There will be a dinner after the meeting (7 o'clock), at The Greyhound Hotel. Charge, 7s. 6d., exclusive of wine.

F. P. ATKINSON, M.D., *Honorary Secretary.*

Surbiton Road, Kingston-on-Thames, March 5th, 1877.

## SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE next ordinary meeting will be held at the Stepney Arms, Llanelly, on Thursday, April 5th: President, ANDREW DAVIES, M.D.

The following papers, etc., are promised.

Mr. J. Hancocke Wathen: 1. A New Form of Splint; 2. Notes of a Case of Extra-uterine Foetation: Operation.

Dr. Sheen: Counter-Practice.

Mr. B. Thomas: Prevention of Contagious Diseases.

Further particulars will appear in the circular.

ANDREW DAVIES, M.D.

ALFRED SHEEN, M.D. } *Honorary Secretaries.*

March 14th, 1877.

*Medical Defence.*—A meeting of those members who approve of and support the Medical Defence movement will be held prior to the Council meeting, and members are earnestly requested to attend.

J. HANCOCKE WATHEN, *Honorary Secretary (pro. tem.)*

## BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE fourth ordinary meeting of the Branch was held at the York House, Bath, on Thursday evening, March 1st; H. F. A. GOODRIDGE, M.D., President, in the Chair. There were also present thirty-four members.

*New Members.*—The following gentlemen were elected members: C. K. C. Herapath, Esq., Bristol; William House, Esq., New Swindon; Henry Lawrence, Esq., Bristol; G. E. P. Pauli, Esq., Bristol; James B. Siddall, M.D., Bristol; and T. D. Saunders, Esq., Bath. Several new members were proposed and will be balloted for at the next meeting.

*Communications.*—1. Mr. NATHANIEL CRISP read notes of a case of Aneurism of the Arch of the Aorta in which Tracheotomy was performed. This led to an interesting discussion, in which Drs. Davey, Brabazon, Skerritt, Mr. Board, and the President, took part.

2. Dr. DAVEY read an elaborate paper on the Physiological Pathology of the Brain, which led to observations from Dr. E. L. Fox, Mr. Stewart, and others.

## BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

THE fifth ordinary meeting of the session 1876-7 was held in the Examination Hall of the Queen's College, February 8th, 1877, at 3 P.M. Present: Dr. G. F. BODINGTON, President, in the chair, and ninety-one members and visitors.

*New Members.*—Mr. R. B. Chaundy, Dr. Guthrie, Mr. R. A. S. Prosser, and Mr. McDonnell were elected members of the Branch.

*Secretary.*—Dr. Edward Malins and Mr. D. C. Lloyd Owen were proposed as candidates for the office of honorary secretary, vacant by the resignation of Dr. Foster. When the vote had been taken by ballot, the PRESIDENT announced that forty-seven votes had been recorded for Dr. Malins, and forty for Mr. Owen, and he thereupon declared that Dr. Malins had been duly elected as one of the honorary secretaries of the Branch.

*Specimens.*—Mr. WHITCOMBE exhibited an osseous tumour of the falx cerebri, from a patient aged 64, who died of general paralysis. He also showed a well organised false membrane, covering both cerebral hemispheres and attached to the dura mater, from a man aged 74, who had been the subject of chronic mania, and died of pleuropneumonia.

*Paper.*—Dr. SAVAGE read a paper, entitled Incisions of the Cervix in Uterine Hæmorrhage.—Dr. MALINS made some observations; and Dr. SAVAGE replied.

*Medical Defence Committee.*—Dr. HICKINBOTHAM read a report

from the Sub-committee appointed "to consider the best means for the promotion of the interests and the defence of legally qualified practitioners".

#### SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

A MEETING was held on March 5th, at the Crystal Palace Hotel: THOMAS TRENT, Esq., in the chair, and twenty-three members and seven visitors present.

*Secretary.*—Dr. Galton was re-elected Secretary.

*Communications.*—1. Dr. GALTON showed a Case, aged 14, of Pulmonary Stenosis, with Patent Foramen Ovale.

2. Dr. GALTON described Two Cases of Cerebral Tuberculosis.

3. The SECRETARY read a Case of Knock-knee cured by Subcutaneous Osteotomy by Mr. H. S. Taylor of Guildford.

4. Mr. MAUNDER gave a Demonstration of Roussel's *Transfusoir* upon a living Subject.

5. Dr. DALTON read a Case of Acute Mania after Scarlet Fever.

6. Mr. SIDNEY TURNER showed a Patient and Apparatus adjusted for Cure of Contracted Tendon of Little Finger.

*Dinner.*—Eighteen members and visitors sat down to dinner.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE Haworth, Oakworth, Oxenhope, Silsden, and Skipton Urban, and Keighley, Settle, and Skipton Rural, Sanitary Authorities, have agreed to combine in appointing a Medical Officer of Health at £500 *per annum*.

#### CHEMICAL ANALYSIS FOR THE LOCAL GOVERNMENT BOARD.

WE know that Government is not always well served in the matter of chemical analysis. The information recently given by the Local Government Board to the Corporation of a town in the North of England is calculated to throw some light on the subject of the shortcomings of Government chemistry. The information to which we refer was that the Local Government Board, according to its own account, pays three guineas for the work for which chemists usually get ten guineas. We are informed that the question is being taken up by the *Chemical News*.

#### SALARIES OF MEDICAL OFFICERS.

THE Lambeth Guardians have been placed in a somewhat awkward position. On the resignation of Mr. Pope, medical officer for the Tenth District, they issued an advertisement for a successor at a salary of £70 *per annum*. Mr. W. E. Farnfield was accordingly appointed, subject to the approval of the Local Government Board. The appointment was approved, but not the salary, which the Board considered was too high; and a letter of remonstrance from the Guardians having no effect, the latter have told the Local Government Board that they might appoint a medical officer for themselves. To this the Local Government Board have returned no answer, and in the meantime Mr. Farnfield has declined to act at a lower salary.

#### MEDICAL OFFICERS OF HEALTH AND MEDICAL PRACTITIONERS.

IN our issue for March 3rd, we called attention to a letter that we had received from Mr. Ashburner, the medical officer to the Union Workhouse, respecting a visit which Dr. Kelly, the medical officer of health for the district, had made to a patient of his in the workhouse, without previously communicating to him as to the visit. Mr. Ashburner further complained that Dr. Kelly, on a former occasion, had called his diagnosis in question, and had stated to the sanitary authority that the case was one of varicella and not of small-pox. We have received a letter from Dr. Kelly, demurring to our observations, and again asserting that he has the legal right to visit any patient who is reported to him to be suffering from an infectious disease, "to ascertain whether or not his information was correct". He also says that, if the medical attendant will not give him the "necessary particulars", he is justified in visiting in his absence, as we suppose, to make a diagnosis for himself, and to report the result to the sanitary authority.

As this is a matter about which there should be no doubt, we now give a very brief epitome of those sections of the Public Health Act, 1875, that bear upon it. These sections are from the 120th to the 140th inclusive. The 120th section directs that a local authority, on receiving a certificate from their medical officer of health, to the effect that the cleansing and disinfecting of any house or part thereof, or of any article of bedding or clothing therein, would tend to prevent infectious disease, shall order the same to be done. By other sections, they may destroy infected articles; may provide proper means for disinfection and for the conveyance of the sick to a hospital; and also remove those who are without proper lodging and accommodation, or who are on board ship. The 130th section gives power to the Local Government Board to alter or revoke regulations as they may see fit, with a view to the treatment and prevention of the spread of infectious diseases. By section 134, whenever any part of England is affected with a "formidable epidemic, endemic, or infectious disease", the Local Government Board may make, alter, or revoke regulations (1), for the speedy interment of the dead; (2), for house-to-house visitation; (3), for the provision of medical aid and accommodation, for the promotion of cleansing, ventilation, and disinfection, and for guarding against the spread of disease.

Now, if Dr. Kelly will refer at his leisure to the sections of the Public Health Act above quoted, and to the instructions issued by the Local Government Board, we think he will be satisfied that there is no legal power given to him to visit the sick, except under the 134th section, which most certainly is not at present in force in his district, or indeed in any part of England. Of course, he may reply that, if he obtain leave from the sick or their friends, he is justified in entering the patient's room, even when the medical attendant is absent; but, as regards that plea, we say that he is forbidden to do so by medical etiquette. He has no right to put himself up as a judge of the diagnosis of his medical brethren, or to assume that he is better acquainted with the symptoms of a zymotic disease than a medical man in ordinary practice. The course of conduct most consistent with medical etiquette, and proper regard for the position of others, would have been an inquiry of the medical attendant as to the nature of the disease, without asking for a visit to the patient, and thus running a risk of placing himself in antagonism with a brother practitioner. Mr. Sclater-Booth has lately stated that a medical officer of health is not to assume, when a patient is under the care of a qualified practitioner, that everything has not been done as regards disinfection and isolation for the prevention of the spread of disease. If this be so, how much less right had Dr. Kelly to assume that Mr. Ashburner was in error as to his diagnosis; and, therefore, to request seeing the first patient at the risk of a refusal. As Dr. Kelly had already had an opportunity of satisfying himself as to the nature of the outbreak, the second visit is the more to be regretted, especially as it was made in Mr. Ashburner's absence.

As Mr. Sclater-Booth's statement to the deputation of medical officers of health, in January last, shows what his opinion is as regards the law and proper procedure in these cases, we reproduce abstracts from the *Sanitary Record* for February 3rd: "The subjects of the resolutions alluded to by the deputation were carefully considered while the Public Health Act, 1875, was in preparation, and many reasonable improvements were made in the law. It was felt that many desirable improvements were omitted, but, although public opinion is fast ripening in the direction of something more authoritative and vigorous, in the way of an interference between the medical attendant and his patient as to infectious disease, he did not think the time had yet arrived; and that, therefore, it would not be wise to ask now for more legislation. He thought that the medical attendant would supply the patients with means of perfect disinfection, and that the medical world would not be at all disposed to agree that they are neglecting their duty as regards the giving advice to check the spread of the disease. His information led him to suppose that there is a good deal of jealousy in the medical world of interference between them and their patients, and that they would resent very much being placed under the authority of another medical man as regards means to be adopted for purposes of that kind."

Now, it is quite clear that, if the law justify Dr. Kelly's interference between Mr. Ashburner and his patient, these words would never have been uttered; and we would, therefore, counsel for the future that, whilst using every fair and reasonable means of inducing medical practitioners to act with them, medical officers of health should do nothing which might appear to be an interference with other medical men's patients. We advise this, not only because we believe that the best interests of sanitary officers themselves demand it, but also in the interests of the community on whose behalf their office has been created; because, if the medical profession generally should become estranged from those holding these offices, the necessary information



for carrying into effect early disinfection, and perhaps isolation, is almost certain to be withheld, and opposition to take the place of co-operation with their ordinary work.

### THE STARVATION CASE AT SUNDERLAND.

THE case, recently tried before Lord Chief Justice Coleridge, at the Durham Assizes, of manslaughter of a child by starvation, in which the judge censured the district Poor-law medical officer and the police, and disallowed their expenses, at the same time intimating that he should write to the Local Government Board respecting the conduct of the medical officer, merits the gravest consideration, not only in the interests of the sick poor, but also in that of their medical attendants and the public.

It would appear that, sometime in November 1875, a carpenter of the name of Ross, a widower with two children, went to cohabit with a widow having five children, residing in a single room in the Bishopwearmouth district of the Sunderland Union. One of the children, being sufficiently old, obtained a situation, leaving behind his brother, a boy from three to four years old. At that date, he was a fine healthy child. Several witnesses deposed to the ill-clad, uncleanly, and generally neglected condition of the child; to his being ravenous after food; to the woman's persistence in not giving him sufficient nourishment; and to the intemperance of the man. It was also shown that the woman's children appeared plump, well fed, and fairly clothed. Mr. Taylor, the Poor-law medical officer, stated that he had several times seen the child during its lifetime, that he had examined him and found that he was not suffering from disease, and he had warned the reputed mother that he was not getting enough food. On *post mortem* examination, he had found that all the organs were healthy, but that the body was extremely emaciated, and that he had come to the conclusion that the child was starved.

At the conclusion of his evidence, the Judge asked: Why, in the name of common humanity, when you knew the child was being starved to death, did you not take some steps to prevent it? No answer. You never appear to have made the slightest effort to prevent it. No answer. By Mr. Greenhow: The family appeared very poor. I might have supplied the child with food had I got an order from the relieving officer. His Lordship: You could have got it. Witness: Perhaps I could. His Lordship: If you had gone to the relieving officer and told him, do you believe that the order would have followed as a matter of course? Witness: Yes, I believe so. And you did not go? I did not go. Then, in my judgment, whoever may be legally answerable, you are morally answerable, and I shall show my sense of it by disallowing your expenses.

Now, with all due respect to this ruling, we beg to take exception to the judge's remarks, so far as they relate to Mr. Taylor. This gentleman visits the case, as will be seen elsewhere, not as a pauper, but because he was asked by a neighbour so to do. He examines the child; finds he is healthy, but underfed; he directs the attention of the reputed mother thereto, and warns her of the consequences. He also sees the other children, and perceiving that they are fairly nourished, and no application having been made to him for assistance, on the ground of alleged or real inability to provide food for the child, does not give an order on the relieving officer for any extras in this case. We believe he will be supported by all persons who know how difficult is the position of a district medical officer. We believe that, if an order had been given in this case, the relieving officer would have refused to entertain it, for there was no allegation that the family were in want, and that, therefore, out-door relief was required; but, even if an order had been given and food supplied, what security would there have been that this woman, who was systematically starving and generally ill-treating this child, would have given him the food when furnished, unless some independent person saw to its administration? But it may, notwithstanding, be said that Mr. Taylor should have issued the order, careless of consequences. To such assertions, we would reply by recalling the facts connected with the story of Charlotte Hammond, last summer, and the more recent case of Ellen Sullivan. In both, the relieving officer of St. George's, Hanover Square, refused the relief recommended by the medical officer; and when, after death from what had the appearance of want of the necessities of life, inquests were held, not only was the conduct of the relieving officer approved by the guardians and the Local Government Board, but Mr. Fenton in the first case, was reprovved by the guardians and censured by the Local Government Board, and, in the next, an urgent effort was made by the guardians to eject him from office.

It is more than probable that this typical case of Mr. Fenton has been read and reflected on by most district medical officers in England and Wales. The treatment this gentleman received for taking a humane

view of his duty is not likely to act as an encouragement to district medical officers to issue orders to relieving officers.

The case, in our judgment, was one where the police should have taken earlier action. As, however, the judge expressed his intention to write to the Local Government Board, we will return to this subject again, so soon as we learn the character of his communication, and the Board's decision, contenting ourselves for the present with expressing our belief that his lordship has been ventilating his philanthropy at the expense of a medical gentleman, who may, and probably does, possess as humane and kindly a disposition as himself, though possibly not so much judgment.

### CHARGE OF ALLEGED NEGLECT AGAINST A PARISH SURGEON.

SIR,—Having read in the *Times* of Wednesday, the 26th ultimo, the report of a case recently tried before Lord Chief Justice Coleridge at the Durham Assizes of manslaughter of a child, in which the judge censured the district Poor-law medical officer for Bishopwearmouth, Sunderland, for inhumanity and neglect of duty, that he had disallowed his expenses, and had further intimated his intention to write to the Local Government Board thereon, in my capacity as chairman of the Council of the Poor-law Medical Officers' Association, I wrote to Mr. Taylor, the surgeon in question, stating that if he would inform me as to his exact relations with the case I would, "were it possible," invoke the aid of the Association in relieving him from the very damaging aspersion on his professional reputation and character. I forward you his reply, which has been laid before the Council of our Association; and as I feel assured that this case will be commented on by you, will content myself by leaving the matter in your hands, feeling convinced that you will agree with us that he has been harshly and unjustly used.—I am, sir, yours obediently,

JOS. ROGERS.

"45, John Street, Sunderland, March 5th, 1877.

"My dear Sir,—I have just received your very kind letter, which I hasten to answer. I saw the poor boy, George Pickering Moss, not at the request of the parents, nor under medical order, but at the solicitation of the neighbours and police-constable Rathey, who urgently begged me to see the said George P. Moss, who was alleged to be ill-treated and starved by Mrs. Moss, or rather by Mrs. Calder. After some little hesitation, I went in, thinking my calling would have the effect of causing the child to be better treated. I found the boy shivering some distance from the fire, with an apology for a jacket and thin shirt on. On exposing the chest, I found the child most dreadfully emaciated. On percussion over the chest and abdomen, I could discover no disease of lung or liver—in fact, no disease whatever. I then said to the woman, who was standing near the fire with her own offspring, 'How is it that your children are so much better clothed and nourished? I can discover no disease; the child does not want physic; what it requires is suitable clothing, and for food, plenty of milk, beef-tea, and cod-liver oil.' She replied in a very angry tone, 'He has as much as he can eat, as well as the others.' She then asked me who sent for me there: 'I suppose Mr. Grosin Rathey and other neighbours, who had much better mind their own business.' I said it was from outside rumour I called, and that I would look in again. I had intended to call in Mr. Bruce, the relieving officer. My object in calling upon him was, that as he had been guardian for many years previously to his present appointment, I thought that he might advise with me as to what steps could or should be taken to secure the boy the regimen prescribed, having no great confidence in the woman, if the reported treatment were true. Before I made my next visit, I met Policeman Rathey, who told me Dr. Francis, the police-surgeon, had likewise seen the boy. Thinking now that the attention of the police had been called to the case, I did not consider it requisite to further call upon Mr. Bruce. To the best of my recollection, I saw the child three times in all, not making an entry, as I was not acting under medical order, or yet as surgeon, for I never was called in by either parent. When the judge was speaking—I suppose to me—I most positively declare I did not hear him, being almost quite deaf on the right side. I dared not tell his lordship to speak up, but simply allowed whatever he said to pass as if I had heard him. The only thing I did hear him say was disallowing costs.

"Thanking you much for the very kind way you have taken my case up, I leave it with you.—I am, dear sir, yours very truly, HENRY H. TAYLOR."

### FEES FOR OPERATION.

SIR,—I attended and operated on successfully a child for imperforate anus (a parish case). Would you kindly tell me in your next issue of your JOURNAL whether I can claim from the Board of Guardians a fee, and if so, what fee I can claim?—Yours faithfully,

EDWIN CHILD, M.R.C.S.

New Malden, March 5th, 1877.

\*.\* The schedule of fees for operations laid down in the general orders of the Local Government Board does not authorise payment for the very exceptional case referred to in our correspondent's query; but at page 138 of Glen's *Consolidated Orders*, the following article, No. 183, may be found. "Provided that in any special case in which great difficulty may have occurred in the delivery, or long subsequent attendance in respect of some puerperal malady or affection may have been requisite, any district medical officer shall receive the sum of two pounds." A successful operation on a newly born child for imperforate anus would, in our judgment, justify an application to the Board of Guardians for payment.

### FEES FOR PAUPER LUNATIC CERTIFICATES.

SIR,—The fee for granting a pauper lunatic certificate in Scotland is one guinea, payable, in respect of each of the two certificates required by law in any one case, by that parochial board in whose parish the pauper lunatic certified has a settlement—that is, payable by the parochial board responsible for his safe keeping. In all cases, one of the certifying medical men is the parochial medical officer of the district in which the lunatic resides; but that makes no difference as to the fee, this being distinctly an "extra" charge, payable as such by the board, and paid at once by all parochial boards who have any regard for their own reputation. Should there be any demur, an appeal to the Board of Supervision will



settle the point. The fee for the visit paid to the pauper lunatics quarterly is, as said in the *BRITISH MEDICAL JOURNAL* of February 24th, 1876, 6d. per visit. It is also an extra; and if medical officers be wise, they will never consent to any commutation of these or any other extra fees. The salaries paid are already too small, while the basis of commutation is not likely to be in the interest of the medical man, especially should it be left to the boards to proceed independently in the matter; indeed, the only object that could influence these latter in taking any such step is that of cheapness, which means under-payment for the work performed.—I am, etc.,  
February 24th, 1877.

F.R.C.S. Ed.

Sir,—Acting on the advice given by your correspondents, I last week rendered an account to my board for the modest fee of one guinea for an eight miles' journey and a temporary certificate. Receiving no reply, I called at the office of the board, and was told by the inspector that my demand had been refused, and shown an entry in the minute-book to that effect, the reason being that such payments had not been hitherto customary. I have laid the matter before the Board of Supervision, asking advice, and will again communicate the result of my attempts to remove what I have good reason to believe is a very common state of matters in Scotland. Practitioners stand in their own light by not demanding their fees, and boards perpetuate the abuse till they come to think that "use and wont" will justify anything.—Yours, etc.,  
March 2d, 1877.

PARISH MEDICAL OFFICER.

## REPORTS OF MEDICAL OFFICERS OF HEALTH.

**WILLESDEN.**—This report is the first which the medical officer of health, Dr. Thomas, has presented; and he therefore states that the district comprises 4,382 acres, 250 of which are closely built upon, whilst the remainder is chiefly open country. The population in 1871 was 15,800, but in 1875 was probably 18,143. The urban portion—Kilburn, Cavendish Road, and part of Willesden—is well drained; whilst the other is not. The water-supply is good, and the scavenging fairly carried out. There were 805 births, or 44.72 per 1,000; and 385 deaths, which was at the rate of 21.37 per 1,000 inhabitants. There were 131 deaths of infants under one year, which was 34.02 per cent. of the total deaths. Dr. Thomas believes that this high death-rate of infants was caused through the overcrowding of parts of Kilburn by inhabitants of other districts. There were 13 deaths from typhoid fever, 12 from scarlet fever, 28 from diarrhoea and dysentery, which, with small numbers from other zymotic diseases, made an aggregate of 76 cases, or 20 per cent. of all the deaths. Certain parts of the district were systematically inspected, when many cisterns were found to be defective, uncovered, or communicating with the house-drains. Dr. Thomas points out, as regards the drainage of the rural district, that, at any rate, all the ditches receiving sewage should be covered when they are near to houses; and that the foul ditches should either be kept clean by the Board or by the parties draining into them, and not by the landlord, as is the practice at present.

**WAKEFIELD.**—Mr. Wade, in presenting his report for the half-year ending June 30th, calculated the population at 31,000, and stated that the births were 622 and the deaths 423, which gives an annual birth-rate of 40.12 and a death-rate of 22.2 per 1,000 population; so that the birth- and death-rates were in excess of the calculated number. There were 96 deaths from zymotic diseases, 70 from tubercular affections, 82 from diseases of the respiratory organs. There were 91 deaths under one year of age, which are equal to 14.6 deaths out of each 100 births. The number of deaths from enteric fever was much less than usual, which Mr. Wade believes to have been due to the ventilation of the sewers carried out at his suggestion; and he proposed that the Board should not sanction any plans for house-drainage in which the sink-pipe communicated directly with the sewer. He also objects to rain-water being allowed to find its way into middens.

## MILITARY AND NAVAL MEDICAL SERVICES.

**DEPUTY SURGEON-GENERAL TRESDRER**, of the Indian Medical Department, has retired on a pension of £550 *per annum*, with an additional pension of £250 from 31st March next.—**Surgeon-Major McKellar** has also retired on a pension of £305 *per annum*.

THE *Army and Navy Gazette* of March 3rd says:—"The army medical officers are much discontented with the manner in which they are being constantly transferred from one duty to another. This system is not only extremely harassing to them, but must also be detrimental to the interests of the service. In one regiment alone on home service there have been during the last eight months no fewer than six medical officers. No wonder commanding officers are opposed to the present regulations."

## THE ARMY MEDICAL SERVICE.

Sir,—*Quempe random abire perit*—"quid" may well be the cry addressed to the powers that be by every member of the Army Medical Department; and if a large number of the body are silent over their accumulated and ever freshly accumulating heaps of miseries, such silence arises, as has been well said, from a conviction that protests would be almost useless. But before just dissatisfaction becomes too deeply rooted, and before the number of applicants for fifty vacancies dwindles from twenty-eight at one time and twenty-three at another to more humiliating proportions, it may be as well briefly to review the existing state of things, and to suggest practical remedies for heavily pressing grievances. In what the proof of the pudding lies we all know. One need not eat unnecessary dirt to detect a grievance when the fact stands out so plainly written in the condemning characters that in this elbowing age of struggling for decent existence only twenty-three candidates are found to compete for fifty vacancies. It is generally supposed that even the governing powers are not a happy concordant family. They consist of the War Office (Mr. Hardy), the Finance Department, and (we are sorry to place him last) our esteemed Director-General, the person who should be accredited with supreme power. Casting aside for the present many of the numerous snags which help to weaken if not break the back of the army medical officer, it may be as well to draw public attention to a few crushing weights that are especially heavy.

1. The being deprived of the advantages of mess.

2. Foreign exchange being now disallowed.

3. Sick-leave being too limited.

4. The being supplanted by civil medical practitioners.

*Hinc ille lacryme.* Well, to turn to the first point: being practically cut out of a regiment, simply means to the army medical officer deprivation of association with gentlemen who, though it may be a case of combatants and non-combatants, yet belong to the same service as himself. It means the never meeting with his brother officers. It imposes living in lodgings—generally speaking, not in the best part of a town: for the medical officer, unlike his combatant brother, must be near his work, and it is the exception to find good houses in the immediate vicinity of camp or barracks. It calls up the idea of "solitary pigging it"; or, as compared with a military mess, misery as a *raison d'être*. A lively prospect for the young medical officer, looking ahead for himself, consulting with his friends as to where he shall pitch his tent in life. Why should not medical officers get a local habitation and a name by being attached to a regiment for messing purposes and for the use of army servants; either to join the mess, which bachelors would do, in which case a monthly subscription could be paid, so that they might do what was fair and be placed on an equality with dining members, or otherwise, to be honorary members? The local military authorities could in orders, on the arrival of any medical officer, post him to the nearest corps. Other military officers arriving for limited periods, such as those from garrison class, etc., are posted to regiments: why could not medical officers also be so posted?

An apology is necessary for advancing this unpalatable entrance to a private institution like an officers' mess; but from our experience of the kindness and hospitality displayed by combatant officers, we feel sure that they would not refuse to do so, as each fully understands the furthering of the welfare of the Army Medical Department.

With regard to the second and third points, we only wish the Secretary of State for War, if he still doubts our being satisfied regarding the sick-leave and exchange questions, would allow a commission to decide the matter, for these are very important points which call for our constant attention.

Supporting the army medical officers by civil aid seems nearly an insult, and certainly an injustice. Soldiers are not allowed to support civil labour: why should civil medical men supplant the military? Would civil medical men be ready and willing to serve our Queen and country by packing up at a few days' notice for foreign service? And yet in a strange manner they tender and understand for semi-military appointments under the new régime. It must be confessed that the new system is admirably progressive in the right direction as regards the station hospital work, general foreign rosters for service, and making the medical branch a distinct corps; but the other points we have touched upon are too revolutionary. An Englishman loves his home, his club, his mess-table, his congenial associates, only too well, and will not take kindly to a civil or restaurant life. The civil medical profession will prove more than ever to have greater attractions with its concomitant comforts than the coming state of things for the red-coated nonentity.

At a future and early date we will return to the subject, which is not only of interest to the Army Medical Department, but also to the army and nation at large; for inasmuch as the strength of a nation is only that of its weakest link, so the strength of a whole army, especially in time of strain or emergency, is only to be gauged by its weakest part, be it combatant, medical, transport, or commissariat link. Let the nation well look to it that there be no flaws in these links which consist of the Army Medical Department.—Yours, etc.,  
G. E. E.

## OBITUARY.

ALEXANDER EUGENE MACKAY, M.D.,  
DEPUTY INSPECTOR-GENERAL, R.N.

THE announcement, on Tuesday last, of the death of Dr. A. E. Mackay has caused both surprise and regret, not only to his brother officers in the Royal Navy, but to the medical profession generally, with whom he had been brought into frequent contact. His service in the Navy, extending over a period of upwards of thirty-three years, twenty of which were spent either afloat or in hospital, commenced in 1844, when, on receiving his appointment as assistant-surgeon, he was attached to the Royal Naval Hospital at Haslar, a post which he left to go to the East India Station. He subsequently served on the China Station and in the Naval Hospital at Hong Kong. He gained his first step in the service in 1852; and in 1854, he was appointed Surgeon of the *Fantôme*, on the Australian Station, and afterwards was selected for the important post of Senior Medical Officer of the Flag Ships of the Mediterranean and South-east Coast of America Stations.



It was during this period that Dr. Mackay was awarded the Blane Medal for the excellence of his medical returns; and when, in 1864, Dr. Brydon became Director-General, Dr. Mackay was appointed to take his place at the Department. From that date, he prepared annually the exhaustive statistical reports of the health of the Navy, with which his name will ever be honourably associated, and which, from their uniform excellence and completeness, have won high praise, not only from writers in the public press, but from statisticians in all countries; the Blue-books being, as we have reason to know, highly valued by the medical officers of the departments of the foreign Ministers of Marine. Shortly after his appointment to the Admiralty, Dr. Mackay was promoted to the rank of Deputy Inspector-General, and he was, during the remainder of his service, borne on the books of H.M.S. *Fisgard* for this special service. In the course of his duties at the Admiralty, Dr. Mackay was called upon to represent the Director-General during his absence from London, and at all times the official duties devolving upon him were of the most arduous and responsible character. He died on Saturday, March 10th, at the early age of fifty-five, at his house at Clifton Hill, from typhoid fever, after an illness of a few weeks.

## MEDICO-PARLIAMENTARY.

**HOUSE OF COMMONS—Thursday, March 8th, 1877.**

**Vaccination Returns.**—Mr. SCLATER-BOOTH stated, in reply to Mr. JAMES, that his attention had been called to the fact that in the thirty-fifth annual report of the Registrar-General, 13,424 deaths were said to have occurred from small-pox, with respect to which it was not stated whether vaccination had taken place or not. As the information was not invariably given to the Registrar-General, that official could not pretend to always supply it in his report.

**Coroners' Inquests.**—In reply to Lord F. HERVEY, Mr. CROSS observed that the Government had prepared a Bill to improve the law relating to coroners and coroners' inquests, and would introduce it at the first favourable opportunity.

*Friday, March 9th.*

**The Small-pox Hospital.**—Mr. SCLATER-BOOTH stated to Mr. RITCHIE that, although patients had continued to be sent to the Small-pox Hospital at Limehouse longer than he had anticipated, he had reason to believe that the new hospital at Deptford would be ready to receive patients on the 10th instant.

**Scurvy in the Arctic Expedition.**—Mr. WARD HUNT, replying to Captain PIM, said that the report of the committee on the outbreak of scurvy in the recent Polar expedition had not yet been received. As soon as it came to hand it should be presented to the house.

**Sanitary Authorities.**—Mr. SCLATER-BOOTH, replying to Mr. WHITBREAD, said the loans sanctioned to urban sanitary authorities at the end of 1876 were £2,506,459, and those to rural sanitary authorities £200,692.

*Tuesday, March 13th.*

**The Conveyance of Small-pox Patients in Cabs.**—Mr. CROSS, in answer to Lord R. GROSVENOR, said that during the past three months no small-pox patients had been seen to be conveyed to the Highgate Hospital in cabs, nor to the Hampstead Hospital. In the single instance that occurred at Homerton, the vehicle was disinfected and proceedings taken against the hirer by the police. Two cabs were used to Stockwell, both of which were disinfected, and proceedings, resulting in a fine of £5 and costs, were taken against the hirer.

### NOTICES OF MOTION.

**Monday, March 19th.**—Dr. Lush: To ask the Secretary of State for War if he will inform the house what was the average number of soldiers in hospital during the years 1875 and 1876 respectively.

**Tuesday, March 20th.**—Dr. Lush: To ask the Secretary of State for War whether his attention has been drawn to the case of a candidate for the Medical Service of the Army, detailed in a letter to the *Times* of the 28th ultimo, in which it is alleged that a young man was rejected by the Medical Board, subsequently re-examined and again rejected, although a distinguished physician and surgeon pronounced him fit for service; and whether the facts are as detailed; and if, in view of the dissatisfaction the occurrence has occasioned, the War Office will direct an inquiry.

**Thursday, March 22nd.**—Mr. Errington: To ask the Vice-President of the Council what progress, if any, is being made by the various medical bodies towards carrying out the "conjoint scheme" of examination; and whether in his opinion the time has not come when her Majesty's Government should itself undertake to reform the whole system of licensing for medical degrees.

## MEDICAL NEWS.

**APOTHECARIES' HALL.**—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 1st, 1877.

Lethbridge, Charles Frederick, Hemmingsford Road, N.  
Maceagh, Thomas Edwin Foster, Pemberton Terrace, N.  
Prosser, Thomas Gilbert, Grenville Street, W.  
Turner, Frank Edward, Lorraine Road, Holloway

The following gentlemen also on the same day passed their primary professional examination.

Walker, Horatio Edward, Guy's Hospital  
Wood, Charles, Guy's Hospital

The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 8th, 1877.

Atkinson, Henry Seymour, Queenstown, Ireland  
Bond, James William, Torrington Square  
Rogers, William Henry, Paragon, New Kent Road  
Satchell, William Morris, Tunbridge Wells  
Stewart, Frederick George, Merrick Square, Borough

**UNIVERSITY OF CAMBRIDGE.**—Degree of Bachelor of Medicine conferred on March 9th.

Hitchcock, Charles Knight, Caius

### MEDICAL VACANCIES.

THE following vacancies are announced:—

**ARDNAMURCHAN**, Parish of—Medical Officer for the District of Sanart, Ardnamurchan, and Moldart. Salary, £100 per annum, with suitable house. Applications to be made on or before the 24th inst.  
**BRADFORD INFIRMARY**—Resident Medical Officer. Salary, £110 per annum, with board and residence. Applications to be sent in on or before the 24th inst.  
**BRECKNOCK COUNTY AND BOROUGH GENERAL INFIRMARY**—Resident House-Surgeon. Salary, £100 per annum, with furnished apartments and attendance. Applications to be made on or before the 20th inst.  
**CARLISLE DISPENSARY**—Junior House-Surgeon. Salary, £50 per annum, with apartments, coals, gas, and attendance.  
**CHORLTON-ON-MEDLOCK DISPENSARY**—House Surgeon. Applications to be sent in on or before the 26th inst.  
**CREDITON UNION**—Medical Officer for the Bow and Colebrooke Districts.  
**EAST LONDON HOSPITAL FOR CHILDREN**—Physician. Applications to be sent in on or before the 22nd inst.  
**HULL AND SCULCOATES DISPENSARY**—Resident House-Surgeon. Salary, £150 per annum, with furnished house, coals, and gas. Applications to be sent in on or before the 31st inst.  
**HULME DISPENSARY**, Manchester—Resident Medical Officer. Salary, £130 per annum, with furnished apartments, coal, gas, and attendance. Application to be made on or before the 24th inst.  
**INGHAM INFIRMARY AND SOUTH SHIELDS AND WESTOE DISPENSARY**—Assistant House-Surgeon. Salary, £60 per annum, with board and lodging.  
**LIVERPOOL ROYAL SOUTHERN HOSPITAL**—Senior House-Surgeon. Salary, 100 guineas per annum, with board and lodging. Applications to be sent in on or before the 21st inst.  
**PORTLAND TOWN FREE DISPENSARY**—Resident Surgeon and Dispenser. Salary, £100 per annum, with furnished apartments, gas, and attendance. Applications to be sent in on or before the 17th inst.  
**ST. GEORGE'S AND ST. JAMES'S DISPENSARY**—Physician. Applications to be sent in on or before the 29th inst.  
**ST. MARY'S HOSPITAL**, Paddington—Assistant Dispenser. Salary, £50 per annum. Applications to be sent in on or before the 19th inst.  
**WEST BROMWICH UNION**—Medical Officer for the Handsworth District.  
**WHITEHAVEN UNION**—Medical Officer for the Gosforth District.  
**WIMBORNE AND CRANBORNE UNION**—Medical Officer for No. 4 District. Salary, £80 per annum, and fees. Applications to be sent in on or before the 21st inst.  
**WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL**—Surgeon's Assistant. Applications to be sent in on or before the 13th inst.

### MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

\*BROADBENT, W. H., M.D., appointed Honorary Consulting-Physician to the Hospital for Women and Children, Vincent Square, Westminster.  
DE DENNE, T. V., M.R.C.S. & L.R.C.P., Assistant Medical Officer to the Bristol Asylum, appointed Assistant Medical Officer to the Northampton General Lunatic Asylum, vice J. H. Bell, M.D., resigned.  
RYGATE, Brougham R., M.R.C.S. Eng., appointed House-Surgeon to the London Hospital, vice Valentine Rees, M.R.C.S., resigned.

### BIRTHS, MARRIAGES, AND DEATHS.

The change for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

#### DEATHS.

PALMER, William James, Esq., Surgeon, late of Great Yarmouth, at Nassau, on March 9th.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 30 P.M.
TUESDAY.....	Guy's, 1 30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1 30 P.M.—St. Mary's, 1 30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1 30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2 30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1 30 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1 30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.—Charing Cross, 2 P.M.—
FRIDAY.....	Royal Westminster Ophthalmic, 1 30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1 30 P.M.
SATURDAY....	St. Bartholomew's, 1 30 P.M.—King's College, 1 30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1 30 P.M.—St. Thomas's, 9 30 A.M. and 1 30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—	Medical Society of London, 8 30 P.M. Dr. J. Braxton Hicks, "On the association of Eczema with Diabetes"; Dr. T. Lauder Brunton, "On Arsenic in the Treatment of Albuminuria".
TUESDAY.—	Pathological Society of London, 8 30 P.M. Dr. Goodhart, "Cerebral Aneurism from Embolism"; Mr. Bryant, "Aneurism of the Femoral and Popliteal Arteries from Embolism"; Dr. George Johnson, "On the Changes which occur in the Blood-vessels in Bright's Disease"; Dr. Gowers, "Atrophy of one Kidney, great Hypertrophy of the Heart, and Atheroma of the Arteries". [Dr. George Johnson's Microscopical Specimens will be on view at 8 o'clock P.M.]
FRIDAY.—	Clinical Society of London, 8 30 P.M. Mr. Barwell, "Excision of a Lingual Epithelioma by Dr. Petrequin's Thermo-Cautère"; Mr. Clement Lucas, "Excision of Lower Half of Uterus for a Myeloid Tumour (a living subject)"; Mr. George Brown, "Excision of Tongue for Cancer supervening on Ichthyosis of twelve years' standing (a living subject)"; Mr. Warrington Haward, "Recurrent Cancer of Tongue treated by Ligation of Lingual Artery"; Dr. Southey, "Case of Idiopathic Tetanus"; Quekett Microscopical Club (University College, Gower Street), 8 P.M. Ordinary Meeting.

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

SIR W. THOMSON ON VIVISECTION.

ON March 5th, Sir William Thomson presided at the Royal Society of Edinburgh at the reading of a report of Professor Rutherford's paper on the Secretion of Bile. He writes next day in the *Scotsman* to state that he desires not to be held by his presence in the chair to express his approval of experiments involving cruel treatment of the lower animals. We cannot of course doubt that Sir W. Thomson has a right to express this opinion, and to take whatever methods he thinks most advisable for impressing them upon the people: at the same time, we can but consider that in this instance he makes a distinctly unjustifiable use of his position as President of the Royal Society of Edinburgh. If he disapproved of the experiments, knowing perfectly well the nature of the paper beforehand, it was not at all necessary that he should have occupied the chair on that night, and his absence would have absolved his conscience. On the other hand, he must be very well aware that he is not in a position to judge of the suitability or necessity of the experiments, and that those who are in such a position entirely differ from him on this subject. His opinions are entitled to all respect, but it seems clear that his position as President was not intrusted to him for the purpose of exciting public prejudice against the most eminent and esteemed members of the Society to which he belongs, or of vilifying the papers which the Society accepts with great satisfaction, and which form some of the most important and valuable parts of its services to science.

MR. H. A. SMITH.—Tobacco was used by the officers and crew during the recent Arctic expedition, and, we believe, without any peculiar effect being noticed.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

THE COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN FEBRUARY 1877.

THE following are the returns made by Dr. C. Meymott Tidy to the Society of Medical Officers of Health.

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, etc.	Nitrogen As Nitrates, &c.	Ammonia.		Hardness. (Clarke's Scale.)	
				Saline.	Organic.	Before Boiling.	After Boiling.
<i>Thames Water Companies.</i>	Grains.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction ..	21.30	0.73	0.165	0.000	0.006	13.2	2.4
West Middlesex ..	20.70	0.77	0.180	0.000	0.007	12.65	3.8
Southwark and Vauxhall .....	20.60	0.77	0.180	0.001	0.007	13.2	3.8
Chelsea .....	21.30	0.66	0.180	0.000	0.006	13.2	3.3
Lambeth .....	21.60	0.56	0.210	0.000	0.008	13.2	4.2
<i>Other Companies.</i>							
Kent .....	28.60	0.01	0.390	0.000	0.003	18.8	6.0
New River .....	21.70	0.49	0.135	0.000	0.005	14.3	4.2
East London ....	19.80	0.63	0.180	0.000	0.007	15.4	4.2

Note.—The amount of oxygen required to oxidise the organic matter, nitrates, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters, the quantity of organic matter is about eight times the amount of oxygen required by it. The water was found to be slightly turbid in all cases.

## MEDICAL ETIQUETTE.

SIR,—Kindly answer the following query in your next issue. A, being called urgently to visit a poor woman aged 54, two miles distant from his residence, finds, on arrival, that she had died suddenly about a quarter of an hour previously. A., having known the woman for fifteen years, and having only attended her occasionally during that period for minor ailments, is struck with the suddenness of the death, more especially as she always seemed to A. a strong active woman. Her husband, at A.'s request, readily consented to a *post mortem* examination, which A. does, for his own interest in the case. Shortly after the necropsy is made, A. hears that an inquest has been held, and that the coroner had telegraphed for B.'s attendance, who, after having found that a *post mortem* examination had been made by A., gave evidence as to the cause of death, without consulting A., and knowing nothing previously of the case. Was B. justified in giving evidence under the circumstances?—Your obedient servant, Anderton, Devonport, Feb. 28th, 1877.

EDWIN J. WORTH.

\*.\* We have also received communications on this subject from the gentleman designated B. He states that, on being officially summoned by the coroner, he made inquiries of the summoning officer, but could not learn from him whether any medical man had been called to see the woman. At the inquest, the coroner was informed that A. had seen the woman after death, and had made a *post mortem* examination, and he then called in B. to give his evidence. B. says that a *post mortem* examination at an inquest is (in the district in which he and A. practise) quite exceptional; and also that, as the coroner resided at a distance of nearly twenty miles, and A. at a distance of two miles from the place where the inquest was held, an adjournment would have been inconvenient. We think that, although it would have been better to summon A.—which, we understand, the coroner himself acknowledges—B. could not do otherwise than give evidence, after receiving an official summons to attend the inquest. It does not appear that he was aware before the inquest that A. had seen the woman; and the reason he assigns for not adjourning the inquest in order to obtain A.'s evidence is one that may be fairly admitted, as regards the question of etiquette; of its bearing on the efficiency of the inquest, we say nothing at present. On the whole, we think that there is not sufficient ground for charging B. with a wilful breach of medical etiquette; and that there is nothing in the circumstances which have taken place to prevent them from continuing their friendly relations towards each other, or renewing them if they have been at all interrupted.

A., BEING in attendance on Mr. Z., and thinking a consultant necessary, calls in B. as consultant. Two days subsequently, B. informs A. by telegram that Mr. Z.'s friends wish B. to consult every second day with A. The case not progressing satisfactorily, A., with the consent of Mr. Z.'s friends, calls in C.; A., B., and C. meeting then and there together in regular consultation. B. objects to A. having summoned C. without first expressing his intention of doing so to B., and consulting him in the matter. Query: Has B. any grounds of complaint against A.? and has A. been guilty of a breach of medical etiquette?

\*.\* We are of opinion that A. should have informed B. of his intention to call in C.; B. being for the time, by desire of the patient's friends, in regular attendance on the case.

## POISONING BY CARBOLIC ACID.

SIR,—What is the best and promptest treatment for poisoning by carbolic acid? I cannot get the information from text-books.—I am, etc., AN APPRENTICE.

\*.\* Taylor, in his last edition of his classic handbook on *Poisons* (Churchill, 1875), says the removal of the poison by the stomach pump is the best plan of treatment. The stomach should be well washed out with tepid water until the smell has disappeared.

SIR,—Can you inform me which is the most effectual filter (large one) for use in a house for cooking and drinking water.—Yours, W.



**NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.**

**ELECTIONS at the MEDICAL BENEVOLENT COLLEGE.**

A CORRESPONDENT forwards us a copy of a canvassing letter issued on behalf of a candidate for this College, which includes the following paragraphs.

"I pray you to consider that we cannot afford to lose a single vote. The struggle will be a hard one, and no effort can be safely neglected.

"I desire to thank those friends who, knowing our need, have kindly sent contributions to our canvassing fund, and also those who sent pensioner proxies, which, by an arrangement of reciprocity with the friends of one of the candidates for a pension, we were enabled to turn to account for our mutual benefit. Let me earnestly beg of you to send us, in addition to your scholarship votes, early next May, your pensioner's proxy also, if disengaged, to exchange for other scholarship votes."

This is not the first application, and illustrates painfully the sort of machinery employed to get pet cases into the charity. It is a painful circumstance, that the Medical Benevolent College alone of our medical charities still clings to this most oppressive, costly, and unjust mode of election. There is no security under such a system that the most deserving objects of the charity will be selected. The pushing influential friends of the least deserving can insure success by employing extra canvassing power. It is a sad parody of charity, and, to our mind, a cruel misuse of funds. We feel sure that, by abolishing this anomalous and oppressive system, the Council of the Medical Benevolent College would secure a stronger hold on public and professional munificence.

**ALPHA.—1.** If the first subject were duly represented to the Committee of the Branch, they would probably prosecute. They could certainly do so with success and at little or no expense. **2.** *The Medical Register.*

**PORTABLE DISINFECTING APPARATUS.**

**H. A. L. (Moseley).**—A very good portable disinfecting apparatus for public establishments and sanitary unions was described by Dr. Charles Rogers, of East Retford, at the last meeting in Sheffield, and was described and figured in the JOURNAL in January.

**SIR.**—Can you or some of your readers tell me a good way of rendering the linimentum ammoniac liquid enough to pour easily into bottles, and yet remain a cheap and efficient stimulating embrocation?—Yours, etc., W.

**ADMINISTRATION OF IODIDE OF POTASSIUM.**

**SIR.**—I would be much obliged if some of your readers would tell me the best way to give iodide of potassium to a patient whose system is very intolerant of the medicine—one grain producing iodism.—Yours truly, AN INQUIRER.

**DR. F. T. PORTER (Dublin).**—We have no reason to doubt that the medical journal in question exercises a fair discretion in dealing with the correspondence addressed to it; and it is contrary to our rule to take up a broken correspondence.

**CERTIFICATE OF DEATH.**

**SIR.**—I should be glad of your opinion as to whether a medical man is justified in giving a certificate of the cause of death in the case of an infant dying at or soon after birth, where the mother has been attended during labour solely by a midwife, and of which he knows nothing except on the representation of the midwife.—Yours, etc., LICENTATE.

Handsworth, March 6th, 1877.

**\*.\*** He may, we think, if he can satisfy himself of the cause of death by personal inspection.

**SIR.**—Can any of your readers tell me to what hospital the following gentlemen belonged in 1772: Mr. Smith, Mr. Warner, Mr. Elze, Mr. Martin, Mr. Frank, Mr. Way? I ask the question, because I have in my possession a notebook of operations performed somewhere by these gentlemen during the years 1772-73. The notes are by Mr. Stainforth, sen., one of the first surgeons to the Sheffield General Infirmary.—Yours faithfully, ARTHUR JACKSON.

**MUSSEL POISONING.**

**SIR.**—I shall be thankful to receive a "wrinkle" from some of your correspondents who have had some experience, as to the treatment they have found most useful in cases of mussel poisoning.—Yours, etc., MEDICUS.

**A QUESTION OF TREATMENT.**

**SIR.**—I shall be glad to receive suggestions for the treatment of the following case. A. B., a strong healthy farmer, aged 23, has for the last three years suffered from intense irritation over different parts of the body, but chiefly about the thighs and forearms. The irritation is accompanied, or rather preceded, by some small red pimples, scanty, with no sort of discharge: these are quickly scratched until they bleed, to get relief. The itching is much worse in cold weather than warm, by day than by night. This winter he has not had it so badly, which he attributes to the mildness of the season. He eats a good deal of pork, and drinks a small quantity of cider. Carbolic acid lotion (1 to 30) gives temporary relief.—Yours, M.D. March 3rd, 1877.

**MURIATE OF CINCHONA.**

**SIR.**—Can any of your readers kindly tell me the precise therapeutics of cinchonine muriate, and where its action differs from that of quinine? If so, I should be much obliged.—Yours obediently, GALEN.

**VACCINATION FEES.**

**SIR.**—In answer to L.R.C.P.'s inquiry as to the custom in reference to vaccination fees, I should say that if the usual fee of a guinea be made, the operator might vaccinate a second time without further charge; but if requested a third time to perform the operation, a second fee should be demanded.

M.D. asks what would be considered a fair and remunerative fee for the vaccination of a city merchant, his wife, two children, and three female servants. I consider five guineas would be a fair charge to make.—I am, etc., A MEMBER.

**MR. ROBERT MANN (Manchester).**—The handbill forwarded is amusing enough. We believe that nearly all the quacks recently fined have recommended business, only taking care to add to their names "not registered"—a formula which, under the present wording of the Medical Acts, effectually shields all who do not supply medicines. In the present instance, however, we are not sure that the person mentioned could not be successfully prosecuted under the Apothecaries' Act, inasmuch as he supplies medicines as well as gives advice.

**CORRESPONDENTS** are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

**WE** are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Sheffield Daily Telegraph; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Edinburgh Courier; The Bridport News; The Liverpool Medical Enquirer; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Warrington Express; The Croydon Chronicle; The Northampton Herald; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; The Hull Criterion; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The High Peak News; The Metropolitan; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Middlesex Advertiser; The Rock; The St. Andrew's Gazette; The West Cork Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Richmond and Twickenham Times; The Western Morning News; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; etc.

\*.\* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

**COMMUNICATIONS, LETTERS, etc., have been received from:—**

Dr. J. Braxton Hicks, London; Dr. A. S. Taylor, London; Dr. J. B. Bradbury, Cambridge; Dr. T. Lauder Brunton, London; Dr. Braidwood, Birkenhead; Dr. George Johnson, London; Dr. J. P. Cassells, Glasgow; Dr. W. R. Gowers, London; Dr. A. A. Gore, Dublin; Mr. N. A. Humphreys, London; Mr. W. L. Selfe, London; Dr. C. Theodore Williams, London; Octogenarian M.D.; Dr. Munro, Battersea; Dr. J. W. Moore, Dublin; Dr. Joseph Rogers, London; Dr. Joseph Bell, Edinburgh; Mr. H. C. Burdett, Greenwich; Mr. G. Brown, London; Dr. P. H. Pye-Smith, London; Dr. I. Burney Yeo, London; Our Vienna Correspondent; Mr. Walter Rivington, London; Dr. C. R. Robinson, Dublin; Mr. J. F. Williams, Bristol; Mr. Richard Davy, London; Our Paris Correspondent; Dr. J. Milner Fothergill, London; Dr. Wm. Fairlie Clarke, Southborough; Mr. Wanklyn, London; Mr. Hugh Robinson, Preston; Mr. T. M. Stone, London; Dr. Ord, London; Mr. Francis Mason, London; Mr. Best, Louth; F. E. A.; Dr. Seaton, Nottingham; Mr. MacBain, North Berwick; Mr. F. A. A. Smith, Walton-on-Naze; Mr. E. R. Denton, Leicester; Mr. D. T. Evans, Denbigh; Dr. G. H. Philipson, Newcastle-upon-Tyne; Mr. B. W. Fothergill, London; The Registrar-General of England; Mr. Holderness, Huntingdon; Mr. North, York; The Secretary of Apothecaries' Hall; Mr. Edward Garraway, Faversham; Dr. J. Russell, Birmingham; Dr. Strange, Worcester; Dr. J. Wight, Aberdeen; The Registrar General of Ireland; Dr. Warner, London; Mr. Ingpen, London; Dr. Tripe, London; The Secretary of the Royal Medical and Chirurgical Society; A Member; Mr. Alfred Haviland, Northampton; Mr. Lowther Kemp, London; Mr. P. H. Mason, Gosport; C. G. S.; Mary; Medicus; Mr. W. D. Husband, York; The Director-General of the Medical Department of the Navy; An Inquirer; Mr. W. Prowse, Cambridge; The Secretary of the Pathological Society; Dr. Clarke, Drogheda; Our Edinburgh Correspondent; Dr. H. Macnaughton Jones, Cork; Dr. Eustace Smith, London; The Secretary of the Quekett Microscopical Club; Mr. S. D. Clippingdale, London; Dr. W. Squire, London; Mr. E. W. Thurston, Ashford; Dr. F. T. Porter, Dublin; Dr. Greatrex, Lawton; Our Dublin Correspondent; Mr. T. D. Stanistreet, Cowbridge; Mr. C. R. Thompson, Westerham; Mr. R. Woolley, Birmingham; Mr. Chavasse, Berlin; The Secretary of the Association of Dental Surgeons; Dr. J. H. Galton, Aneley; Dr. Sawyer, Birmingham; Dr. Mackey, Birmingham; Mr. Evens, Bristol; Opaque; Mr. Hildard, Birmingham; Mr. H. A. Smith, Reading; Dr. Goodchild, Leamington; Mr. Cuffe, Woodhall; Mr. W. J. Tyler, London; Dr. West Symes, Leeds; Mr. Hughes, Woodbridge; Dr. W. A. Hollis, Brighton; Mr. Ceely, Aylesbury; Dr. Harbinson, Lancaster; Mr. Lennox Browne, London; Dr. McKendrick, Edinburgh; Dr. Cayley, London; Dr. Thomas Trollope, St. Leonard's-on-Sea; Mr. Farnfield, London; Dr. Cameron, Liverpool; etc.

**BOOKS, ETC., RECEIVED.**

Atlas of Skin-Diseases. By Tilbury Fox, M.D., F.R.C.P. London: J. and A. Churchill. 1877.  
Text-Book of Structural and Physiological Botany. By Otto W. Thomé. London: Longmans, Green, and Co. 1877.  
The Whole Familiar Colloquies of Desiderius Erasmus of Rotterdam. By Nathan Bailey. (Translated.) London: Hamilton, Adams, and Co. 1877.  
Geography. By George Grove, F.R.G.S. London: Macmillan and Co. 1877.  
The Electric Bath: its Medical Uses, Effects, and Appliance. By George Schweig, M.D. New York: G. C. Putnam and Co. London: Sampson Low and Co.  
Chemical Microscopical Analysis of Urine. By George B. Fowler, M.D. London: Sampson Low and Co. 1877.



# THE GOULSTONIAN LECTURES

ON

## PHARMACOLOGY AND ITS RELATION TO THERAPEUTICS.

*Delivered at the Royal College of Physicians, London.*

By T. LAUDER BRUNTON, M.D., D.Sc., F.R.S.,

Fellow of the Royal College of Physicians; Assistant-Physician and Lecturer on Materia Medica and Therapeutics at St. Bartholomew's Hospital.

### LECTURE II.—*Concluded.*

As a third example of pharmacological investigation, I shall take casca bark, which I have lately been examining with Mr. Pye; and I choose this because it illustrates various methods of examining the action of a drug on the different organs of the body. The methods we employed were not new. I could have found a better investigation of the action of a poison upon the heart and circulation in Von Bezold's admirable work on *Atropia*, of action upon muscles in his examination of veratria, of action upon the stomach in Giannuzzi's investigation of tartar-emetic, and of action upon the kidneys in Ustimovitch's research on urea and potash. In none of these works should I have found all the methods combined. I have selected this drug, moreover, because I believe it to be deserving of attention, and likely to prove of great use in practical medicine. This bark is used as an ordeal poison along the greater part of the coast line of Western Africa, with the exception of Old Calabar. In different districts, it bears the names of "doom", "gedu", "sassy", "saucy", "cassa", and "casca". It is obtained from the *Erythrophloeum Guinense*, which, like the Calabar bean, belongs to the natural order Leguminosæ.

There are two ways in which it is employed by the natives. One is to make the suspected person fast for several hours, and then to give him a few grains of rice and some infusion of the bark. If he vomit all the grains of rice and be not purged, he is said to be innocent. If he be purged, he is pronounced guilty. The other way is to bend several boughs of trees, and stick both ends into the ground, so as to form a long archway, through which the accused walks in a stooping position, after a dose of the infusion has been administered. If he be able to walk through without stumbling, he is considered to be innocent. If he stumble, he is said to be guilty, and at once despatched. The chief effects of the poison, by which the innocence or guilt of the accused is decided, are thus, vomiting, purging, and loss of muscular power or co-ordination.

Some of this bark having been brought from Angola by Mr. Monteiro, I made a few experiments on its action, the results of which he published in his work. These experiments showed that the poison acted upon the heart in much the same way as digitalis; but other engagements prevented me from making at the time an exhaustive investigation. The experiments of others have shown that vomiting and purging may be due either to local action of an irritant substance upon the mucous membrane of the stomach and intestine, or to its effect upon the nervous system regulating the secretion and movements of these organs. In order to ascertain in what manner the casca produced these effects upon the intestinal canal, a quantity of infusion was administered to an animal. Vomiting and purging both took place, just as in the case of the persons subjected to the "ordeal". When the infusion was injected under the skin, or into a serous cavity, equally violent vomiting occurred, but there was no purging. It was, therefore, clear that the purging was due to the local action of the poison upon the intestine, but that the vomiting was caused through the medium of the circulation. The poison, however, is conveyed by the blood to the stomach itself, as well as to the central nervous system. Its effects might, therefore, be produced by irritation of the walls of the stomach, as well as by means of its action on the nervous centres. The connection between the stomach and the nervous centre is kept up chiefly, if not entirely, through the vagi and the splanchnics. If these nerves were divided, a poison, which acted by irritation of the stomach, ought no longer to be capable of producing its usual effect. The vagi were, therefore, divided before the injection of the poison, and then we often found that vomiting or retching either did not occur, or was much less violent than usual. The purging might be due either to increased secretion or increased peristaltic action. If it had been caused by the

former, a quantity of the drug, introduced into an empty loop of intestine, isolated from the rest by two ligatures, ought to have caused a secretion of fluid, as Moreau has shown to result from other purgatives, such as sulphate of magnesia. This, however, was not the case; and we, therefore, concluded that the purgative action was due to increased peristaltic of the bowel.

The second symptom, regarded as a proof of guilt in those subjected to the "ordeal", is want of power to walk properly; those who stumble before they reach the end of the archway of boughs being at once executed. In attempting to ascertain the cause of this loss of power, we excluded the muscles and motor nerves, as we found that neither of them lost their irritability when the poison was applied to them in the same manner as curare in Bernard's experiments. The spinal cord was the next point of the nervous system to which we directed our attention. We noticed that, some time after an injection of casca under the skin of a frog, the movements of the animal became sluggish and were imperfectly performed. When the toes were pinched, the foot either moved lazily or not at all, instead of being promptly drawn up. The reflex activity of the cord was thus seen to be impaired. It would not be wise, however, to conclude hastily that this impairment was due to the effect of the drug upon the nervous tissue itself; for imperfect circulation through the brain and spinal cord quickly deprives these organs of their power. Although arrest of the circulation does not abolish the functions of nervous centres so quickly in the frog as in warm-blooded animals, it nevertheless does so after a time. The effect of the casca upon the cord might, therefore, be due to its action, not upon the nervous tissues, but upon the circulation. On examining the heart of the frog after the drug had begun to act, it was found that its pulsations had ceased. It seemed, therefore, quite possible that loss of power in the spinal cord was due to an arrest of the circulation; but, of course, this was only a hypothesis, as the casca might act both on the heart and the cord itself. To decide this point, we administered casca to one frog, and waited until the heart had stopped. The instant it had done so, we arrested the circulation in another frog, of a similar size, by a ligature drawn round the large vessels close to the heart. The circulation was thus arrested equally and simultaneously in both animals. In one of them, the poison had been previously carried by the blood to the spinal cord, and could still act upon it, although circulation had stopped. If the casca had any paralyzing action upon the nervous substance of the cord, reflex action ought to cease in the poisoned frog first. But this was not the case. In both animals, reflex action ceased almost exactly at the same moment. The diminution of power in the spinal cord seemed, consequently, to result from the action of the drug on the circulation. We, therefore, arrived at the conclusion that alterations in the heart's pulsation were the cause of the staggering gait and want of muscular power exhibited by the victims of the "ordeal".

The action of the drug upon the heart and circulation was the subject of our next inquiry. After its administration to a frog, the first effect observed is that the heart beats more slowly. Then the ventricle contracts irregularly, some parts of it being firmly contracted and white, while others remain partially dilated and filled with blood, so as to present the appearance of little red pouches studding the surface of the organ. Finally, the ventricle stops altogether in systole, while the auricles continue to pulsate for some time. This condition is almost like that produced by digitalis. Further experiments have shown us that casca also resembles this drug in its action upon the cardiac nerves. When a moderate dose of casca is injected into the jugular-vein, the pulse becomes slow. A further dose, makes it quick; and another large dose again renders it slow. Slow pulsation of the heart indicates that its regulating nerves are in a state of abnormal excitation. This regulating or inhibitory nervous apparatus is partly situated in the heart itself, and partly in the medulla oblongata, and these two are connected by means of the vagi nerves. The medullary or central is more sensitive to the action of many drugs than the cardiac or peripheral portion, and was, therefore, likely to be the one first affected by the poison. If this were so, division of the vagi, through which it acted upon the heart, would remove the slowness of the pulse occasioned by the action of the casca. Experiment confirmed the truth of this. The effect produced by section of the nerves was an immediate quickening of the pulse. The same condition was brought about, as I have already mentioned, by the injection of an additional dose of casca when the nerves were left untouched. This effect rendered it probable that the additional dose paralysed the ends of the nerves in the heart. When an electric current is applied to the nerves, it usually causes immediate stoppage of the heart's pulsations. If, however, this irritation be applied after the casca has quickened the heart, no effect is produced by the galvanism. This clearly shows that the usual power of the nerve over the heart has been completely abolished. Since, then, a moderate



dose of casca destroys the power of the vagus, through which slowness of the pulse is usually produced, and, nevertheless, the injection of a further dose still renders the heart's pulsations slow, this slowness must, we think, necessarily be due to an action of the drug upon the ganglionic structures or muscular fibre of the heart itself.

We have hitherto considered its action upon the heart alone; but, on the injection of a small dose, an effect upon the circulation becomes manifest before any change whatever can be noticed in the pulse. This effect is a rise in the blood-pressure. This rise continues after the pulse has become slow, and it does not fall during the intervals between each cardiac systole. This satisfactorily demonstrates that the arterioles through which the blood flows from the arteries into the veins have become contracted. The next question is, How is this contraction induced? It may be that the drug acts upon the muscular walls of the arterioles themselves, upon the nerves which stimulate these walls to contraction, or upon vaso-motor centres situated either in the spinal cord or the medulla oblongata. The chief vaso-motor centre is situated in the medulla; and usually, when its connection with the arterial system is destroyed by cutting across the cord at the occiput, the arterioles dilate and the blood-pressure falls. If any drug should raise the blood-pressure by acting upon this centre in the medulla, its effect will be prevented by such a section of the cord before its administration. On dividing the cord and injecting casca, we found that the blood-pressure rose higher than in any other experiment. The drug, therefore, does not produce contraction of the arterioles by its action upon the general vaso-motor centre in the medulla, but by acting either upon the arterioles themselves or upon vaso-motor nerves or ganglia not contained in the medulla. In order to ascertain, if possible, whether these centres were contained in the spinal cord, or were in the neighbourhood of the vessels themselves, we divided the sympathetic in the neck of a rabbit, and thus cut off the vessels of the ear from their connection with any nervous centre excepting such ganglionic cells as might lie in the immediate neighbourhood. We then injected a dose of casca, which caused the vessels in both ears to become equally pale. Had the contraction depended upon excitation of a vaso-motor centre in the spinal cord, it would have affected that ear the nerves of which had been left entire to a greater extent than the one in which the vaso-motor nerve had been divided.

As the action of casca resembles in many points that of digitalis, it seemed not improbable that it would exert a similar action upon the kidneys also. A dog was, therefore, anaesthetised by chloroform, and a cannula placed in one ureter, so that the urine could be collected as it flowed from the kidney, and the rate of secretion exactly discovered. The experiments of Ludwig and Max Hermann had already shown that this rate depends upon the pressure within the renal glomeruli; and it was to be expected that, as the pressure rose after the injection of casca, the rate of secretion would be increased. On trying the experiment, our expectation was realised, for a single dose both raised the blood-pressure and quickened secretion. Another dose raised the blood-pressure still higher; but the secretion of urine, instead of becoming quicker, began to slacken; and, when the blood-pressure had risen to its maximum, it stopped altogether. But when, after a while, the blood-pressure began to fall, the secretion again commenced. This indicated that the casca had exerted its contracting power to a greater extent upon the arteries of the kidney than upon those of the body generally; so that, notwithstanding the rise of pressure in the arterial system, the contraction of the renal arteries had almost entirely cut off the supply of blood to that organ. As the effect of the drug passed off, the renal arteries relaxed, again allowing the blood free access to the kidneys. In this respect, the action of casca agrees exactly with that of digitalis. It seems likely that, like digitalis, casca will possess a cumulative action; for if, during the course of its administration, it should arrest excretion by the kidneys while it is still being absorbed from the stomach, poisoning will occur, just as in Hermann's experiment with curare. In casca, then, we possess a drug which strengthens and slows the heart, contracts the arterioles, and increases the urine. Having gained this knowledge, how are we practically to apply it? What connection is there between our acquaintance with the parts of the body on which the drug acts, and the symptoms of any disease with which we meet at the bedside? The connecting link between these two, pharmacology and symptomatology, is pathology. This traces back the symptoms of disease to alterations in the structure and functions of the different organs, just as we have seen pharmacological experiment in the hands of Magendie trace back the symptoms produced by strychnia to the spinal cord.

Only too often are we called upon to see cases where, on the least exertion, the heart begins to palpitate; the breathing becomes difficult; and, as the disease progresses, suffocation threatens. The patient

sits upright in bed; the face becomes dusky, the lips livid; the feet swell; and death ends the scene. To what organic changes are these symptoms due? and how are these changes to be remedied? Harvey's discovery and Malpighi's demonstration of the capillaries have made it easy and natural to connect the rosy hue of health and the flush of exertion with full vessels and active circulation, and to attribute the pallor of death to absence of blood. It is to the blood, then, that the skin chiefly owes its hue; and dusky skin indicates darkness of the blood. But the experiments of Lower showed that darkness of the blood was caused by deficient respiration, and was removed by exposure to air. We therefore trace the dusky skin to deficient aëration; but we cannot yet say whether the air has been prevented from reaching the blood, or the blood from reaching the air. Here the discoveries of Avenbrugger, Laennec, Corvisart, Hope, Williams, Corrigan, and many others, come to our aid. We percuss the chest and listen to its sounds. We find, let us suppose, no excessive resonance, and hear no rattling in the bronchial tubes. We thus learn that the air is not prevented by mucus from filling the lungs, nor is the area of contact with the blood lessened by emphysema. The lungs, then, are not in fault, and we pass on to examine the heart. On percussion, we find the organ enlarged; on palpation, we perceive the apex displaced to the left; and on auscultation, we hear the sharp "lubb" of the first cardiac sound replaced by a whiff like that of a bellows. From this, we know that the valve which ought to prevent the backward flow of blood from the left ventricle during its systole is inefficient; and that, like one sliding back at each step while walking on a slippery road, the heart must beat with abnormal power to carry on the circulation. No wonder, then, if it palpitates at the slightest unusual call upon its efforts. But more than this: each pulsation not merely fails of its proper effect in forwarding the circulation, it positively retards it; for each systole sends a jet of blood back into the auricle and obstructs the flow in the pulmonary veins. The blood cannot pass through the lungs with sufficient rapidity; aëration is, therefore, deficient. Thus we learn why the respiration is laboured, the skin dusky, and the lips livid.

How, then, is this to be remedied? First of all, it would be an advantage to make the heart beat more slowly; for, when it pulsates rapidly, there is no time for the pulmonary veins to become well emptied between each systole. By lengthening the interval between them, the ventricle has time to become better filled, and sends a fuller current into the wide aorta, and a proportionately small amount back into the pulmonary veins through the narrow chink in the mitral valves. But, if this were all, why should not a drug like aconite serve our purpose, for it renders the heart's action slow? But at the same time it weakens it; and, in the conditions which we have just been considering, one of the most important factors is weakness of the right ventricle; for it is in the pulmonary circulation that the resistance lies, and one of our most important tasks is to strengthen the propulsive power of the right ventricle, as well as to remove obstruction in front. This end we gain by employing digitalis or casca, which increase the strength at the same time that they diminish the rapidity of the cardiac contractions.

The next symptom is the oedema. This depends upon accumulation of fluid in the cellular tissue, and may be due either to too much being poured out from the blood-vessels or to too little being re-absorbed. It was attributed by Lower, in 1680, to diminished absorption by the veins; his idea being based upon some experiments in which he tied the vena cava, with the effect of producing great oedema of the lower extremities. His opinions were confirmed by the observations of Bouillaud, who noticed a similar condition in patients suffering from thrombosis of the iliac veins. His experiments, however, were repeated by Valsalva, Hewson, and several others, with a different result; and it was not until Ranvier, in 1870, again investigated the question, that the cause of the discrepancy between these observations was ascertained. On tying the vena cava in the abdomen of a dog, Ranvier found that oedema did not come on unless the nerve of the limb was divided at the same time. When the sciatic was cut on one side, the arteries were dilated, so that the leg became warm and oedema came on, while no swelling was perceptible on the opposite limb, although the venous circulation was equally obstructed in both. The reason of this appears to be that, so long as the arteries were not unnaturally dilated, the lymphatic system sufficed to absorb the fluid poured out for the nutrition of the tissues, so that no excess accumulated in them. Whenever section of the vaso-motor nerves allowed the arteries to become dilated, more fluid was poured out than the lymphatics could absorb; and, the veins being prevented from removing the excess as they would have done under ordinary circumstances, it remained in the tissues, producing oedema. That this effect was due to paralysis of the vaso-motor, and not of the motor nerves of



the limb, was shown by Ranvier in another experiment. He divided the roots of the sciatic nerve in the spinal canal before they had been joined by the communicating branches from the great sympathetic. He thus cut the motor without injuring the vaso-motor nerves, and rendered the leg completely powerless, without altering the vessels. In this case, no œdema occurred, although the vena cava had been tied as in the former experiment. We see, then, that contraction of the arterioles may prevent œdema, even although venous obstruction exists; and we are warranted in supposing that it will diminish the œdema after it has already come on. But more than this: stimulation of the vaso-motor centre increases absorption. This was shown by Goltz, who injected a quantity of fluid into the dorsal lymph-sac of a frog, and found that, when he stimulated the vaso-motor centre, this fluid was rapidly absorbed into the circulation. But, when he destroyed the nervous centres, no absorption whatever took place. We do not yet know the exact way in which this increased absorption is effected; nor has it been ascertained whether drugs which contract the arterioles, either by stimulating the vaso-motor centre in the medulla oblongata or other vascular nerves, have a similar action. It seems to me highly probable that digitalis at least has such an action; for, in some experiments which I made many years ago, after the quantity of urine had been very much increased by the action of the drug, an intolerable thirst came on, which I was obliged to satisfy by drinking a quantity of water greatly in excess of the allowance to which I had restricted myself every day for the preceding six months.

By the use, then, of a drug like casca, which contracts the vessels, we will almost certainly lessen œdema by diminishing the flow of blood through the arterioles. At the same time, in all probability, we will increase absorption, both by a direct action upon the circulation and tissues and by the secondary effect proceeding from the augmented urinary discharge. Digitalis has hitherto been our great resort in mitral disease, but I think it probable that in casca we possess a drug more powerful still; at least, its effect upon the arterioles appears to be greater than that of digitalis, and it is quite possible that it may succeed in those cases of advanced mitral disease when digitalis fails.

From these examples, it will be evident that the use of experiment to the student of medical science is the same as that of a solar observation to the mariner. An unwise sailor may trust to his "dead-reckoning", and thus make shipwreck; but the wise navigator will not be content with calculating his position from his rate of sailing and the direction of his course. He knows that irregular winds and unseen currents may falsify his calculations, and he will use every opportunity of correcting them by actual observation of his latitude and longitude. Day by day, he rectifies any error into which he may have fallen, and thus he can proceed with confidence, knowing he can never be far astray. When, on the other hand, no such a correction is made, each erroneous calculation forms a false starting-point for the succeeding one, and the error daily grows. Thus it was that the ancients, founding a great speculation on a small fact, and building one fancy on another, landed themselves in utter confusion. Erasistratus found the arteries empty after death; he therefore concluded that they contained air during life, and then he went on to fancy that when blood got into them it troubled the spirit they contained, and caused fever or inflammation.

Harvey found valves in the veins, and therefore thought it probable that the blood circulated, instead of oscillating backwards and forwards; and the tetanic spasms caused by upas led Magendie to believe that it acted on the spinal cord. But neither was content with mere probability; each walked as on a quaking bog, and tested each step before taking it. If the blood circulated, pressure on the veins must make them empty above and full below the point of constriction. If upas acted on the spinal cord, its action must cease when the cord was destroyed. Every step thus gained affords sure foothold for another, and thus science daily grows. Already the experimental method has done much for medicine, and in my next lecture I purpose to consider the chief gains we have obtained by its use.

MR. CROSS received a deputation on the 15th instant from the Amalgamated Tailors' Society, to lay before him the evils of what is known as the "sweating system", and to ask him to take remedial measures.

VACCINATION.—Mr. Oded Lousley, Public Vaccinator for Reading, has received from the Local Government Board £53:17. This is the second time Mr. Lousley has received an award for successful vaccination.—The Local Government Board have just awarded to Dr. P. S. Fentem £10:10, as the result of the first inspection made since his appointment as Public Vaccinator for the Bakewell District of the Bakewell Union.

## THE CROONIAN LECTURES

CN

### THE DIFFERENCE BETWEEN THE SEXES IN REGARD TO THE ASPECT AND TREATMENT OF DISEASE.

*Delivered at the Royal College of Physicians of London.*

By J. BRAXTON HICKS, M.D., F.R.S.,

Physician-Accoucheur and Lecturer on Midwifery and Diseases of Women and Children at Guy's Hospital, etc.

#### LECTURE I.—*Concluded.*

LET us now follow the relative liability of the sexes as they proceed towards maturity. Now, the records of the relative frequency of disease in the sexes are pretty clear in attributing to the male a much higher rate of susceptibility to *acute hydrocephalus* than the female. I need only quote the statistics of Dr. J. Risdon Bennett, where he shows that, out of equal numbers of each sex, 1,707 males and 1,349 females died of this disease.

In regard to *convulsions* taken as a prominent symptom in the broad idea of the public statistics ending in death, we find, for two years taken as a haphazard, that, in 1866, 12,438 males and 9,353 females were attacked within the first year of life; and, during the second year, 1,668 males, and 1,513 females; after which time the proportion becomes more equal, and later the excess is slightly more on the female side. In 1868, during the first year, 11,689 males and 8,905 females; during the second year, 1,480 males and 1,367 females.

Of course, we must bear in mind that, convulsions being an accompaniment of other conditions, we must take the above rather as an evidence of serious disease, and compare it with the statistics of acute hydrocephalus, from which it is separated in the Registrar's reports.

In regard to liability to *laryngismus stridulus*, convulsion of the larynx, we find males decidedly in excess. In Reynolds's *System of Medicine*, we find Dr. Hughlings Jackson assenting to this and quoting Vogel, Gee, and Mackenzie in confirmation. Thus, he says, "of Gee's cases, 34 were males and 14 females".

It is curious to note here that rachitis, which has been shown by Sir W. Jenner, Gee, and others to be very frequently found with laryngismus stridulus, is also more fatal in males than females. Thus, in the Registrar's report for 1866, we find there died, males 66, females 38; and in 1868, males 69, females 49.

It is also to be noticed that the death-rate in males exceeds that of the females in most of the affections of the larynx. Thus, in *croup*, the proportion of deaths was 100 males to 82.89 females, as quoted by Churchill. Trousseau gives 22 males for 8 females, and 17 males to 5 females.

In *pertussis*, we find that the death-rate is about equal.

The same may be said of the diseases classified as *paralysis* by the Registrar-General; though it is difficult to say whether the condition called infantile paralysis is thereby indicated.

Hitherto, in the diseases to which I have alluded, the male has been the most affected; but, in that which will next engage our attention, namely *chorea*, this proportion is reversed, and in a marked degree. The difference is not much up till the end of the fourth year; but after this, on the average, we find from two to four times more females than males. Thus, at the Great Ormond Street Children's Hospital, Dr. Hillier tabulated the sexes and ages of 422 cases occurring up to twelve years of age, of which 122 were males, and 300 females. I need not quote the whole table, but may mention that, between the ages of four and five, the proportion of males to females was as 4 to 16; and, between ten and twelve, as 23 to 81. Again, when chorea occurs after puberty, it is among women that it is principally seen; thus, in Dr. Ogle's cases, there were 16 females and but 3 males. These facts are doubtless well known to my hearers, but I am anxious to contrast this remarkable difference with other diseases of the nervous system.

Yet, like most, if not all, of the other conditions in which we find marked preponderance in one or the other sex, it must be remembered it is not confined exclusively to females; and, therefore, when we seek for the cause, we must seek in a direction where we find a factor common to both, but especially intense or prominent in the female. What is that condition? Looking at the tables, we find the *highest* proportion of females affected very noticeable at six years old; up to that age, there was very slight difference; but, from that period to the latest at which it has been noticed, namely forty-seven, the excess is strongly



preserved, although the general frequency is much diminished. Again, during pregnancy, we find that a considerable number of those attacked had already been subject to it in childhood.

It would be apart from the intention of these lectures, and indeed it would be presumptuous on my part to attempt to discuss the causation of chorea. I have merely endeavoured to show the line of research which, followed out, may lead up to the solution of the difficulty. It would be well to bear in mind that, about the time of the increased frequency of chorea in the female, her heart begins to exceed in frequency, and so continues through life. Possibly, other differences may be discovered by careful inquiry.

As we proceed in these lectures, we shall, I think, find that an exalted sensitiveness of the nervous system gradually supervenes; so that, at any rate, we have increased vascular action and nervous sensitiveness to assist as predisposing agents.

Employing this method of inquiry still further, and particularly with regard to the embolic theory of origin, it is interesting to find that, in rheumatism, the proportion of deaths in males is rather greater than in females. If, as is supposed by some, the embola are the result of the rheumatic diathesis, it seems but reasonable to expect that, with such a large excess of females affected by chorea, there would be a larger number of females die of rheumatism than males. This, however, is not the case.

If, then, we inquire into the statistics of deaths from pericarditis as given by the Registrar-General, the proportions are nearly the same throughout the several ages; and under the broad head of "heart-disease" within that period of life most obnoxious to chorea, and which class doubtless is, to a large extent, made up of endocarditis and its results at that period, in this class, again, we find a remarkable equality. This is well borne out by examining the cases quoted by our late lamented colleague Dr. Sibson in the fourth volume of Reynolds's *System of Medicine*, where, at the ages most exposed to chorea, we find an excess of males attacked by endocarditis.

Then again, looking at the period of life most liable to chorea, and comparing it with the frequency of rheumatism at the same ages, we find that, whereas chorea is most frequent before fifteen years, rheumatism kills most frequently from twenty to twenty-five years of age.

If, therefore, the endocardial vegetations are the outcome of the rheumatic diathesis, although silently attacking only the heart, should we not find chorea prevailing at the age most liable to rheumatism? However, I do not wish, and indeed am not competent, to deny but that minute embola may cause chorea; only, I would venture to say that, for the reasons abovementioned, one would hardly conceive them to be of a rheumatic origin.

*Dentition.*—Very few authors allude to any distinction between the sexes with regard to the severity of the process of teething. Yet the Registrar's reports show that males die in a much greater ratio than females; thus, in 1866, we find, under the head of "teething", 2,384 males died and only 1,909 females; again, in 1868, there died 2,221 males and 1,924 females. And this is quite in accordance with the facts already brought before you; namely, the more susceptible cerebro-spinal system and more unyielding skull in the male.

I find but little, if any, sexual susceptibility to the *zymotic diseases* in either children or adults; at least, not sufficiently constant to deserve notice.

I alluded above to the tendency there is to transmit *sexual peculiarities*. Numerous instances are recorded by Darwin, both abnormalities as well as diatheses, and notably the hæmorrhagic; yet, this rule does not obtain in syphilis, so far as I have been able to learn. No indication is found in the Registrar-General's report; and Mr. Jonathan Hutchinson tells me that, although he had taken much trouble to ascertain, he cannot find that boys are more liable to congenital syphilis than girls; although the proportion of the male parents afflicted with syphilis far exceeds that of the female.

Before considering the sexual differences of the diseases attending puberty, it will not, I think, be without advantage to devote a few minutes to the consideration of that great change in the system.

What is this change? when does it commence? upon what does it depend? Presuming we may answer the first portion of the question in the manner Dr. Fowler in his *Vocabulary* has put it, "the time of life at which the generative faculties begin to be developed", one may go on to attempt an answer to the second portion, namely, When does it commence? and, so doing, we shall gradually be led up to the solution of the third. And this inquiry will be seen not to be without practical value; for thereby we can the more easily see the direction in which we should proceed when we attempt the correction of its disturbances.

I think it will be convenient to consider the puberty of the female

first, because the changes are more marked, and are more rapid than in the male.

Now, it has generally been accepted that puberty in woman coincides with the development of the ovary and its Graafian follicles, the commencement of the menstrual function; and those changes of the form that lead the child and girl up to womanhood, which I need not detain you in enumerating.

But instances occur not infrequently in which the change of bodily form takes place thoroughly, and yet no menstruation appears; even pregnancy has happened without menstruation having occurred. And again, the full development of the body has been completed, the woman having no ovaries; what, then, is the explanation?

Suppose I place before you this proposition: *That the organs of generation in their healthful state, from the earliest intra-uterine life till the full period of puberty are in a state of progressive development*; but the growth proceeds at a more active rate about that period. Let us now consider how facts support this proposition. Formerly, it was supposed that ovulation and menstruation began together, and that the latter was a sign of the former. But recent inquiries have shown that ovules are discharged at an age long anterior to the first appearance of the menses, in fact, in early childhood. It would be difficult to say how far the irregular fluxes of blood in children are dependent on this form of ovulation, because we are generally not able to say what other causes of vascular excitement and tension may be present in these hæmorrhages; yet, it is much more rare to find a parallel condition in boys.

Again, it has been not unfrequently, I may say commonly, said that there is but little distinction between the sexes till puberty; I mean in a clinical aspect, and even in manner, disposition, etc. Yet, I venture to think that those of my hearers who have much attended to children will agree with me in saying that, almost from the cradle, a difference can be seen in manner, habits of mind, and in illness, requiring variations in their treatment. The change is certainly hastened and intensified at the time of puberty; but there is, even to an average observer, a clear difference between the sexes from early infancy, gradually becoming more marked up to puberty. That sexual feelings exist from the earliest infancy is well known, and, therefore, this function does not depend upon puberty, though intensified by it. Hence, may we not conclude that the progress towards development is not so abrupt as has been generally supposed?

And this will serve to explain, in a measure, the cases of very early pregnancy; though in many of those there is a general precocity of the development, which may be the equivalent of ordinary puberty.

We are now somewhat prepared to answer the third portion of my question. "*Propter uterum*," says Van Helmont, "*mulier est*." "*Propter solum ovarium mulier est quod est*," paraphrases M. Chereau. But, is either true?

How, then, are we to explain the growth and full development of those who, possessed of every characteristic of woman, "*tout imprégnés de féminisme*," as Professor Fossagrives writes, are yet born without a trace of uterus and ovaries?

If the phenomena of puberty were dependent, as generally supposed, on the rapid maturation of the ovaries, then those cases would be inexplicable; but, suppose we were to say this: "That the changes of puberty were the result of a general force of development inherent in the being, extending its influence also, and principally, to the sexual system and to the nervous centres in association with it." I say, were we so say this, should we not find our facts more easily explained than they are by the other and older suggestion?

There can be no doubt that the function of menstruation is dependent on the presence of the ovaries; for when these are both absent, congenitally or by operation, the menses do not present themselves. But it is quite a different thing to say that the absence of the ovaries will cause the woman to lose her attributes as a woman. Nothing can be more clear as to the facts on this point than the evidence and arguments of Puech, in his work on *Diseases of the Ovaries*, in which he clearly disproves the opposite opinion, powerfully supported as it is even by Virchow, who goes so far as to say: "Take away these, and one has a man-woman." This, he shows by facts, is not the case: with a slight change, the women retained their attributes, otherwise it would be very difficult to reconcile the supposed effects of ablation with those cases of congenital absence alluded to just now.

It is true that, in some cases (frequently quoted), there has been a tendency to fatness, and also to a slight growth of hair on the face and masculine voice; but this certainly cannot be considered as a sign of loss of feminine qualities, because the women of some races have it in a marked degree. Indeed, this is one of the secondary sexual characters which vary in each sex and race so much that it cannot be held, when existing in a slight degree, as of such value as to



unsex the possessor. It is also a well ascertained fact that women who have no ovaries possess the sexual desire like other women, and altogether, as before stated, behave as women in their sexual relations. Hence it is clear that this instinct is neither dependent upon the ovaries nor, as shown before, on the changes of puberty, although, doubtless, intensified by it.

The case of hermaphrodites might seem to cause a difficulty in regard to their secondary sexual characters; but their case is readily understood, if we look upon the body as a whole, not dependent upon any one part, but a combination of correlated parts; though one can easily conceive that, if any error were to occur in the developmental force, so that the nervous centres as well as corresponding ovaries were deficient, there might be a tendency towards a neutral form, or man-woman.

Doubtless, although we cannot admit that the development of the body at puberty is entirely dependent on the presence of the ovaries, yet we must admit that they in their turn, full of life and activity, do powerfully react on the nervous centres, with which they stand in relation directly and sympathetically; and thus any disturbance occurring in the process of growth must reflect itself upon the economy.

Our position, therefore, is this. We may assume that we agree so far—1. That the development of woman can be completed without the function of menstruation; 2. That it can be perfected without the presence of uterus and ovaries; 3. That the sexual feeling and instinct existed before puberty.

If this be granted, then we must admit that puberty is in its essence not dependent on these conditions; rather, as I have before suggested, may we not say that "the changes of puberty are all of them dependent on the primordial force which, gradually gathering in power, culminates in the perfection both of form and of the sexual system, primary and secondary?"

The period at which this culmination arrives is not by any means fixed. We have every day evidence that the capability of procreation may occur some years before the completion of the process. By some it has been compared to the unfolding of a blossom; but that is not an accurate description. It should be compared to that position of the life of a plant when it for the first time shows signs of blooming, till it arrives at full power to form and perfect the seed.

I have dwelt somewhat long upon the puberty of woman, because, being more abrupt and marked than in man, one can view the change to more advantage, and because one can also, by comparing the normal process with its abnormal conditions, arrive more certainly at conclusions as to the causation both of the perfect and imperfect states. Now, in man, the process is slower, more gradual, making less demands on the system, and consequently is less liable to variations and perturbations. It is thus that some of the diseases of puberty have been considered peculiar to woman, yet I think we shall see that this view is not correct; that it is based on an imperfect appreciation of the phenomena first discussed.

But there is one most frequent concomitant of puberty to which I must allude before considering its errors; I mean menstruation. I have already stated that menstruation is not an integral, although it must be admitted to be a very important part. Many instances have occurred where full development and capability of procreation have existed without the appearance of the menses. It is often absent for a long time in some without any very serious condition of health. It depends on the ovaries unquestionably; for, where they have been removed, it ceases; or, where they are congenitally absent, it never appears. Hence we must regard the ovaries as an essential link in the causation of menstruation. But in what way does it act? Investigations, both clinical and *post mortem*, show at the time of menstruation a state of marked hyperæmia in uterus and ovaries which did not exist during the interval. There are other features in the process, but this is the most marked. Is the origin of the monthly hyperæmia situated in the ovaries, or in the nervous centres in relation to them? I think we cannot but conclude in the ovaries; otherwise, from what we have before seen, we ought to have menstruation when they are removed, so long as their corresponding nervous structures are perfect. Concluding therefore, that there is some stimulus generated in the ovaries, which, by reflex irritation, affects the uterus, we may further ask, Does it do so through the general system or directly upon the uterus, or is there a general condition of vascular excitement or tension which, occurring during the exfoliation of the uterine mucous membrane, finds a ready relief or exit in this direction, and thus manifests itself in the flow of menses?

At present, we are not in a position to answer the question about vascular tension, because the sphygmograph has not yet given efficient information; but, if we may judge from other clinical facts accompanying the epoch, we have every evidence of general vascular and

nervous excitement; for, when this occurs in excess, or in persons of frail vessels, we find the strain too much for their delicate walls; and thus exudations or even hæmorrhages, either vicarious, supplementary, or co-dependent, occur. That this influence is conveyed by, and is reflected on, the nervous system every passage of the epoch reveals.

If we seek an explanation why this process is so different in the male, we shall not have far to go, if we consider the difference between the testis and ovary; for, whereas the products of the testis readily escape by tubes, the ovaries are much more perturbed before the ovum can escape. Dense tissue has to be penetrated, and there is severe local distension of the vessels coupled with the tonic contraction of the Fallopian tube and dartoid tissue in connection with it.

I have already mentioned that the ovary is, according to recent searches, not the exact homologue of the testis, but that it springs later and from a different spot on the genital track; that, in the future male, an ovary commences, but soon becomes effete. That we might find some condition in the male to correspond to menstruation, would not be so very wild a thought; but, at the present time, information has not been sufficiently gathered to enable us to say whether the hæmorrhages of the male partake of any approximation to periodicity.

These remarks regarding puberty will help us, I hope, to understand more clearly the disorders which will form the subject of my lecture on Friday.

## ON NERVOUS SYMPTOMS WITH EAR-DISEASE.

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THE author thought it desirable to consider together the very different symptoms which are dependent on or are associated with ear-disease. Excepting when considering Aural Vertigo, he would speak only of cases in which there was discharge from the ear, signifying disease of the walls of the tympanic cavity, and, as it often did, disease of the temporal bone. To limit his subject still further, it was supposed that the patient had had discharge for some time before any extra-aural complications ensued: this was a simplification of the subject, as—especially in a child—it might be very difficult or impossible to tell whether there was recent acute otitis or meningitis, or both. To the aural surgeon, the condition spoken of is a disease of an important organ of sense; to those practising in general medicine and surgery, it is very often indeed bone-disease, and that of an important part of the cranial wall. The defect of hearing which accompanies it is bad enough, but this is, in comparison, nothing to such graver evils as cerebral abscess and meningitis. Old ear-disease often kills people, and sometimes kills them rapidly. Insurance-companies know this, and act upon it. Caries of a bone is bad; caries of a cranial bone is particularly bad; but, from its numerous important anatomical relations, caries of the temporal bone is worst of all. The author handed round the following reprint of two paragraphs from Tröltzsch *On the Ear* (Roosa's translation), in which the anatomical relations of the external auditory canal and of the tympanic cavity are succinctly stated.

"I have already called your attention to the short distance of the dura mater and the cerebrum from the upper wall of the external auditory canal, and also to the proximity of the transverse sinus and of the mastoid cells to the posterior wall. This proximity explains why these parts are sometimes involved in the inflammation, even when the caries is confined to the auditory canal. The anatomical relations are still more important in the cavity of the tympanum, since its lower wall or floor is frequently separated from the jugular vein only by a thin translucent layer of bone. Again, the largest artery of the head—the internal carotid, with the venous sinus surrounding it—takes its course on its anterior portion. These are separated from the cavity merely by a delicate and frequently defective bony lamella. Furthermore, its roof or upper wall, which, with the superior petrosal sinus, lies between the mucous membrane and the dura mater, is not unfrequently thinned, and even perforated; and besides, even in adults, there is usually a gap in the bone, the petrosquamosal fissure.

"The inner or labyrinth wall, finally, offers only slight resistance to the transition of the inflammation to the facial nerve, and through its two fenestræ, which are only closed by membrane to the external ear, and then to the meatus auditorius internus, which is covered by the membranes of the brain. Close under the mastoid process, which is intimately connected to the cavity of the tympanum, is the transverse sinus, which makes up the whole of these important relations."



The list of nervous affections is (1) neuralgic pain, (2) Bell's paralysis, (3) scrofulous tumour, (4) cerebral or cerebellar abscess and meningitis, (5) pyæmia, (6) hemiplegia, (7) epilepsy or epileptiform seizures, (8) aural vertigo. Some of these can only be said to be *associated with the ear-disease*. Pyæmia is not a nervous affection, but is conveniently considered along with the others for diagnostic purposes.

1. The neuralgic pain was cursorily considered: it was probably only symptomatic of an exacerbation of the tympanic disease—symptomatic in the same way as pain in the brow was of acute iritis, or pain down the nose of glaucoma. As a rule, *this sort of pain did not precede or usher in cerebral abscess or meningitis*; but, sometimes preceding paralysis of the face, it misled to the diagnosis of "rheumatic" paralysis of the portio dura nerve.

2. The author had seen facial palsy with double tympanic disease—a clinical rarity, but one not standing in need of special interpretation. He made the following remarks of the one-sided facial palsy. (a.) In no case of uncomplicated facial palsy had he ever seen any paralysis of the same side of the palate. An oblique position of the uvula is of no moment: it is common in healthy people. One-sided paralysis of the palate goes almost always with paralysis of the vocal cord of the same side: it depends, the author thinks, on disease of the bulbar part of the spinal accessory nerve or of its nucleus. Were he to meet with paralysis of one side of the palate in a patient who had also Bell's paralysis, he should make the diagnosis, not that it depended on aural disease, even if there were aural disease, but *intracranial disease*: there would be two lesions, and thus there would, if they came on slowly or at different times, be a step towards the diagnosis of the *nature of the disease*, for two such palsies would point to syphilis. (b.) Uncomplicated facial paralysis with ear-disease is not a cerebral symptom; it is not an intracranial symptom; it is scarcely an ear-symptom; it is rather a bone symptom. (c.) It is occasionally the precursor of fatal intracranial mischief; but, as a matter of fact, not often, and when so, it is independent of it—that is to say, the ear-disease, by distinct processes, happens to do two entirely different things at once, or in quick succession. (d.) It is erroneous to infer that because the process by which the palsy results is a gross one, recovery will not follow: complete recovery often does. In this matter the author is in accord with Trötsch and Roosa. (e.) The facial palsy does not even show much extension of the tympanic disease, but only slight extension in an unfortunate direction. The nerve in one part of its course is separated from the cavity by a thin scale of bone, and sometimes (Toynbee says) lies just under the mucous membrane. The occurrence of intense pain in the head would be of infinitely worse omen than this facial palsy.

3. In some cases of chronic ear-disease, the author had found in the cerebrum or cerebellum a mass of tubercle in the place, so to speak, of an abscess from ear-disease. Except, perhaps, for chronicity of the cases, there was nothing to determine betwixt the symptoms of these cases and cerebral abscess. He could not say that there was any real relation; the cases spoken of were not cases of tubercular meningitis, nor was there tuberculosis of other organs. Trötsch and Buhl have noted the occurrence of tubercular meningitis and acute general tuberculosis in cases of chronic otorrhœa, and they believe there is a connection between the two things.

4. The author placed together abscess and meningitis, because, since the symptoms of abscess were often very acute, he did not know how to tell whether there was meningitis or abscess in many cases of acute cerebral disease occurring with ear-disease. If an attempt were made at diagnosis, the prediction of abscess, since, at least in the author's experience, it is most common, would mostly be verified. Perhaps, the very early occurrence of optic neuritis, were the appearance well marked, would point to abscess. It was thoroughly well known that a cerebral or cerebellar abscess may be "latent"; as Wilks and Moxon put it, "a man with ounces of pus in his brain may continue to do good mental work, and have full use of his limbs". When symptoms do come on, even in cases where the abscess is well encysted, and therefore old, the course of the case is often acute; hence the difficulty in the diagnosis from meningitis. The symptoms in some cases of cerebral tumour are quite similar, and very often the only means of deciding is by finding or not finding ear-disease. This is not quite decisive, for, as stated, there is sometimes tumour (scrofulous) in cases of aural disease. Then, as a rule, the earliest symptoms of fatal cerebral or cerebellar abscess (as of tumour) are only such as severe headache and vomiting; the rule is that, in ear-cases, such unmistakable nervous symptoms as hemiplegia, convulsions, and tetanoid states, come on late, and, in many cases of cerebral or cerebellar abscess from ear-disease, they do not come on at all. The occurrence of headache and vomiting, both in

cases of abscess and tumour, misleads to the erroneous diagnosis of stomach and liver derangement. The intensity of the headache, its occasional occurrence in unusual places—at the occiput, for example—its persistence, and the "purposeless" nature of the vomiting, often with clean tongue, would negative that diagnosis. If the ophthalmoscope were used in all cases of intense headache, mistakes in diagnosis would often be corrected. There is often optic neuritis, but, as it frequently happens that this pathological condition is unattended by any symptom (defective sight), it is usually not looked for. Occasionally acute intracranial disease is erroneously inferred, in cases of ear-disease, from the occurrence of active mental symptoms (delirium). This is, the author thinks, very poor evidence of the existence of acute primary brain-disease of any kind, and should not be trusted until acute non-cerebral disease has been carefully excluded. Although the brain is the organ of mind, the trustworthy symptoms of acute affection of it, or of its membranes, are not mental, but are such as severe headache, vomiting, constipation, retracted belly, and alterations of pulse, especially slowness and irregularity. Delirium does occur in some cases of acute cerebral disease, but rarely to such a degree as in acute non-cerebral affections. It should never be forgotten that, with rare exceptions, a man who has acute brain-disease, first comes to us when he has severe headache and vomiting, and not for anything wrong with his mind. Supposing that we could be sure there was abscess, we cannot usually tell whether it be in the cerebrum or cerebellum. We can only decide when there occurs such a symptom as hemiplegia, or unilaterally beginning convulsions, or partial aphasia, to point to the cerebrum; or reeling or tetanoid states to point to the cerebellum; but in cases of cerebral abscess, however caused, these symptoms often occur late, and the author has never seen any of them in cerebral or cerebellar abscess from ear-disease. A patient may recover for a time from symptoms of cerebral abscess, just as he may from symptoms of cerebral tumour; the encysted abscess, like the tumour, mostly, especially early in the case, causes symptoms, not by destroying or squeezing nervous organs, but by acting as a "foreign body", causing a local encephalitis; it is possible that this secondary acute process passes off when recovery follows, leaving some softening. It is clinically important to know that a patient, with abscess from ear-disease, may, after being acutely ill, and yet apparently not near death, die suddenly. So it is in some cases of tumour. As in these cases there is no rupture of the abscess, and sometimes at least no rupture of vessels of the tumour, and as there is agonising pain, the author thinks it is the pain that kills, and considers it very important to relieve severe pain in such cases by narcotics.

5. *Pyæmia*.—This is well known to occur from ear-disease, and may be mistaken for meningitis or abscess. Negatively, there is no excessive pain (there may be a swollen optic disc); there are often severe rigors, and great rises and falls of temperature; the presence of delirium, especially without severe headache, would tell in favour of pyæmia. Recovery may follow. There may be both pyæmia and meningitis, as there often are after injury to the head. In meningitis from injury to the head there may be no severe pain.

6. Hemiplegia occurs sometimes in children who have ear-disease; cases were spoken of in which the paralysis was on the side opposite the ear-disease, and in which there was no convulsion and no loss of consciousness at the onset. In no such case had the author had a *post mortem* examination. But, as (excluding cases where there was valvular disease of the heart, rheumatic fever, or signs of "coarse" brain-disease) the causation of hemiplegia in children was exceedingly obscure, it was right to suggest the possibility of venous thrombosis leading to local softening to ensure definite search at *post mortem* examinations. Roosa has seen two cases of hemiplegia with ear-disease; in one patient, a boy of ten, in which the hemiplegia was of the same side as the ear-disease, as both the auditory and portio dura were paralysed on the same side as the arm and leg, it is a possible thing that there was some disease pressing on the crus cerebelli; there is no doubt that, as Brown-Séquard has long ago stated, disease here would account for the symptoms the patient had. Roosa thinks there was hæmorrhage betwixt the dura mater and the bone. Roosa's other case was a man of sixty-two, and here the hemiplegia was on the side opposite the ear-disease; in a man of that age, the paralysis might, at least, quite as well be interpreted by local softening from arterial thrombosis, a pathological process unconnected with the aural affection.

7. Epilepsy or epileptiform seizures occasionally occur with ear-disease. In a disease so calamitous and so obscure as epilepsy, we could not afford to overlook any associations. Admitting a relation, the accepted explanation would be that the ear-disease provokes the seizures by reflected irritation. The author does not accept that hypothesis; he has been erroneously said to do so. Were this the process of causation, the treatment of the aural disease is the important matter;



but, then, no medical man neglects to treat otorrhœa under any circumstances whatever. The author suggested another hypothesis, the possibility that the aural disease led to disease in Hitzig's and Ferrier's Region; for, in some cases, the aural disease was associated with epileptiform convulsions, starting in the hand, face, or foot of the opposite side. In one such case, the author had found a large tubercular or scrofulous tumour of the hemisphere on the side of the ear-disease and on the side opposite the convulsions. He thought it possible that the disease is sometimes local softening from venous thrombosis, the convulsions depending on instability of grey matter around the part softened. He had no direct evidence of this, but he thought he had some indirect evidence of it. He related a case in which a man who had phosphorus necrosis of the jaw had, during an acute illness, frequent epileptiform affections affecting the left side of his face, both sides of the thorax, and slightly the left arm. (In passing, the author remarked that this case was one of those verifying Broadbent's now well known hypothesis, that there is a double representation in the brain of the bilaterally acting muscles.) In the intervals of the attacks, there was paralysis of the face almost as complete as in ordinary Bell's paralysis of the face. At the necropsy, there was, although not ear-disease, yet an equivalent state of things, there being pus in the right lateral sinus, and from this a vein with creamy contents was traced to the part most diseased of the right side of the brain; about the anterior end of the Sylvian fissure, there was purulent softening and red softening. As the lesions were more wide-spread, and as the case was acute, the evidence was only very indirect towards the interpretation of chronic cases, but was, the author thought, worth consideration in that regard.

8. *Aural or Auditory Vertigo or Menière's Disease.*—The author believed that almost any kind of ear-disease would cause paroxysms of vertigo and reeling, with faintness and vomiting. He stated briefly various kinds of disease of the ear he had seen associated with the paroxysm, expressing his opinion that the paroxysm always depended on trouble of the auditory expansions in the labyrinth, whether from actual disease therein or disturbances from without. He insisted that besides cases with paroxysm, these were, so to speak, chronic cases. With ear-trouble, it was not a very uncommon thing to find slight giddiness and trifling reeling when the patient walked. These cases had, he thought, not received sufficient attention. He referred to the case of a medical man, deafness of the right ear occurring immediately after the discharge of a heavily loaded gun; the patient always afterwards tended to the left; to the case of another medical man, who, besides having paroxysms with right-sided deafness was always giddy if, when lying down, he turned over from right to left; to the case of a patient, the subject of Menière's disease, who would become giddy and feel as if pushed forwards whenever she suddenly bit anything crisp. The explanation suggested of this last case was, that the symptoms were, owing to contraction of the tensor tympani, a muscle acting along with the masticatory muscles. The paroxysms were generally explained by the laity, and not unfrequently by medical men subjects of the affection, as being caused by stomach and liver derangement. The author urged that the mere concurrence of deafness with the paroxysmal or chronic symptoms should not alone settle the diagnosis. He passed in brief review the most characteristic symptoms of five great varieties of vertigo: (1) Stomachic, (2) nervous (often sexual) exhaustion, (3) ocular, (4) epileptic, (5) aural or auditory. Great attention should be paid for diagnosis to what Knapp has called the limitation of the "field of audition", to the loss of perception of certain notes; if the loss were of some intermediate notes, it would, the author thinks, point to disease in the cochlea. He tried to show how we should distinguish betwixt a case of chronic unsteadiness from aural disease, that from cerebellar disease, and that from ocular palsy. Finally, he gave his speculations as to the *modus operandi* of the ear-disease. There were two sets of symptoms: *a*. "Vital" (faintness, perspiration, irregularity of pulse, etc.); *b*. Locomotor (vertigo with or without reeling). He attributed the former to disturbance of or actual disease in the cochlear division, the latter to disease or disturbance of the semicircular canal divisions; the former division was, he suggested, chiefly afferent to the medulla oblongata, the auditory nucleus having (Lockhart Clarke) close connection with the vagal and spinal accessory nuclei; the latter division, he thought, represented that part going, according to Lockhart Clarke, to the cerebellum. The "vital" and locomotor symptoms were due to disturbance of the medulla oblongata and cerebellum respectively. He referred to Goltz's theories, to the experiments by Vulpian and others on the semicircular canals. He mentioned that Pierret had recently spoken doubtfully as to the existence of relations betwixt the auditory nerve and the cerebellum. Cyon has recently found that irritation of each of the semicircular canals is followed by a particular ocular movement—a very significant thing towards the interpretation of auditory vertigo.

## HOSPITALISM IN COTTAGE HOSPITAL PRACTICE, IN RELATION TO SIR JAMES SIMPSON'S THEORY.

By HENRY C. BURDETT, The Seamen's Hospital, Greenwich.  
Late General Superintendent of the Queen's Hospital, Birmingham.

ON the eve of the publication of my book on *Cottage Hospitals*,\* and at the request of many medical friends, I venture to submit the following statistics bearing upon the mortality in cottage hospital practice after the major operations—the various amputations of the limbs—for the consideration of the profession. I am strengthened in my resolve to adopt this course by the knowledge that I am justified in claiming for the annexed statistics the closest attention, because I can vouch for their careful preparation and accuracy. The accuracy of Sir James Simpson's statistics of the results of amputations in country and private practice has been seriously impugned by Callender, Holmes, and other authorities, chiefly on the ground of the impossibility of proving the reliability of the sources from which they were derived. No such doubt can exist with regard to the figures I have prepared. The cases I give can be definitely verified, as they are derived from the books kept by the medical staff of the different cottage hospitals mentioned in the table. Each return is signed by the honorary medical officer who has kindly furnished it; and, in the majority of instances, each surgeon has vouched for the accuracy of his own cases.

Feeling deeply the importance of great care being exercised in the preparation of the annexed table, I have sent the following circular to one hundred and sixty cottage hospitals, with whose existence I am familiar.

The following is a copy of the form which was enclosed:

### Return of Amputations of the Limbs in Cottage Hospitals.

Return from	Cottage Hospitals		Totals	
	Primary	Secondary	No. of Cases	No. of Deaths
Seat of Amputations	No. of Cases	No. of Deaths	No. of Cases	No. of Deaths
Amputation of thigh ..				
Amputation of femur ..				
Amputation of arm ..				
Amputation of forearm ..				
Total .....				

Date..... Signature.....  
Residence.....

### REMARKS—

Note.—The cause of each death should be stated, if possible, viz., whether secondary hæmorrhage, shock, pyæmia, or other cause.

"The relative success of the graver operations in surgery as performed, first, in large town hospitals, and, secondly, in country cottage hospitals, has for years attracted much attention, and there is reason to believe that the mortality in cottage hospitals in the major operations is much less than in the London hospitals. With a view of settling this question at rest, and of proving the truth or fallacy of Sir James Simpson's theory, I shall feel deeply obliged if you will fill up the enclosed form with the results of all the amputations which you may have had in connection with your cottage hospital since it was first opened.

"However few may be the amputations of the limbs, an exact return from every cottage hospital will be regarded as a very valuable contribution to surgical statistics.

"I will endeavour to make my book as complete as possible, and the return of the enclosed form in the course of next week, accompanied by any remarks as to the cause of death, and any special features of particular operations, will be esteemed a great favour."

In reply, I received answers from ninety-two cottage hospitals, in thirty-one of which no cases requiring amputations had been received, although the majority had had in addition to severe fractures, cases of herniotomy, lithotomy, extirpation of eyeball, removal of bone for necrosis, ovariectomy, excisions of knee, ankle, shoulder and breast, or other surgical cases of interest.

The cases of amputation in the sixty-one hospitals, which are given in alphabetical order in the following table, amount to three hundred and six, or one less than the number given by Mr. Erichsen in his book, as "all the amputations" which have been performed in his wards at University College Hospital from the foundation of the hos-

\* *Cottage Hospitals, in a General and Medical History, with a Description of the London, J. and A. Churchill.*



pital (a period of thirty-eight years). The average mortality in Mr. Erichsen's cases was twenty-five per cent., while it only amounted to eighteen at the cottage hospitals.

*Table of Amputations and their Results—Primary or for Injury, and Secondary or for Disease—of the Thigh, Leg, Arm, and Forearm, performed in Cottage Hospital Practice by Country and Provincial Practitioners.*

Nominal List of Cottage Hospitals.	No. of Beds.	PRIMARY.								SECONDARY.								Total.
		Thigh.		Legs.		Arms.		F'arms.		Thigh.		Legs.		Arms.		F'arms.		
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Ashford.....	6	..	..	2	1	..	..	1	..	..	..	..	..	..	..	..	3	1
Becles.....	7	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..
Bournemouth.	6	..	..	1	..	2	..	..	..	..	..	..	..	..	..	..	3	..
Bourton-on- the-Water..	8	1	1	..	..	..	..	2	..	..	..	1	..	1	..	..	5	1
Durford.....	6	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
Bromley.....	10	..	..	..	..	..	..	..	1	1	..	..	..	1	..	..	3	1
Boston.....	5	1	..	1	..	2	1	1	1	..	..	..	..	1	..	..	5	2
Buckh'rst Hill	7	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1
Bromyard.....	5	..	..	..	..	1	..	1	..	2	..	..	..	..	..	..	3	..
Crewkerne.....	12	1	1	1	1	3	2	..	..	..	..	..	..	..	..	..	7	2
Cromer.....	6	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..
Chesham.....	7	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	1	..
Cranleigh....	6	1	..	..	..	..	..	1	1	3	..	2	..	..	..	..	7	1
Cirencester...	6	..	..	..	..	..	1	..	4	..	..	1	..	..	..	..	6	..
Charlwood.....	4	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1	1
Dorking.....	12	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	2	..
Enfield.....	6	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..
Erith.....	7	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	3	..
Fairford.....	8	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
Fowey.....	8	1	1	1	..	..	..	..	..	3	..	..	..	..	..	..	5	..
Frome.....	10	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Hayes.....	5	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	1	..
Hillingdon...	4	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Hatfield.....	9	..	..	..	..	..	1	..	1	1	..	..	..	..	..	..	2	1
Broad Oak...	9	..	..	..	..	..	1	..	1	1	..	..	..	..	..	..	2	1
Jarrow-on- Tyne.....	11	3	2	6	1	..	1	..	..	..	..	..	..	..	..	..	11	3
Iver.....	7	..	..	..	..	1	..	1	..	..	..	..	..	1	..	..	2	..
Kendal.....	10	..	..	..	1	1	..	1	3	1	3	1	..	..	..	..	9	2
Ledbury.....	3	..	..	1	..	2	..	..	..	..	3	..	..	..	1	..	4	..
Lloyd, Brid- lington...	13	..	..	2	..	..	..	..	3	1	..	..	..	..	..	..	5	1
Litcham.....	7	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Marlborough (Savernake)	20	3	..	4	2	1	1	..	1	..	..	1	..	1	..	..	13	..
Mildenhall...	8	2	1	1	..	1	..	1	..	..	..	..	..	..	..	..	5	1
Malvern.....	12	..	..	2	..	..	..	..	5	3	..	..	..	..	..	..	10	..
Market Rasen	4	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..
Milton Abbas.	6	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..
Melksham.....	6	1	1	..	..	1	..	1	..	..	..	..	..	..	..	..	2	1
Nth. Lonsdale	59	5	4	10	..	3	1	..	..	1	..	..	..	..	..	..	24	5
North Cam- bridgeshire.	25	..	..	..	2	..	..	2	1	..	..	..	..	..	..	..	4	1
Newton Abt..	8	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1
Ottery St. Mary	7	..	..	1	..	..	3	2	..	1	1	1	..	..	..	..	8	1
Oswestry.....	8	2	..	2	..	3	1	2	..	..	..	..	..	..	..	..	9	1
Petworth.....	8	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..	1	1
Petersfield...	6	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Penryn.....	6	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Ross.....	6	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	2	..
Royston.....	7	1	1	..	1	..	..	3	3	1	..	3	..	..	..	..	11	2
Reigate and Redhill.....	12	..	1	1	2	..	1	1	1	2	..	..	..	..	..	..	7	2
Rugely.....	10	1	2	1	..	..	1	..	2	1	..	..	..	..	..	..	6	3
Ross Memo- rial, Dingwall	4	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
Ruabon.....	6	1	1	4	..	..	..	..	..	..	..	1	..	..	..	..	6	1
Stockton-on- Tees.....	9	1	..	7	7	1	5	2	1	2	1	..	..	..	..	..	40	10
St. Albans.....	7	1	1	2	..	..	3	..	1	..	..	..	..	..	..	..	7	1
Seacombe...	8	1	1	1	..	..	..	..	..	2	..	..	..	..	..	..	4	2
Stratton Corn- wall.....	5	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
St. Leonards, Sudbury...	20	1	..	..	2	..	2	..	2	..	1	..	..	1	..	..	9	1
St. Mary's Bur- ford, Tenbury	8	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
Tewkesbury..	9	1	5	4	..	5	6	5	..	..	..	..	..	..	..	..	26	8
Trowbridge...	8	..	..	..	..	3	1	..	1	..	..	..	..	..	..	..	4	1
Ulverstone...	12	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Warminster...	7	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..
Wickham.....	6	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..

To facilitate comparison, I have prepared the following summary of the above table on the plan adopted by Sir James Simpson.

1. *Total Mortality of all Amputations*, in sixty-one cottage hospitals, having a total of 553 beds; total number of cases, 306; total number of deaths, 55; or 1 in every 5.6 died, or 18 in every 100.

2. *Mortality of the Individual Amputations.*—When we include

all the amputations of the thigh, leg, arm, and forearm, the results are—

Thigh	Cases 80.	Deaths 27 or 1 in 5.1, or 19.6 per cent.
Leg	" 108.	" 18 or 1 in 6.2, or 16 "
Arm	" 64.	" 7 or 1 in 9.3, or 10.7 "
Forearm	" 54.	" 3 or 1 in 17.7, or 5.7 "

3. *Mortality from the Amputations that were Primary or for Injury.*

Thigh	Cases 31.	Deaths 18 or 1 in 1.7, or 58 per cent.
Leg	" 76.	" 15 or 1 in 5.0, or 20 "
Arm	" 53.	" 7 or 1 in 7.7, or 13 "
Forearm	" 45.	" 3 or 1 in 14.3, or 7 "

4. *Mortality from the Amputations that were Secondary or for Disease.*

Thigh	Cases 49.	Deaths 9 or 1 in 5.5, or 18.4 per cent.
Leg	" 32.	" 3 or 1 in 10.7, or 9 "
Arm	" 11.	Nil.
Forearm	" 9.	Nil.

These tables will be incomplete unless the cause of death in each case is recorded. Thus I find that, in the primary amputations for injury,

Of the *Thigh Cases*—13 died from shock, 1 from pyæmia, 1 from enteritis, 1 from inflammation of the lungs, and 1 from delirium tremens. In the remaining case, a compound fracture just above the knee, with destruction of the femoral artery, not detected at the time, of reduction, mortification of the limb set in, and amputation was performed as the last resource.

Of the *Leg Cases*—6 died from shock, 3 from pyæmia, 1 from tetanus, 1 from delirium tremens, 1 from pneumonia; in 3 the causes not stated.

Of the *Arm Cases*—4 died from shock, 1 from pneumonia, 1 from tetanus; in 1 the cause of death is not stated.

Of the *Forearm Cases*—2 died from shock, and 1 from tetanus.

In the secondary amputations for disease—

Of the *Thigh Cases*—3 died from exhaustion, 2 from secondary hæmorrhage, 1 from shock, 1 from pyæmia; and in 2 the cause is not stated.

Of the *Leg Cases*—2 died from exhaustion; and in 1 the cause is not stated.

Where I have remarked that the cause of death is not stated, the cases were treated at the Stockton Hospital, the books of which give no information on the point.

Of the five cases of pyæmia, 2 occurred at Stockton, 1 at Crewkerne, 1 at Ashford, and 1 at the Lloyd Cottage Hospitals.

It will be observed that the great mortality in the primary amputations of the thigh is due to the fact, that two-thirds (12) of the deaths were caused by shock, consequent upon the severe injuries which the patients had sustained.

I purposely refrain from giving any other statistics than those which I have obtained from the Cottage Hospitals, as those prepared by the late Sir James Simpson, Mr. Erichsen, and other authorities are well known to the profession, and can easily be referred to. It must suffice for the purposes of this paper to point out that, according to the most recent authorities, the mortality in General Hospital practice, after the major operations, averages: In England, 41.6 per cent.; in Paris, 58.8 per cent.; in Glasgow, 39.1 per cent.; in Edinburgh, 43.3 per cent.; giving an average mortality of 45.7 per cent.

## CIRRHOSIS OF THE LIVER: ALCOHOLIC PARALYSIS.

By CHARLES H. ROBINSON, F.R.C.S.I.,

Lecturer on Surgical and Descriptive Anatomy, Ledwich School of Medicine, etc.

THE following case I believe to be of interest, as showing the rapid manner in which alcohol may paralyse the nervous centres and destroy life in a comparatively short time. This is my chief reason for detailing a case, which, so far as my experience goes, and as well as I can learn from writers on the subject of chronic alcoholism, is extremely unusual as regards its speedy termination.

Mrs. K., aged about 37, first came under my care in February 1876, suffering from irritation of the stomach, flatulence, loss of appetite, and vomiting, which subsided under treatment, but again recurred in about a fortnight, but did not continue long. In the following June, I was again in attendance, when I found her in rather delicate health, suffering a good deal from vomiting and with slight tremor of the hands. This last aroused my suspicions, and I instituted inquiries as regarded the possibility of the attack being due to stimulants taken in excess,

but was not able to obtain any satisfactory replies in reference to the matter.

In July, another attack came on, with symptoms of irritation of the kidneys and conjunctival jaundice; the urine, however, was free from bile and albumen. In the latter end of September, diarrhoea was added to the other symptoms, but did not continue long. I should add that I was informed that, during the past summer, she had suffered from hæmatemesis and epistaxis.

On January 8th last, I was sent for, and my patient then presented the following appearances:—Face sallow, tongue red and tremulous; conjunctiva jaundiced, skin dry and unperspiring, liver somewhat enlarged and hard, spleen also increased in size, pulse quick and weak, urine scanty and loaded with lithates, but Marechal's test could not detect any bile present. There were also loss of appetite, violent and persistent vomiting, the smallest quantity of fluid or solid food being immediately rejected, pain and tenderness in the epigastric and right and left hypochondriac regions, also a constrictive feeling about the chest. These symptoms and signs showed that there was considerable gastritis present; that the spleen was enlarged; and that the liver was in the first stage of cirrhosis; viz., that of increased volume and vascularity, the inflammatory stage of the disease, the lymph effused into the portal canals increasing the size of the organ; the dry and unperspiring skin, always present, I believe, in cases of cirrhotic liver, being caused by the action of the alcohol absorbed into the system acting on the secreting cells of the skin.

The early symptoms of cirrhosis of the liver are, it is well known, obscure, and it is an extremely difficult matter to obtain from ladies an acknowledgment that they indulge in spirituous liquors to excess. As Dr. Haddon, in a paper on Intemperance read before the Obstetric Section of the British Medical Association in Edinburgh, 1875, says: "Happily, it is still regarded as a great disgrace for a woman to be intemperate, and so she is bent upon deceiving us. We need expect no help from her in arriving at the real cause of her ailments, and the practitioner will, in the great majority of cases, receive from her husband or friends not even a hint as to the real cause of her suffering." As I have mentioned before, my suspicions had been excited; but the symptoms were now so apparent that I had no hesitation in stating to her friends my opinion of the cause of illness. I may here observe that the menses were irregular, having been absent for about seven months: this and the sickness of stomach, which was principally in the morning and had lasted for several months, were the grounds for the statement of the patient that the vomiting was merely the morning sickness of pregnancy.

The vomiting was almost uncontrollable, and I experienced extreme difficulty in arresting it. Ice was given, also milk and lime-water, enema of concentrated beef-tea; and a mixture containing hydrocyanic acid, morphia, and solution of bismuth was administered with but slight improvement; blisters were applied to the epigastric region, and all food and drink given in very small quantities at a time. The thirst being intense, dilute phosphoric acid was prescribed with benefit; this, and sucking a thin slice of lemon and small pieces of ice, to a great extent relieved this distressing symptom. About the latter end of January, the vomiting gradually ceased, and at last it only occurred in the morning; vesicating collodion was again used over the pit of the stomach, and finally it disappeared, and did not recur again.

About the end of the month, two symptoms presented themselves for observation: double vision (from paralysis of one of the muscles of the orbit) and anæsthesia of a portion of the right side of the chest equal to a space covered by the palm of one's hand; they did not last longer than from two to three days, but were important as showing that the nervous system was being implicated.

On February 3rd, there was numbness of the knees and feet and very little sensation in either leg, a pretty sharp pinch not being felt. At this time, I gave a very unfavourable prognosis, and, on the 7th, met in consultation a medical friend, who corroborated my opinion. On the 8th, there were loss of motor power in both legs, inability to stand, cough, huskiness of voice; and, when swallowing liquids or solids, attacks of spasmodic dyspnoea occurred very constantly. The patient now complained of intense pain (hyperæsthesia) in the thighs, knees, and ankles. The pulse was very weak, the average beats per minute being 104 for the past week. The appetite was miserable, but she took a little jelly, ice, milk, etc., and a small quantity of Saumur champagne. The bowels had a tendency to constipation, and were regulated by occasional doses of Friedrichshall water. The patient was very irritable, and occasionally suffered from loss of memory, whilst the voice was gradually becoming weaker. Another consultation was now requested by her friends, some of whom could scarcely credit my assertion that the case was a hopeless one; and, on the 16th, I saw her with an eminent physician of this city, when she had great dyspnoea,

tracheal breathing, voice almost inaudible, and pulse 120 and extremely weak. Her nights were now restless, and drugs seemed to have no power in producing sleep; chloral-hydrate given in large doses and combined with bromide of potassium not being of any avail. On the 18th, there was oedema of both feet. Death took place early on the 20th, the patient being conscious to the last. During the last few days, the voice had fallen to a mere whisper, and it was only possible to understand a word now and then. The hands also had become affected, motive power being almost entirely lost.

The treatment was very simple, the principal difficulty being to arrest the vomiting; after this had been remedied, the patient took ten-grain doses of bromide of potassium, with small doses of morphia; tincture of iodine was painted over the hepatic enlargement, and an occasional night-draught of chloral was given, sometimes combining that drug with bromide of potassium.

It will be noticed that the first symptoms of the toxic action of alcohol on the nervous centres—viz., double vision and anæsthesia of a portion of the breast—was towards the latter end of January; these disappeared in a couple of days; but, on February 3rd, numbness of the lower extremities came on, and death supervened on the 20th, showing the swiftness with which various parts of the body had become involved in rapid succession.

## THE PREVENTION OF POST PARTUM HÆMORRHAGE.

By J. HYDE HOUGHTON, M.R.C.S.Eng.,  
Surgeon to Guest's Hospital, Dudley.

INITIATED in midwifery by my late lamented friend Dr. Edward Rigby, I was early taught the importance of the "binder" as a means of preventing *post partum* hæmorrhage; and through a period of nearly thirty-three years, during greater part of which I have had a very extensive midwifery practice, I have only had one fatal case in my own practice.

In every case, I myself carefully bandaged the patient as tightly as possible with a shawl or large towel, in which I generally wrapped a book to form a pad over the uterus, with the best results, though I had then sometimes to deal with cases of hæmorrhage.

In the year 1861, however, I was engaged to attend one of the largest women I ever saw. She was tall and immensely stout. The labour was natural, but rather tedious; and, after it was over, violent hæmorrhage set in. Here any ordinary binder was useless; and to grasp the uterus through the parietes was impossible, from the immense quantity of fat on the wall of the abdomen. I had the advantage of the advice of my old friend Mr. S. D. Fereday, and all the means which we could devise were used without effect. We watched her for some hours, a certain quantity of draining going on in spite of our efforts; and we anticipated a certainly fatal issue. Where art had failed, however, nature came to her assistance, and she ultimately recovered.

In the following year, I was again asked to attend her, and was called to see her one Sunday morning. I had a most lively recollection of her last labour and a firm reliance on the binder, and was determined, if possible, to bring one to bear on her huge abdomen; so I went to a saddler who lived near, and there extemporised a binder. It consisted of an oval piece of the strongest "butt leather" he had, ten inches long by eight wide, to each side of which a strong strap (nearly as strong as stirrup-straps) with buckle was attached. With this I was able to attain some degree of pressure. Suffice it to say the labour went on well and no flooding took place.

For some time afterwards, I took my "binder" with me only when I had to attend stout persons; but I soon found that the comfort of it was so great and the advantages so signal, that I began to take it with me to every patient I attended, and have continued to do so for the last eight or nine years; and during that period I have not had a single case of hæmorrhage that has given me the slightest anxiety.

This is the practical fact I wish to bring forward: I apply the bandage gently before the child is born. I make the nurse press on the pad during the expulsion of the child. I then tighten the bandage pretty firmly; and, after the expulsion of the placenta, which is rarely long delayed, I again tighten it as firmly as the patient can comfortably bear. It is very rarely necessary to do more; but if the pains be sluggish or infrequent, and if pressure by the binder do not increase them, I give a dose of ergot just before the child is born.

My object in writing has been to insist on the importance of pressure (which is ably advocated by former correspondents of the



JOURNAL) in the prevention of *post partum* hæmorrhage, and to suggest the propriety of the use of a bandage designed for the purpose, instead of trusting to one extemporised in the room.

I will promise my brethren one thing: if they commence the general use of the binder, they will not be allowed to leave it off. Constantly, the first question put to me on entering the room of patients I have attended previously is, "Have you brought your binder?" If it had no other advantage, the comfort it affords to the patient, and its power of retaining the figure, would be sufficient to demand its general use.

## NOTES ON THE USE OF THE CHISEL IN CASES REQUIRING THE REMOVAL OF PORTIONS OF THE MAXILLARY BONES.

By J. C. OGILVIE WILL, M.D.,  
Surgeon to the Aberdeen Royal Infirmary.

THE surgical use of the chisel seems to be gaining ground speedily, a goodly number of cases proving its utility in operations on long bones having already been recorded in the BRITISH MEDICAL JOURNAL and other periodicals; and, from the success following its employment in suitable cases, there seems to be every reason to expect that a wide field exists where this implement will be found useful. So far as I have myself seen, attention has not yet been directed to the advantages which may be gained by substituting the chisel for the cutting forceps in cases requiring the removal of small portions of the maxillary bones; and, as I have lately used it with good effect in two cases of operation for the cure of epulis, a short notice may prove of use to those who may be called upon to deal with similar cases.

In the first case—a private one—the tumour, which was about the size of a small hazel-nut, was attached to the inferior maxilla, its upper margin slightly overlapping the left central and lateral incisor and canine teeth. The left central and canine teeth having been extracted, two vertical cuts were made, one on each side, with a small stiff-backed saw, and the included portion of bone from which the tumour sprang was readily removed by applying a chisel transversely, and giving it one or two sharp taps with a mallet. The cut surface was smooth and regular, the healing process rapid; and a few months afterwards the patient was supplied with false teeth by my friend Dr. W. H. Williamson, who informed me that the cleanness of the cut aided him considerably in remedying the defect for the relief of which the patient applied to him.

The second case—a hospital one—was one of epulis of the upper jaw. The tumour, which somewhat resembled a plum-stone in size and shape, was attached to the alveolus immediately above the central incisors. Here the proceeding just mentioned was adopted, and with equally satisfactory results. In neither case were the teeth diseased.

The advantages of the chisel over the cutting forceps in cases of the kind spoken of are the following; viz., it can be applied with greater accuracy, the resulting surface is much more even, and, therefore, it is better suited for the insertion of false teeth, and the danger of fracturing adjacent parts is completely obviated. These reasons are, I think, sufficient to induce surgeons to give this instrument the preference.

## COMPOUND FRACTURE OCCURRING IN INDIA: CLOSURE OF WOUND WITH COMPOUND TINCTURE OF BENZOIN.

By E. M. SINCLAIR, M.D., Surgeon-Major, Royal Artillery.

AS several cases have recently been published of the successful application of compound tincture of benzoin on lint to "seal" the wound in cases of compound fracture, more particularly at Guy's Hospital, under the care of Mr. Bryant, the following brief notes of a case in which this method of treatment was also successful, in the moderately warm month of August, in the Deccan, may not be uninteresting.

On August 14th last, a healthy boy aged 12, son of a sergeant in the Royal Artillery, was climbing a tree, when a branch gave way and he fell about sixteen feet to the ground, causing a simple fracture of both bones of the right forearm, about the junction of the lower and middle thirds, and a compound fracture of both bones of the left forearm slightly lower down than the other. The upper extremities of both bones protruded through the wound, and a short piece of each had to be removed before coaptation could be obtained. A moderate degree of extension was secured by an extemporised splint having an "inter-rup-tion" at the seat of fracture; the wound was then sealed with

a piece of lint saturated with compound tincture of benzoin, covered by another piece folded into several layers, and also well saturated with the tincture. There was considerable restlessness for some days, and difficulty, as might be anticipated from the age of the patient, in keeping the two arms in proper position.

On the twelfth day, there was a slight smell and suspicion of pus having formed under the lint. This was removed, and a large hard "scab" found over the site of the wound, with a very little pus escaping at one side on pressure. Carbolic acid oil was applied for a day or two, and then water-dressing, until the scab came off in pieces; and the wound, with the exception of a few granulations which had sprung up at one small spot, was cicatrised by the twenty-sixth day. There was never any regular secretion of pus, and a firm cicatrix transversely across the arm, about an inch and a half long and from one and a half to three lines in breadth, marked the position of the wound. When the boy was discharged, at the end of September, rotation was very limited in both hands and a good deal of callus was formed at the seats of fracture, particularly in the left arm.

On January 15th, 1877—three months and a half after discharge—rotation could be performed in both hands to nearly the normal extent. There was no appreciable difference in the length of the two arms on careful measurement. Callus could hardly be felt on either side.

## REPORTS

OF

## MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

### LONDON HOSPITAL.

#### CASES OF TUMOUR OF THE MIDDLE LOBE OF THE CEREBELLUM.

(Under the care of Dr. HUGHLINGS JACKSON.)

THERE is now under Dr. Hughlings Jackson's care a boy who has symptoms which point to tumour of the middle lobe of the cerebellum; viz., greatly enlarged head, double optic neuritis, and reeling gait. We shall report the case later on. We now publish the following, supplied to us by Dr. Hughlings Jackson, giving the result of a case we published in 1873. That case will be published *in extenso* with some others.

"I wish to note the result of a case I published in the Hospital Reports of this JOURNAL on May 17th, 1873, under the title, 'Supposed Tumour of the Middle Lobe of the Cerebellum'. From that report, I quote: 'When the boy first came to see Dr. Hughlings Jackson in November in 1870, his usual medical attendant, Dr. Young of Aldershot, had so far back made the diagnosis of tumour of the cerebellum. There can be no doubt of its correctness.' The symptoms (enlarged head, optic neuritis, and reeling gait) made me locate the tumour in the middle lobe. The boy lived about seven years from the first symptoms—a very striking thing; and died at last from the effects of a fall, causing meningeal hæmorrhage. For the rest, Dr. Young's diagnosis, made seven years ago, was verified. There was found a tumour involving part of the middle lobe of the cerebellum."

In our reports, November 4th, 1871, we reported a case of this kind under Dr. Hughlings Jackson's care, with remarks on the diagnostic symptoms; we gave notes of a second case during the life of the patient (July 20th, 1872), and published a note of the necropsy which verified the diagnosis (August 3rd, 1872). The case of Dr. Young's patient is thus the third case of the kind we have published completed by necropsy.

#### SARCOMA OF THE THIGH: EXCISION: RECOVERY.

(Under the care of Mr. RIVINGTON.)

ELIZABETH HAYTER, aged 63, was admitted into the London Hospital on September 22nd, 1874. She had a tumour about the size of a shaddock in the upper half of the back of the thigh, just below the gluteal fold. It was not lobulated nor adherent either to skin or bone. She first noticed it four months previously, and could not in any way account for it. She had always enjoyed good health, and there was no history of tumours among the members of her family. She was unable to sit down with comfort, and, when she walked, she experienced severe pain in the thigh and leg. Having obtained the patient's consent to an operation, Mr. Rivington removed the tumour under chloroform on October 29th. The elastic bandage and ligature were applied; a straight incision about five or six inches long was made



through the skin and fasciæ down to the tumour, which was found to be destitute of a complete capsule. He was able, however, to separate it from its attachments chiefly with his fingers and the handle of the scalpel. The tumour lay between the hamstring muscles and reached down to the femur, the surface of which was exposed. On the removal of the elastic ligature, the hæmorrhage consisted of general oozing and was chiefly venous, and it ceased entirely after exposure of the surface of the wound for some minutes. One or two ligatures were applied. The wound healed almost entirely by primary union, with very little discharge. On December 1st, the patient was able to walk well and without pain, and to sit down comfortably. She was seen about a couple of months after she left the hospital. She was in fair health, but there was a good deal of thickening at the site of the operation, suggesting that the tumour might be returning, as the part was considerably fuller than when she quitted the hospital. She said she suffered from varicose veins, and was advised to wear a bandage or stocking. She has not been to the hospital again.

The tumour was examined microscopically by Mr. Needham. It was a well marked example of a round-celled sarcoma. The stroma was particularly well developed.

## REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

### HYPOPHOSPHITES.

MESSRS. YOUNG AND POSTANS of Baker Street have forwarded to us some new preparations of the hypophosphites—namely, granular effervescing hypophosphite of lime and of soda. One teaspoonful contains five grains of the salt.

Many eminent physicians still prefer to give phosphorus in this form, and when this medicine is indicated, we know of no manner so pleasant and agreeable as the effervescing form. Much has been said of late about the unpleasant taste of phosphorus; Messrs. Young and Postans have therefore done a good service in producing a result which must please even the most fastidious of patients, while at the same time they guarantee scrupulous accuracy in preparation. These preparations deserve an inspection and trial of the profession.

### DR. CLIN'S CAPSULES OF BROMIDE OF CAMPHOR.

DR. CLIN'S capsules are a valuable pharmacological preparation of a new drug, which is beginning to be well known here, and is already extensively used in France. Since the researches of Bourneville and Lawson Tait, a great many clinical facts have been published, showing the properties of bromide of camphor as a nervous sedative, hypnotic, and antispasmodic. It is especially in chorea and hysteria that the new bromide has shown the most remarkable effects. Several cases of chorea have already been published, in which the use of bromide of camphor was successful where other sedatives and antispasmodics had failed. We may especially mention those observed by Dr. Gallard of La Pitié, and Dr. Desnos of Lariboisière, who relate that the use of Dr. Clin's capsules was attended by the most rapid results in confirmed chorea. The cases of hysteria, in which marked amendment or recovery was brought on by the administration of bromide of camphor, are still more numerous, and have been observed and published in France by Professors Charcot, Vulpian, Potain, Lorain, and a great many other hospital physicians. Bromide of camphor has also shown its valuable therapeutical properties in neuralgia, dyspnœa, nervous palpitations, etc. Drs. Bourneville, Lawson Tait, Pathault, and others declare that it proved of great service in insomnia connected with cerebral hyperæmia or heart-lesions. Hammond of New York and Niemer have stated its value in convulsions brought on by teething. In another class of disease, that of the urino-genital organs, bromide of camphor has been used with advantage by Dr. Lannelongue of the Paris hospitals, who speaks highly of it in connection with cystitis of the neck of the bladder; by Dr. Sirédey of Lariboisière Hospital, in anal and vesical tenesmus; by Dr. Longuet and Dr. Petrocq, in cases of urethritis accompanied by pain, of symptomatic priapism, etc.

Bromide of camphor may, therefore, be said to have taken its place in therapeutics; and Dr. Clin, who has identified his name in Paris with the physiological investigation and pharmacological preparation of bromide of camphor, has really rendered good service by his patient researches on the new substance, which is said to be very difficult to prepare. After

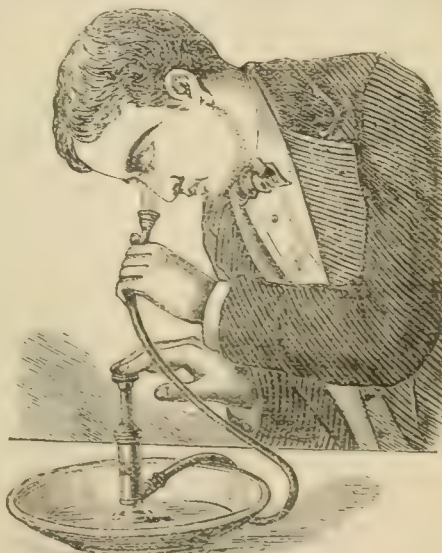
various trials, the profession in France has finally adopted the form of capsules, as being the most convenient for use and the most easily ingested. All the experiments made in the hospitals were carried on with those of Clin, which are also referred to by Professors Charcot, Vulpian, Potain, etc., in their observations. The specimens which have been sent us are very fine. We have found them to be composed of a thin gluten envelope, containing each about five grains of pure bromide of camphor. The gluten envelope melts easily in the stomach, and, therefore, constitutes a convenient form of administration of bromide of camphor.

### LECLANCHÉ MEDICAL BATTERY.

THE Leclanché battery, as manufactured by the India-rubber and Telegraph Works, No. 100, Cannon Street, London, E.C., is now coming very largely into use for the purposes of medical electricity. After many experiments with a great variety of medical batteries, the most experienced medical electricians appear finally to have settled upon this one as combining the greatest number of advantageous properties. Several things are necessary for a convenient medical battery. In the first place, it must be portable; it must be always ready for use; it must, when out of use, be so arranged that no destructive action goes on within the cells, and it must be free from the disadvantage attending the older forms of battery in which corrosive acids were used, and which sometimes occasioned to the medical man who carried them about very disagreeable surprises. The Leclanché medical battery gives a constant current of high tension, and is so arranged that its strength may be very easily varied either by increase or diminution, and that the current may be either administered in the constant or intermittent form. It remains in good order for about two years, requiring meantime little or no attention, and, at the end of that time, the manufacturers undertake to restore it to its original usefulness for a similar period at very small expense. Thus it seems to deserve the favour which it has attained, and it is likely to be of more and more use in proportion as the excellent handbooks on medical electricity now current enable practitioners fully to avail themselves of this valuable therapeutic agent.

### A NEW EYE-DOUCHE.

SEVERAL patients to whom I have recommended the use of an eye-douche having complained to me of the unsatisfactory working of the instruments which they obtained, I applied some months ago to Messrs.



Arnold and Sons of West Smithfield to provide me with a better one. They have made for me a new eye-douche acting upon the principle of their "simplex enema" syringe, as shown in the above diagram. It has worked extremely well in my hands at repeated trials, and it seems little likely to get out of order. I beg leave, therefore, to bring it before the notice of the profession, and to recommend it as a well-made and useful instrument.

PRIESTLEY SMITH,

Ophthalmic Surgeon to the Queen's Hospital,  
Birmingham.



BRITISH MEDICAL ASSOCIATION:  
SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, MARCH 24TH, 1877.

THE CONTAGIOUS DISEASES ACTS AND THE  
HEALTH OF THE NAVY.

WHATEVER opinion may be held as to the logic or the tone of argument adopted by anti-vaccinationists and the opponents of the Contagious Diseases Acts, all must admire the irrepressible pertinacity of the agitators, and hope that they may be the means of promoting trustworthy statistics bearing upon the operation of the two compulsory Acts, which aim at the repression of two most terrible forms of human disease. There is a striking similarity between the claims and the lines of argument adopted by the opponents of each of these Acts. Anti-vaccinationists are not satisfied with asserting that vaccination never saved the life of a single human being from small-pox, but declare that vaccination is one of the principal causes of small-pox prevalence and mortality. The opponents of the Contagious Diseases Acts not only try to persuade us that the Acts to which they object have not caused any reduction in the prevalence of venereal diseases, but would have us believe that the operation of the Act has led to an increased prevalence of these diseases. Each party asserts that Government statistics are deliberately prepared and manipulated, with a view to bolster up the Acts which it believes to be iniquitous. Such preposterous assertions and such forms of attack must be damaging to any cause; but it is well that those who desire to arrive at the truth of these vexed questions should, as far as possible, disabuse their minds of the objectionable tone adopted by the opponents of the Acts, and endeavour to discuss impartially the facts which alone form the basis of argument.

Dr. J. B. Nevins has recently published a detailed analysis, from his point of view, of the Admiralty Report of the Health of the Navy for the year 1875, so far as that Report deals with the prevalence of venereal diseases in the navy, and the operation of the Contagious Diseases Acts at protected stations. This analysis is, in fact, not only a general indictment of the *bona fides* of the Navy Report, but makes out a speciously strong *prima facie* case against the Government statement, that the operation of the Acts has caused a reduction in the prevalence of venereal diseases in the navy. On turning from the analysis to the Navy Report in question, one cannot but confess that, in the management and arrangement of figures and the faculty of drawing deductions therefrom, Dr. Nevins is more than a match for the Medical Department of the Navy. The Navy Report for 1875 really affords no material for observing the ratio of cases of venereal disease in its several forms, either in the entire navy or at the several stations, during a *series of years*. This remarkable omission in the Navy Report is not confined to its statistics of this form of disease, but extends to all its statistical facts relating to the health of the navy. Hence the Report only affords the means of comparing the statistics of one station with those of another and of the whole navy for the year 1875, excepting occasional and partial comparison in the text with results for 1874. It is scarcely credible that this Report, with its more than six hundred pages, does not contain a single summary table showing comparative results for a series of years. In a table on page 403, some of the figures for 1875 are, however, compared with the average ratios for twelve years, thus proving that the Medical Department of the Admiralty has the

means for publishing these much to be desired tables of statistical results for a series of years. For all useful purposes, statistical reports for a single year are comparatively useless unless accompanied by tabulated results of previous years, to afford a standard for comparison. We have no hesitation in confidently affirming that, by condensation and rearrangement of the tabular matter in the Navy Report, far more useful information could be published in a hundred and fifty pages, including summary tables extending over a series of years, than is now given in three times as many pages. We would suggest that those whose duty it is to compile these statistics of the health of the navy should study the Reports of the Registrar-General, and try to imagine what the value of those Reports would be if they dealt exclusively with the year to which they especially relate, without any means for comparison with the results for previous years.

But, to return to Dr. Nevins's analysis, it may be useful to allude to one or two of the principal charges which he brings against the Navy Report, and to point out how far these charges, if they can be supported, affect the real value of the information contained in the Report for estimating the effect of the Contagious Diseases Acts upon the health of the navy.

In the first place, it is asserted that there is inconsistency between the statements in what Dr. Nevins calls the "editorial leader" of the Report in large type and "the detailed statistics by which they ought to be proved". In support of this charge, it is pointed out that in Dr. Mackay's brief introductory letter, addressed to the Director-General of the Medical Department of the Navy, the following sentence, with reference to the sanitary condition of the Home Station, occurs: "The advantages derived from the operation of the Contagious Diseases Act continue to be maintained, the ratio of cases of the disease against which it is directed being less than in the preceding year." At the same time, no reference is there made to the ratio of cases of the disease at any of the other stations. Dr. Nevins asserts that the large increase of the disease on the Mediterranean Station should have been as prominently brought before the eyes of the reader as the continued decline of the disease at the Home Station, more especially as he calls Malta "a highly protected station". The analysis tells us, moreover, that on the Mediterranean Station the ratio of primary venereal sores was only 24.0 per 1,000 in 1866, whereas it was 63.0 in 1875; and that the ratio of cases of gonorrhoea was 14.8 and 50.6 per 1,000 in those two years. Now, as the object of the paragraph of the Navy Report, objected to by Dr. Nevins, was to express an opinion as to the effect of the Act of 1866 upon the prevalence of venereal disease in the navy, it seems but natural that such opinion should be based upon the experience of the Home Station, where the Act is very generally in comparatively effective operation, and not upon the experience of stations like the Mediterranean, where only a few ports are even nominally protected. Accepting Dr. Nevins's assertion that Malta is a "highly protected" port, let us look at a few facts bearing upon the origin of the disease recorded at this station. Out of one hundred and eighty-nine cases of primary syphilis reported among the average force of three thousand men engaged on the Mediterranean Station during 1875, no fewer than fifty-five occurred in the *Invincible* and thirty-five in the *Hercules*. Now, it is stated that, in forty-six of the fifty-five cases in the *Invincible*, the disease was contracted at Barcelona; and that only five cases out of the thirty-five in the *Hercules* were contracted at Malta. In the *Hibernia*, moreover, which is permanently stationed at Malta, there was not a single case of primary syphilis during the year among the hundred and fifty men on board. Fleet-Surgeon George Moore of the *Swiftsure* alludes to the fact that during the first quarter of 1874, when his ship was stationed at Barcelona, twenty-eight cases of primary syphilis occurred; whereas in the corresponding period of 1875, when the ship was stationed at "highly protected" Malta, only two cases occurred. These facts show that Dr. Nevins's attempt to use the increase of venereal disease on the Mediterranean Station as an argument against the utility of the Act of 1866, is as disingenuous as it is a complete failure. With a knowledge that so large a proportion of primary

syphilis on the Mediterranean Station in 1875 was contracted at Barcelona, which is described as a "perfect hotbed of syphilitic disease", it would be futile to attempt to draw any conclusions as to the effect of protection on this station from the ratio of disease to the strength of the ships' companies. We can but conclude that on this point the Navy Report is entirely justified by the facts, and that Dr. Nevins's analysis, without the additional facts we have here extracted, is calculated to give a most incorrect impression as to the prevalence and increase of disease on the Mediterranean Station. With reference to the increase of primary syphilis on this station, in face of the decrease on the Home Station, it appears to us to strengthen rather than to weaken the claim of the favourable results attributed to the Act of 1866 by the Medical Department of the Navy. In order to judge satisfactorily of the nature and extent of this increase, we want and ought to find in the Navy Report a summary table relating to each station as well as for the entire force, showing the results for at least ten years.

Another charge against the Navy Report made by Dr. Nevins, for which the passage quoted above also affords the text, is, that the Admiralty has no right to assume that syphilis is the disease against which the Act of 1866 is directed. Especial exception is also taken to the statement in the Report for 1874 that gonorrhœa, "as compared with syphilis, is of little or no consequence". This is a question which it is impossible to discuss here, even if it were admitted that it is open to discussion. The effects of gonorrhœa are, however, purely personal and local, although frequently serious. Moreover, although the Act of 1866 defines the term "contagious disease" to mean venereal disease including gonorrhœa, it may be safely asserted that the Act would never have become law as a protection against gonorrhœa. It was mainly the sufferings of innocent people from the after-effects of syphilis, and its hereditary transmissiveness, which led to the passing of the two Contagious Diseases Acts, and conduce to their maintenance and support. While, however, agreeing in the main with the Navy Medical Report that the success of the Contagious Diseases Acts may be fairly judged from their effect upon the prevalence of syphilis, we cannot but regret that the Report affords so little assistance for estimating the accuracy of Dr. Nevins's assertion of the rapid increase in the prevalence of gonorrhœa since the Act of 1866 came into operation. Dr. Nevins, in his analysis, states that the ratio of cases of gonorrhœa at the Home Station, in 1875, was 2.1 per 1000 higher than in 1874; and further, that the ratio from the disease has risen "in this Home Station from 20.4 per 1000 in 1866, to 52.5 in 1875, or is nearly trebled". It becomes necessary, therefore, that this serious charge should be investigated; and, unfortunately, a complete set of the Navy Reports must be studied and analysed in order to obtain the necessary figures for such investigation. One or two facts appear to us, however, to prove that if the Medical Department of the Navy improperly ignore the charge of a large increase of gonorrhœal diseases since 1866, Dr. Nevins is not only incorrect in his figures, but appears to have considerably over-stated his case. In the first place, he states that the ratio of cases of gonorrhœa at the Home Station was 2.1 per 1000 higher in 1875 than in 1874. This is evidently a misquotation, as the Report states that the ratio of cases of all "Diseases of the Urinary and Generative Systems" (of which gonorrhœa is but one), showed an increase to the extent of 2.1 per 1,000. As regards the ratio of cases of gonorrhœa, it was equal to 53.5 per 1000, in 1874, and to 52.5 in 1875, and showed an *actual decline* of 1 per 1,000 in 1875, *instead of an increase* of 2.1, as stated by Dr. Nevins. Then, as regards the asserted alarming increase in the ratio of cases of gonorrhœa since 1866, we strongly suspect that the assertion is in great measure due to the adoption in recent years of a different system of nosological classification. On referring to the Report for 1864, which happened to be the only one at hand relating to a year prior to 1866, we find that the ratio from gonorrhœa at the Home Station was 25.7, rather less than half the rate in 1875; but we find, also, that in 1864, a ratio of 20.2 is assigned to orchitis, and 13.9 to bubo, whereas in

1875 it was but 6.6 and 6.8 respectively. It is quite evident that this changed proportion of ratios requires some explanation before we can accept Dr. Nevins's startling assertion, that the ratio of cases of gonorrhœa at the Home Station has nearly trebled since 1866, as even approximately correct. It is eminently desirable, however, that an authentic table should be prepared, showing the ratio of cases of this disease during the last twelve years, in order that the actual increase may be known. When the real increase is known, the cause of the increase will then be fairly debatable.

Another instance of Dr. Nevins's special pleading is his statement that "secondary disease is higher in 1875 than in 1874". He alludes to this statement several times in his analysis, but never gives the extent of increase. The ratio from secondary syphilis was 12.2 per 1000 in 1874 and 12.3 in 1875. It would surely have been more ingenuous to have spoken of the ratio from secondary syphilis as stationary, more especially as Dr. Nevins accuses the Navy Medical Department of disingenuously arranging their figures in order to convey to the public a false impression of the results which may be attributed to the operation of the Contagious Diseases Acts.

Space will not allow us to follow Dr. Nevins in all his specious arguments, supported by various extracts from the Report for 1875 bearing upon the operation of the Acts at various foreign stations in our colonies. Many of these stations are protected only in name, and numberless passages could be quoted which show that in the East and West Indies, and in China, the Contagious Diseases Act is in many places a dead letter; the low class native women are said to be all more or less prostitutes, and where the Act is sought to be carried out by native police it is naturally a failure. This is especially referred to in the report upon the West Indian Station, with regard to Barbadoes and Port Royal. Such facts afford the strongest evidence of the futility of attempting to judge of the results of the Act from the ratios of disease at such stations.

Dr. Nevins's analysis notwithstanding, it appears reasonable to judge of the results of the much abused Acts by the figures at the Home Station; and, although we are inclined to think that the Navy Report has unwisely ignored the apparent increase of the ratio of gonorrhœa, we cannot under-rate the importance of the decline in the ratio of cases of syphilis at this station. The Report for 1875 tells us that, during three years immediately preceding the operation of those Acts, the average annual ratio of cases of primary and secondary forms of disease, was 104.4 per 1000, whereas, in 1875, it did not exceed 45.8; and further, that the ratio of cases of primary disease was 53.4 in 1866, but had declined in 1875 to 33.5. No amount of ingenuity can explain away this marked decline of the more serious forms of venereal disease, whatever may be the real facts of the case with regard to the asserted large increase in the ratio of cases of gonorrhœa.

In attempting to estimate impartially the true effect of the Acts upon the prevalence of venereal diseases, their effect upon the civil population should not be ignored; and we cannot neglect this opportunity to remind the opponents of the Contagious Diseases Acts, that during the five years, 1870-4, the annual death-rate from syphilis (including congenital syphilis) in the eleven districts or stations where the Acts were in operation, was 21 per cent. lower than it was during the five years 1861-5, before the Act of 1866 was passed; whereas in the rest of England and Wales the death-rate from this disease was 20 per cent. higher in the second than in the earlier period. It would appear that the operation of the Act of 1866 at these eleven stations, not only there prevented the increase which took place in other parts of England and Wales, but caused an actual decrease in the fatality of the disease equal to 20 per cent.

If the opposition to the Contagious Diseases Acts be ever successful, it will be rather through other influence than the result of the attempts of their opponents to support their arguments by statistics, many of which are scarcely more reliable than those persistently put forward by anti-vaccinationists.



## PARLIAMENTARY COMMITTEE ON THE LUNACY LAWS.

A SELECT Committee of the House of Commons, which has been appointed to inquire into the lunacy laws, commenced its sittings under Mr. Stephen Cave as chairman on the 15th instant. Mr. Cave intimated that the scope of the matter referred to his Committee does not extend beyond the operation of the lunacy laws in their interference with the liberty of the subject; but already, in the examination of Mr. Wilkes, the Commissioner in Lunacy, and of Mr. Percival, the Secretary to the Commissioners, the inquiry has taken a much wider range than this. It would seem impossible, indeed, to limit this inquiry to the narrow issue whether the allegations of certain people that sane subjects of Her Majesty are certified to be insane for the purpose of detention in asylums be true or false. This question may well be settled in each particular case by process of law; and the great rarity of such proceedings would indicate that such allegations have little foundation in fact. The Committee would, indeed, seem to be compelled, both by the terms and by the nature of their reference, to inquire whether the legal provisions for the detention and custody, not of sane, but of insane subjects, are the best which can be devised; and whether the purposes for which they have been framed, and the manner in which they are carried out, are such as to justify that which in itself must be an evil—namely, the loss of liberty. This, of course, opens up the question of the treatment of the insane so far as the State is bound to take cognisance of it, but no further; for any meddlesome legislation on medical matters is ever to be deprecated.

The purpose of the Lunacy Acts was most ably set forth by Mr. Milne in his letter to the Lord Chief Baron (Nottidge *v.* Ripley and Nottidge), who had charged the jury that a person of unsound mind ought not to be confined in an asylum unless he was dangerous to himself or others. "The objects of these Acts is not," says Mr. Milne, "so much to confine lunatics, as to restore a healthy state of mind to such of them as are curable, and to afford comfort and protection to the rest." These, therefore, are the objects of confinement—namely, cure, protection, and comfort—and not the mere detention of any one whom the loss of reason and discernment has rendered dangerous; and it is the duty of the State and of its officials to see that these objects are not neglected, and that the confinement of insane persons is not resorted to beyond such measure as may be needful for their attainment.

Mr. Wilkes has testified that, in his opinion, "the safeguards as to the committal and detention of persons insane were quite sufficient"; also that "it was not the interest of the proprietor of a private asylum to keep a patient, but rather to discharge him cured"; and that "a refractory patient was never punished, but always treated with a view to soothe him"; and also that "the private asylums had greatly improved within the last twenty-two years". He said, moreover, that "the entire number of patients discharged through the action of the Commissioners since 1845 had not been more than ten"; and Mr. Percival said that "the only case of the non-renewal of a licence to a private asylum within the last five years was that of a small asylum in the county of Cheshire". These facts would seem to afford a very noteworthy instance of the making of omelettes without the breaking of eggs.

Mr. Percival also told the Committee that for many years the Commissioners had not thought fit to grant any new licence for a private asylum in the metropolitan district, which is under their absolute control in this regard; the Commissioners being of opinion that the existing licensed houses are sufficient for the purpose. These houses are full to overflow, and the profits arising from them are very solid and satisfactory. The lucky licensees, therefore, have every reason to be grateful to those who are set in authority over them, and who have

found so little reason to discharge their patients and none to refuse a single one of their licences, who have hedged them safely from the invasion of all competitors, and who, now that they are assailed with a public outcry more or less unjust, are ready to defend them with testimony which would be quite unanswerable if it were as unbiassed as it is honourable and sincere.

We freely acknowledge the great public worth of the Commissioners in Lunacy, and that their humanity, disinterestedness, and devotion are not exceeded in any branch of the civil service. There is not one of them who is not always spoken of individually with honour and esteem. But may we not fairly ask whether they are not somewhat too much wedded to this private asylum system? May we not ask whether this monopoly is good for the interests of the medical profession, seeing that asylum property, enhanced in value by the protection it receives, is passing into the hands of solicitors, auctioneers, and other speculators? May we not ask whether this monopoly has conduced to the public welfare by attracting men of professional eminence and scientific attainments into its service? And, finally, may we not ask whether this system has really encouraged the therapeutic treatment of the insane? and, if so, whence arises the doctrine now taught by so many of the best known writers on psychological medicine, that skilful treatment as single patients offers to most men suffering from mental disease a much surer prospect of comfort and as large a probability of cure as "care and treatment" in the protected asylums of the metropolitan district? The latter opinion was strongly enunciated before the Committee on Thursday by Dr. Lockhart Robertson, and in a more pointed form than this.

## LEGAL ADMINISTRATION OF POISON: WHAT IS A NOXIOUS SUBSTANCE?

IN the JOURNAL of March 10th, we gave a short notice of a case in which, at a recent trial for maliciously administering cantharides to a girl, the prisoner was acquitted, because the quantity found was small. "The statute required that the thing administered should be *noxious*, whereas, in this case, the evidence was that it was not so."

As this is the first time, we believe, that cantharides has been judicially pronounced not to be noxious within the meaning of the Statute on Poisoning, it is desirable to consider the circumstances of this case.\*

The prisoner, aged twenty-five, gave to the prosecutrix, a girl of about fifteen, two figs, in which the powder of cantharides was found. Owing to this discovery, the figs were not eaten. A chemist, or, more correctly speaking, a druggist, stated that he obtained about a grain and a half from one fig, but the other was not examined. He said that twenty-four grains might be fatal, and that the quantity found in this case "would have no effect on the human system". The counsel for the prisoner rested his defence upon this statement which was given in evidence for the prosecution. He contended that, as the quantity found was insufficient to injure a person, it could not be regarded as "noxious"; and the learned judge, Chief Justice Cockburn, held that the objection was fatal and directed an acquittal.

It has been long known that cantharides produce a specific effect on the organs of generation, and the powder has thus been frequently given to females in order to excite erotic feelings. Sir R. Christison describes a case in which the powder was put into beer, and a number of young women were rendered severely ill, and one of them died. The law had not then provided for the punishment of this crime, as it only contemplated the administration of poison with intent to murder. The statute now makes it a misdemeanour where the intention is to injure, aggrieve, or annoy.

Hennah was indicted under this clause of the new statute, and, that there may be no mistake about the propriety of a conviction, we have before us another case, *Regina v. Wilkins*, which will serve as an illus-

\* The Queen against Hennah. Bodmin Lent Assizes, 1877.

tration of the uncertainty of the criminal law. The prisoner Wilkins was indicted for administering cantharides to a female, with intent to injure, aggravate, and annoy her. It appeared that the prisoner, unknown to the prosecutrix, put cantharides into a cup of tea, which she drank and was very ill in consequence; and the jury found that the prisoner had administered the cantharides with intent to excite the sexual passion, in order that he might have connection with her. He was found guilty; and, on appeal, the conviction was affirmed, it being held by the court that the intent was an intent to injure, aggravate, and annoy.

Why, then, was Hennah acquitted? Reliance appears to have been placed on the evidence of an incompetent and inexperienced witness; and the learned judge held, on this evidence, that the term "noxious" depended on quantity as well as on the nature of a substance, and that, unless the quantity administered was sufficient to cause illness, there was no offence.

That powder of cantharides is a noxious substance, and something more, is generally admitted by all authorities. It contains an active poisonous principle, cantharidine, which is liable to absorption and may cause death. In any form, it specifically affects the urinary and genital organs. No writer on Poisons has yet been able to assign how small a quantity may destroy life. In most fatal cases, the quantity taken or administered could not be ascertained. The case quoted, of death from twenty-four grains, was the mere result of an accidental observation. Such a case does not show that less than this quantity would not prove fatal. If fatal effects do not always follow, the substance may still produce serious illness and place life in jeopardy.

The quantity here found, one grain and a half, was obtained from one fig; there is reason to believe that both were poisoned; but even this quantity, medically speaking, may be regarded as noxious, *i. e.*, injurious to health. Cantharides in powders are not commonly employed in medical practice. Dr. Christison represents the medicinal dose at from half a grain to two grains. The tincture is commonly used in medicine, and we have it on the authority of the *British Pharmacopœia*, that one ounce of the tincture is equivalent to five grains and a half of the powder. This quantity of the tincture has proved fatal to life. From these facts, it is reasonable to infer that one and a half to four grains of the powder might suffice to cause serious symptoms. At any rate, if these facts had been put properly before the court by a competent witness, the result of the trial might have been different.

It is impossible to accept the decision as final. We trust that, in some form, it may be brought before the Court for Crown Cases Reserved, and considered by all the judges. We believe that a majority of them would be adverse to the view taken at this trial. They would probably hold, in common with the opinions of toxicologists, that the powder of cantharides is in all cases a noxious, and in many cases a poisonous, substance; and that its administration to a woman, in any quantity, for an unlawful purpose, should carry with it penal consequences.

Unless some such principle be adopted, we do not see how it is possible to suppress the crime of poisoning. If noxiousness is to rest upon the indefinite condition of quantity, it will be necessary to take into consideration the influence of age, idiosyncrasy, etc. If this ruling is to be carried out, we do not see what is to prevent a man from administering with impunity arsenic, strychnia, or prussic acid. He has only to keep within the medicinal dose. His counsel may then safely contend that quantity is a necessary element in determining what is noxious; and, so long as some druggist can be brought forward to assert that the quantity of either of these substances administered would have no effect upon the human system, he is safe for an acquittal. On the other hand, health and even life may be imperilled, if this new definition of a noxious substance is to be received as a correct interpretation of the statute on poisoning.

WE understand that, the last edition of the *British Pharmacopœia* being nearly exhausted, it is about to be reprinted.

WE hear with pleasure that the Dublin Colleges of Physicians and Surgeons have intimated to the Home Secretary that they entirely approve of the amended Vaccination Bill prepared by the Irish Medical Association, and trust that it will receive the Government support.

#### THE FELLOWSHIP OF THE ROYAL COLLEGE OF SURGEONS.

WE are glad to hear that there is some probability that the decision of the Council of the Royal College of Surgeons of England, in respect to the proposed alterations in the regulations for the Fellowship, is not likely to be pronounced altogether without consideration of the case for the members. A considerable number of Fellows by examination have petitioned against those alterations. The point at issue is the proposal that members of ten years' standing should be admitted upon an examination for the Fellowship consisting of regional anatomy and surgery, chiefly practical. That is an examination which they might be reasonably expected to prepare for and to pass. In the opposition which has been stirred up against this alteration, little account has been taken of what probably many will regard as a very reasonable feeling; and that is that every member should have the opportunity of presenting himself for examination for Fellowship; whereas, by the present regulations, a large number are absolutely excluded, and, after a certain number of years, it is impossible for them to get up or retain the minutiae of anatomy and the details of modern physiology; and that there ought to be some examination which they could pass. Thus, a stimulus would be afforded to the members to get an improved knowledge of anatomy and surgery. That view seems to us to be one which it is by no means desirable to ignore: and, although a strongly organised effort has been made to maintain a certain exclusiveness in respect to the regulations for the Fellowship, we believe it is probable that the Council will to-day (Thursday) endeavour to reconcile the more popular view with the obvious propriety of maintaining an adequate standard for the Fellowship examinations.

#### GENERAL IGNATIEFF.

GENERAL IGNATIEFF has, since his visit to London, justified the statements made in anticipation of his coming that his object was medical as well as diplomatic. He has placed himself under the care of Mr. Liebreich, of St. Thomas's Hospital, for the cure of a troublesome affection of the tear-ducts, together with astigmatism. Some foreign journals publish accounts which intimate that General Ignatieff's only interview with Mr. Liebreich was at the Foreign Office. He has, however, placed himself subsequently under his treatment during his stay in London, and will probably return for the completion of the cure, which has been only partially effected.

#### MILK-TYPHOID.

A REPORT from Dr. Stevenson, the Medical Officer for Islington, on a recent outbreak of typhoid fever in that parish, discloses an unsatisfactory state of things. The cases numbered in all thirty-four; on one day, there were five fresh cases, and in five days twelve more. Twenty-nine of these persons had their milk from the same shop. Dr. Stevenson regards the outbreak as clearly due to typhoid infection of the milk sold; and, as in most of these cases, it appears that the water used "to wash the milk-pails" was taken from a pond liable to contamination.

#### THE LATE EPIDEMIC OF TYPHOID IN PARIS.

THE total number of deaths caused by typhoid fever, during the epidemic which prevailed in that city during the last six months, is 1,645. Assuming an average mortality of 20 per cent., this would correspond to 8,000 or 9,000 cases, or one in every 200 inhabitants. M. Besnier, who has been studying the epidemic, states that typhoid fever attacks a much larger number of men than women, of boys than girls; but the relative mortality of the disease being greater in women and girls, the ultimate result as regards the two sexes becomes, as a matter of fact, equal.



## DEATH OF M. HERVEZ DE CHÉGOIN.

OUR Paris correspondent writes: The oldest member of the Faculty of Medicine of Paris, both in age and standing in the profession, has just departed this life in the person of M. Hervez de Chégoïn. He was born on January 6th, 1791, and received his diploma in 1816. He was one of the oldest members of the Academy of Medicine, in which he occupied the section of operative surgery, his election having taken place in 1823. He was also honorary surgeon to the hospitals, member of the Surgical Society, and Officer of the Legion of Honour. His obsequies took place on Thursday, in the Madeleine Church.

## CHARING CROSS HOSPITAL.

THEIR Royal Highnesses the Prince and Princess of Wales presided on Wednesday last at the opening of the Charing Cross Hospital, which has recently undergone considerable improvement and extensions. The Prince and Princess were conducted through the wards, two of which they were graciously pleased to allow to be named after them—the Albert Edward Ward for male patients, and the Alexandra Ward for children; Her Majesty the Queen, when Princess Victoria, having given her name to the principal ward for female patients. The members of the staff who were in the wards were presented.

## CITY HOSPITAL FOR DISEASES OF THE CHEST.

THE new wing for out-patients at this institution was opened by the Lord Mayor on March 15th, in the presence of a large concourse of gentlemen. It contains the office for the registering clerk, two large and lofty waiting-rooms for patients, two large consulting-rooms and a private room for the physicians, a new dispensary, and all the necessary offices. It is hoped these new premises will remove all grounds for the complaints that have been made of the length of time patients have had to wait through the insufficiency of accommodation. After necessary alterations in the old building, the number of in-patients capable of being treated in the wards will be exactly doubled.

## SUNSHINE IN LONDON.

THERE were 26.5 hours of sunshine in London last week out of 81.9 hours during which the sun was above the horizon. On Sunday, there were as much as 9.6 hours out of 11.5. On Friday, the sun shone for 6.2 hours, and on Saturday for 5.2 hours. On Monday and Tuesday it did not shine at all.

## THE PUBLIC HEALTH.

THERE was a further increase in the mortality from small-pox in London last week. The Registrar General reports that the deaths from this disease, which had been 84 and 96 in the two preceding weeks, further rose last week to 100; 42 were certified as unvaccinated, 30 as vaccinated, and 28 were "not stated" as to vaccination. The Metropolitan Asylum Small-pox Hospitals contained 952 patients on Saturday last, including 109 convalescent cases at Limehouse, against 898, 902, and 922 at the end of the three previous weeks. The new Metropolitan Asylum Hospital at Fulham contained 45 convalescent small-pox patients on Saturday last. The number of new cases admitted to these hospitals during the week was 212, against 230 and 223 in the two previous weeks. The total number of deaths from all causes registered in London last week was 1,800, and there were 2,587 births. Allowing for increase of population, the births exceeded by 40, and the deaths by 153, the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the two preceding weeks had been equal to 22.6 and 26.3 per 1,000, further rose last week to 26.6. The 1,800 deaths included, in addition to the 100 from small-pox, 44 from measles, 15 from scarlet fever, 5 from diphtheria, 36 from whooping-cough, 21 from different forms of fever, and 10 from diarrhoea. These 231 deaths exceeded by six the corrected average number from the same diseases in the corresponding week of the last ten years, and were equal to an annual rate of 3.4 per 1,000. The 21 deaths referred to fever were 15 below the corrected average

number; one was certified as typhus, 15 as enteric or typhoid, and five as low or simple continued fever. The deaths referred to diseases of the respiratory organs and phthisis further rose to 687 last week, from 471, 524, and 678 in the three preceding weeks. In Greater London, 3,096 births and 2,090 deaths were registered, equal to annual rates of 37.0 and 25.0 per 1,000 of the population. Fourteen deaths from small-pox were registered in the Outer Ring, against 6 and 15 in the two preceding weeks; 6 occurred in the district of Edmonton, 6 in that of West Ham, and one each in Kingston and Hillingdon. Three deaths from fever occurred in Willesden subdistrict, and two from diphtheria in Croydon. The mean temperature was 41.7 deg., 0.5 deg. above the average.

## DECREASE OF THE ARMY MEDICAL DEPARTMENT.

A RETURN presented to Parliament, at the instance of Mr. Dunbar, shows that the strength of the executive officers of the Army Medical Department has declined from 1,050, on the 1st of January, 1869, to 841 on the first day of the present year. In eight years, a reduction of 209, or almost exactly 20 per cent., has thus occurred. We reproduce the actual strength for each year, that it may be seen with what discriminating caution the diminution in numbers has been effected: 1869, 1,050; 1870, 1,038; 1871, 985; 1872, 986; 1873, 961; 1874, 938; 1875, 909; 1876, 885; 1877, 841. These figures exhibit a tendency to fall into a species of arithmetical progression, or perhaps rather retrogression, which, did we belong to the service, would dispose us to ask—When is this sort of thing to end, and how many will be left to do the work of the department, say, ten years hence? It is proverbially more easy to ask than to answer questions, and we are inclined to think that to those we have just propounded satisfactory replies are not likely to be forthcoming so long as Mr. Hardy maintains his present attitude of self-complacency regarding the means which have been adopted to recruit the department since he became War Minister. For a long time past complaints have been rife of the short-handed condition of the department, but few will be prepared to find that it has been diminished by so large a proportion as 20 per cent. Such a diminution—the strength and distribution of the army being unaltered since 1869—implies one of two things; either the medical officer's duties must be hastily and perfunctorily performed, to the detriment of the sick soldier; or the doctor, endeavouring to discharge his obligations to his patients in a conscientious manner, must have more labour imposed upon him than he was led to suppose on his entry into the service he should have. Knowing as we do the sacrifices which numbers of our profession are ever ready to make in the cause of suffering humanity, we feel convinced that the first alternative has not occurred. We are, therefore, constrained to believe that it is the story of the willing horse over again; and, in this view, we protest most strongly against a policy the unfairness of which it is not difficult to demonstrate. The medical service is composed of men who have undertaken the performance of duties, in themselves not hitherto of a very arduous character, in preference to the more laborious calling of the general practitioner. The income of the former, though certain, is small, has to be earned in greater part in unhealthy climates, and is ordinarily insusceptible of increase by individual exertion. The civilian practitioner, on the other hand, works in his native climate, and is stimulated by the knowledge that increase of labour is certain to be followed by increase of income with its attendant advantages. A kind of compensatory balance has thus for many a year been established which, so long as it was not tampered with, worked well, supplying soldier and civilian alike with an ample number of medical men, and furnishing the latter with fields of employment congenial to their respective tastes. Latterly, however, the equilibrium of the balance has been disturbed, if not destroyed; and the result of the "competitive" examinations held within the last year or so for admission to the service should act as a warning to the authorities to consider well what further ill effect on the recruiting of the department will be produced, by the circulation of a knowledge of the fact that 841 executive medical officers

are now compelled to perform precisely the same duties for which eight years ago 1,050 were not considered too many, and that for the great increase of work thus necessarily entailed no increase of remuneration is given. To point to the circumstance that a large number of promotions to the rank of surgeon-major have taken place since 1873 does not in the least invalidate our assertion that the increase of work is unremunerated, because these promotions were avowedly made to recompense the recipients for long and faithful service, and to obviate—in a clumsy manner, it is true—the stagnation which had arisen owing to the failure on the part of the authorities to secure a natural flow of promotion by the only legitimate means, viz., retirement from the senior ranks, brought about by adequate inducements. The rapidly diminishing numerical strength of the department, which now for most practical purposes is approaching the vanishing point, will never be sufficiently replenished until the fact is recognised and acted upon, that the only effective way to induce candidates to come forward is to treat those already in the service, who are powerless to use direct means of defence, with justice and consideration.

#### COPPERED PEAS.

It is satisfactory to find that the poisoning of peas and other green vegetables, used as articles of food, has been made the subject of a formal report by M. Pasteur. The Council of Hygiene and Health have remitted the investigation to this eminent French chemist. He was required to state, irrespectively of all trade views or commercial profits, whether these substances were or were not coloured with any compound injurious to health. He examined fourteen tins of preserved peas, purchased indiscriminately of dealers in the best quarters of Paris, and he found in ten of them copper, in some instances in considerable proportion. The sole object of this adulteration was to give to the preserved the green tint of natural peas. It seems that peas in drying always acquire a yellowish tint, which renders them unsaleable. The addition of copper-salts, or the use of copper-vessels in preserving them, removes this commercial defect, and, according to some evidence which we have heard recently in England, it gives to the peas tonic and other medicinal properties beneficial to those who eat them! M. Pasteur found the copper deposited, in an insoluble form, in the solid tissue of the peas, below the external coat. In some of the tins, the copper amounted to about the thousandth part of the entire weight of the food. The liquid in which they were immersed also contained copper, but in smaller proportion. M. Pasteur states that green French beans, asparagus, and artichokes—in fact, all green provisions used as food out of season, *i. e.*, during the winter—owe their attractive green colour to the same mineral. From these researches, M. Pasteur demands from the legislative authorities an entire remodelling of the penal laws in reference to the poisoning of the public with articles of food. He complains that the members of the French Chambers are at present so busily occupied in discussing trivial questions, that they have no time to pass a law to prevent the Parisians from being fed upon verdigris.

#### RAW POTATOES IN SCURVY.

THE following extract is from Dana's *Two Years Before the Mast*, and, as will be seen, is characterised by that accuracy and fidelity of observation which has made the book valuable for many years. The period referred to is 1835.

In the most severe case on board their ship, "his legs swelled and pained him so that he could not walk; his flesh lost its elasticity, so that if it were pressed in, it would not return to its shape; and his gums swelled until he could not open his mouth. His breath, too, became very offensive; he lost all strength and spirit; could eat nothing; grew worse every day; and, in fact, unless something was done for him, would be a dead man in a week at the rate at which he was sinking". Fortunately, however, they fell in with an outward bound vessel, which gave them a supply of fresh provisions. Dana continues: "The chief use, however, of the fresh provisions was for the men with the scurvy. One of them was able to eat, and he soon brought himself to by gnawing upon raw potatoes; but the other, by this time, was hardly able to

open his mouth, and the cook took the potatoes raw, pounded them in a mortar, and gave him the juice to drink. This he swallowed by the teaspoonful at a time, and rinsed it about his gums and throat. The strong earthy taste and smell of this extract of the raw potato at first produced a shuddering through his whole frame, and, after drinking it, an acute pain which ran through all parts of his body; but knowing by this it was taking strong hold, he persevered, drinking a spoonful every hour or so and holding it a long time in his mouth, until, by the effect of this drink and of his own restored hope (for he had nearly given up in despair), he became so well as to be able to move about, and open his mouth enough to eat the raw potatoes and onions pounded into a soft pulp. This course soon restored his appetite and strength, and, ten days after we spoke the *Salon*, so rapid was his recovery that, from lying helpless and almost hopeless in his berth, he was at the mast-head furling a royal."

#### COMPULSORY VACCINATION.

AT the meeting of the Aberdeen, Banff, and Kincardine Branch on March 7th, Dr. Wight called attention to a Bill before Parliament to alter the Compulsory Vaccination Act, and, after discussion, it was unanimously agreed "that the convener of the Parliamentary Committee having brought before the Branch the Vaccination Law (Penalties) Bill, the Branch instruct the Secretary to prepare and forward to Parliament a petition against the Bill, signed by the President on behalf of the Branch". The subject was further remitted to Dr. Wight, with full powers.

#### SMALL-POX IN SYDNEY.

A CORRESPONDENT of a daily paper writes:—Sydney has hitherto enjoyed a happy immunity from the small-pox, but its inhabitants are just now battling hard to prevent its getting a footing in the city. It was brought there in one of the Torres Straits mail-steamers, without its being announced. Whether this was done inadvertently or not is to be tested by the trial of the captain and doctor as soon as the ship is released from quarantine. Some days had elapsed before the existence of the disease was known to the authorities, during which period the passengers and crew had landed and dispersed. Prompt and vigorous steps were taken by the Government to deal with the danger as soon as it was disclosed, but it is as yet impossible to say whether the spread of the disease has been arrested. Two deaths have occurred in an infected family that was placed in quarantine, and there are three cases among the crews of Her Majesty's ships on this station. As the last three cases are of quite recent development, no one can at present tell how far the mischief may have spread. One good result is, that the city authorities have been stimulated to unusual efforts for the purification of the city, and many dirty corners, too long undisturbed, are now being made to put on quite a cleanly appearance. If this zeal do not abate too soon, this visitation of small-pox may do more to save life than to destroy it.

#### THE LYMPHATICS OF MUSCLE.

In a paper read before the Royal Society, on February 15th, Dr. G. Hoggan and Mrs. F. E. Hoggan, M.D., the authors, announce that they have discovered the long looked-for lymphatics of striated muscle, and describe them as radicles, valveless reservoirs, and valved efferent vessels. While describing their structure and relations, they point out that the reservoirs are found on one plane or side of a muscle; the valved efferents are found on the other side, as for example in the case of the diaphragm, transversalis abdominis, and triangularis sterni muscles. In connection with this, they have discovered a dense plexus of valved vessels on the interior surface of the abdominal wall, corresponding to that on the pleural surface of the diaphragm. Upon the lymphatics of muscle they find the peculiar serous cells first described by Ludwig and Schweigger-Seidel, whose views they confirm, in opposition to those expressed by Ranvier. They deny the existence of stomata in the mammalia, but admit it in the case of frogs; and as the peritoneum of the latter is lined by crenated lymphatic epithelium, they admit its connection with the lymphatic system; but on account of the absence of the latter epithelium, as well as stomata, from the



serous cavities of mammals, they deny any connection between these and the lymphatics. While describing the structure of basement-membrane, they discuss the facts adduced by Klein and Debove as bearing on the question of absorption, and give their own views on this question. They hold that the lower surface of the diaphragm is an exuding one, and only an absorbent one when all the natural conditions are reversed. They describe the minute anatomy of the lymphatics of the intestine, and state that it is the glandular structures, and not the muscles of the wall, that regulate the amount of these vessels. They also trace complete identity between these and the lymphatics of striated muscle. In each case they figure the connective-tissue cavities as forming the radicles of the lymphatics, but hold that these are not the only lymphatic afferents, nor that that is their only function. To prove this, they discuss the nature of these cavities, as they have discovered them, in tendon and other gelatinous structures in different classes of animals, to be of the same structure as in the cornea. Unlike man, the small mammals have no special-vascular or lymphatic vessels in the peritoneal tissue, being dependent on the muscles below for those structures. The authors finish by entering upon a minute description of the process employed by them. A series of about sixty camera-lucida drawings of preparations in their possession illustrates their researches.

#### DANGERS FROM SANTONINE.

WE reported lately a case of poisoning from "worm lozenges." In using santonine, it is well to bear in mind that comparatively small doses have produced convulsions of a somewhat grave character. The *Philadelphia Medical Reporter* quotes a case in which poisonous effects were produced in a child, two years old, by the ingestion of so small a dose as a grain and a half. Convulsions commenced in the face, and extended to the extremities, while the respiratory action was greatly impeded. Under warm baths, enemata, and artificial respiration, the patient recovered. The physician in charge of the case then instituted a series of experiments on the lower animals, and found that inhalations of chloral and ether controlled the convulsions produced by santonine. He naturally argues that the same treatment should be pursued in the human subject when a poisonous dose is taken.

### SCOTLAND.

It is stated that there is a widow named Nicholson living at Kilmuir, Skye, who has attained the age of 107 and still possesses good health and all her faculties.

ANOTHER case of hydrophobia is reported from Glasgow. A little girl, who was bitten in the street by a large Newfoundland dog about the end of December, became ill last week, and died in a few days with symptoms resembling those of hydrophobia.

At the annual meeting of the Glasgow Ophthalmic Institution, the eighth annual report was read, stating that during the year 3,537 new cases had been under treatment, 406 as in- and 3,131 as out-patients. Of these, 3,421 were cured, 63 relieved, and 53 dismissed as incurable. Attention was directed to the inadequacy of the accommodation for patients. The present building has only twenty beds, while the demand was so great that there had been as many as thirty-one patients in the house at one time. A considerable sum had been subscribed for the extension of the hospital, but a large amount was still required.

#### MORISON LECTURES ON INSANITY.

THE third and fourth lectures of this series were delivered last week in the College of Physicians, Edinburgh, by Dr. Sibbald. The subject of the third lecture was, the Popular View of Insanity during the Modern Epoch. It was pointed out that gradually the barbarous methods of dealing with the insane previously in vogue were found, about the beginning of last century, to be no longer applicable; and, as a result of a changed system of dealing with them, there was a large

increase in the number of patients. The condition of asylums at this time was most deplorable, and continued so until William Tuke, who began his labours on the subject in 1791, established the Friends' Retreat at York, where the insane were first carefully and kindly treated in England. The efforts of Pinel in France in the same direction were touched on; and a *résumé* of the Acts of Parliament bearing on the subject, particularly that of Lord Ashley in 1845, was given. Among the principal causes of the more extended popular views of insanity at present held, was the more perfect organisation of the body social, and the advance and rapid development of art, commerce, and manufactures, which, by raising the average intellect, caused a large number of persons, whose eccentricities of conduct would have interfered with public order and private comfort in the reign of Queen Anne, to be ranked now among the insane. Thus a large increase had taken place in the number of persons classed as insane, whether or not there had been any actual increase of mental disease in the country. The lecturer believed that all expressions of belief in a great increase of mental disease which were founded on the official returns of lunacy showed either an ignorance or disregard of the true nature of such statistics. In the fourth lecture, Dr. Sibbald dealt with what he believed was, or ought to be, the view of insanity taken by the physician. After an historical review of the subject in this aspect, he went on to state his own views. He did not, when using the words "mental disease" as synonymous with insanity, offer them as a definition of insanity, but merely as adding some definiteness to the idea. But mental disease, in its strict meaning, did not always imply brain-disease, though it was often said to do so. It did not follow that disordered mental action necessarily implied a diseased condition of the brain, any more than disordered respiration necessarily implied disease of the lungs. Acute mania might be caused by the presence of tape-worm in the bowel, a piece of glass in the foot, or a displaced uterus; healthy mental action immediately following on the removal of these conditions. He was of opinion that the transient depressions and deliriums which accompanied many diseases ought not to be regarded, as they often were, as scientifically different from insanity. There had been a general disinclination to admit this essential unity in all mental manifestations produced by disease. The fact was, that we could have no definite idea of mental disease unless it was held to include every mental modification that might be produced by disease.

#### SMALL-POX HOSPITAL IN GLASGOW.

A NEW small-pox hospital is being built in Glasgow, and is now nearly ready, capable of accommodating one hundred and fifty patients. It was commenced eighteen months ago, and, but for a long continued strike among the joiners, it would have been finished several months since. It consists of five pavilions, with four wards in each pavilion, two for acute and two for convalescent cases. These wards are completely separated from each other, there being no internal communication between them. Each of the wards for acute cases measures fifty-six feet by twenty-two, and will contain nine beds. The convalescent wards are smaller, and contain six beds each. In both sets of wards, each patient will be allowed air-space to the amount of 2,000 cubic feet. All the most approved appliances for ventilation and other sanitary arrangements are made use of. There are to be no water-closets in the hospital, all communication with the sewers being cut off, to avoid the possibility of contagion being spread by means of the sewerage system. The cost of the hospital is estimated to be between £25,000 and £30,000.

#### DR. RUTHERFORD ON THE ACTION OF MEDICINES.

At a recent meeting of the Royal Society of Edinburgh, Professor Rutherford read a paper embodying a large series of researches carried on by himself and M. Vignal on the action of cholagogues and the secretion of bile. The experiments were made upon dogs. It was shown—and the results were thrown into visible form by large diagrams—that croton-oil, to which Röhrig had assigned great properties



as a cholagogue, was not at all an important agent of this kind. Podophyllin was shown to be a powerful stimulant of the liver in the dog, as it was known to be in man. With the aid of his diagrams, Dr. Rutherford proceeded to indicate the properties discovered to be possessed by aloes, rhubarb, senna, taraxacum, colchicum, scammony, castor-oil, gamboge, euonymin (a substance not hitherto used in this country, because not known, but shown to be an active cholagogue little inferior to podophyllin), sanguinarin and iridin (substances also unknown in this country, but similar in their action to euonymin), and several other well-known aperients. Calomel was shown to have a powerful action on the liver. After showing the important bearing some of the discoveries made might have on the practice of medicine, Dr. Rutherford concluded by mentioning that the expense of the research had been borne by the British Medical Association.—[We have the MS. of this report, and shall be able in a short time to lay it before our readers.]

## IRELAND.

SCARLET fever is very prevalent in Killiney, near Dublin, and several deaths have taken place from this malignant disorder.

At a public meeting of the citizens of Dublin, held last Monday at the Mansion House, it was resolved to establish a free library for Dublin, under the Public Libraries' Act of 1853.

At a special meeting of the Board of Guardians of Carlow Union, held last week, it was unanimously resolved that Dr. James Frazer, Medical Officer of Bagnalstown Fever Hospital for the last twenty-five years, should receive a retiring allowance equivalent to two-thirds of his salary.

### CONJOINT EXAMINATIONS.

A MEETING of a Committee appointed by the College of Physicians and College of Surgeons was held last Thursday, the 22nd instant, at the College of Surgeons, to arrange about a combined examination between the two Colleges. We understand that the invitation for a conference came from the Council of the College of Surgeons.

### ROYAL IRISH ACADEMY.

A MEETING of the members of this Society was held on the 16th instant, to elect a President in the place of Dr. Stokes, who had resigned owing to the state of his health. There were two candidates—Sir Robert Kane and the Rev. Dr. Haughton—both Fellows of the Royal Society and well known in the scientific world. Sir Robert Kane, as was generally expected, was elected, receiving, it is said, nearly double the number of votes that his opponent obtained. During the meeting, the following resolution was unanimously adopted. "That the Academy receive with great regret the announcement of the retirement of Dr. Stokes from the office of President; and that the Secretary be requested to convey to him the grateful thanks of the Academy for the eminent services rendered by him on its behalf, and for his dignified and zealous discharge of his functions as President of the Academy."

### PROPOSED VACCINATION AMENDMENT BILL.

THE Council of the Royal College of Surgeons in Ireland have addressed a communication to Sir Michael Hicks Beach, Chief Secretary for Ireland, stating that, the attention of the Council having been directed to two proposed Bills prepared under the direction of the Irish Medical Association, they regard the object at which the Bills aim as most important to the public health. The vaccination laws in Ireland being in an unsatisfactory condition, they urge upon the Government the expediency of amending the present system; and the Council express generally their approval of the amendments suggested, many of which, having been adopted in England, have had long and satisfactory experience.

## FACTORY LEGISLATION.

IT is a curious fact—yet, indeed, not curious in English law-making, which is full of like anomalies and inconsistencies—that, from the passing of the Factory Health and Morals Act, 42 George III, chap. 73, in 1802, up to the Health of Women and Children's Act, in 1874, factory legislation can only be said to have been of a piecemeal character. Its different provisions have been evoked by some passing agitation, often of a semipolitical character, as by a temporarily aroused popular sympathy in behalf of some class of labourers whose grievances have secured the attention of the press, or by a recognition of errors and anomalies in existing labour-laws. The general result has been, undue multiplicity of separate enactments aiming at the same ends; the introduction of conflicting provisions; the allowance of manifold special exceptions; a want of coherency in purpose and in action; and the progressive growth of a large and complicated machinery without accompanying adequate controlling and administrative power.

The consequence of this state of things has been the appointment of a Royal Commission, presided over by Sir James Fergusson, to "inquire into the working of the Factory and Workshops Acts with a view to their consolidation and amendment, and whether any further provisions are requisite for the improvement of the health and education of young persons and children, and whether any further provision is needed for the due enforcing of such acts, or, if not, in what way the existing provisions may be improved and the promised Bill of the Home Secretary founded upon their recommendations". These latter are to be found in two large folio volumes issued from the government press about a year since, and on them we desire to offer a few remarks.

Now, it may be noted generally, of the vast amount of evidence there recorded, that it is singularly unanimous on this point at least, namely, that the principle of factory-legislation is correct and beneficial. There is concurrent testimony on all hands that the Factory Acts were, in the first instance, imperatively required for the physical well-being of the manufacturing classes; and that those Acts, amended and widely extended as they have been, have, on the whole, been admirably administered, and have greatly contributed to the happiness and welfare of our operative breadwinners, without creating the disturbance and embarrassment of the manufacturing interests of this country, at one time so much dreaded. In fact, so well have they worked, that in foreign countries, where factory-laws exist, especially in France, the medical element is about to be largely introduced.

To secure the complete administration of these laws, two classes of government officials are employed—the government inspectors and the certifying surgeons, the concurrent and harmonious action of whom are necessary to efficiency. The duties of the former consist in taking steps to secure the due observance of the law; and right well do they exert themselves. Those of the latter are essentially sanitary. The Factory, like all other laws, were made for evil-doers, and not for those who do well. They assume that avaricious masters may overtax their workpeople; that lazy and ill-conditioned husbands may oppress their wives with work; and that the greed of parents may compel their young, weak, diseased, or deformed offspring to undue and unfit labour. Unhappily, every day's experience proves this assumption to be only too correct. They assume that the masters require to be kept up to their duties and responsibilities towards those whom they employ. In numerous departments of labour, the factory or workshop owner is only indirectly brought into relation with the women and children employed, more especially the latter. His workmen are their immediate employers, their hirers, and their paymasters, and consequently also their masters and controllers. In all such instances, the owner of the factory or workshop possesses little knowledge of, or control over, his juvenile workers; they are hired and dismissed at the pleasure of his workmen; and his responsibilities towards them are chiefly to those which the Factory Acts impose on him. Under such circumstances, the value of these Acts is especially illustrated. The workman wants labour, and he wants it cheap, and withal as much of it as he can get out of his hireling. His employer has little or no authority, even had he the disposition to exercise it, and to be sufficiently acquainted with the children, their age and condition, to interfere with the bargain. Now, it is in this that the protective and sanitary clauses exhibit pre-eminently their efficacy and value. If the workman can ignore his employer, he cannot escape the requirements of the law, and must yield to the judgment of the certifying surgeon respecting the abilities



for labour of those hired by him. This officer stands, therefore, as the *only* efficient protector of the helpless, the weak, and the diseased against undue and unfit labour. In short, the certifying surgeon's duties are preventive in character and purpose: to prevent the degeneration of the working population; to prevent the oppression of the weak by the strong, of the child by the parent or employer; to prevent the spreading of infectious and contagious diseases; and, by an amended law, to prevent employment under conditions and circumstances of labour inimical to health and life.

These are the great purposes for which factory legislation was first instituted, and for which the certifying surgeons were appointed; and this it does effectually, although silently and almost unobserved by the authority with which they are invested; in fact, the proportion of rejections made by them may generally be held to stand in direct proportion to their zeal and activity. Nevertheless, if in regard to any one factory, the tokens of useful labour be not so obvious as some might suppose they should be, they are very fully so when that labour is examined in the aggregate, and the results from a number of factories are brought together. This statement was sufficiently established by the tabulated replies given by a large number of certifying surgeons acting in all parts of the United Kingdom, which appeared in the annual publication of the Association of Certifying Surgeons for 1874; in which it is stated, "that the percentage of the rejected as unfit for labour of those presented for examination varied a good deal, according to population and locality, but the average was from 20 to 50 per cent., and even of about 19 per cent. of those who produced a birth-register proving them to be of the legalised age".

Mr. Charles Roberts, well and honourably known in his profession as a scientific and painstaking surgeon—late assistant to Messrs. Bridges and Holmes, the Commissioners appointed to report to the Local Government Board on "Changes in hours and ages of employment of children and young persons in textile factories", 1873—in a most interesting paper on the "Physical Requirements of Factory Children", published in the *Journal of the Statistical Society*, amply bears testimony to the beneficial results of factory legislation, and gives some most curious figures on behalf of his deductions as to the increase in the average weight of the children in question. The dates compared are 1833 and 1873; and his conclusions are certainly most gratifying. His investigations are most careful and complete. The statistical tables show the "actual", the "average", and the "mean" height, chest-girths, and weights of nearly 10,000 factory and other children of the working classes; also the relative *physique*—so far as can be determined by height, chest-girth, and weight—of the children at present employed in cotton and woollen manufactures, and others living under similar social conditions, not following any occupation, but chiefly attending schools. The ages taken are from 9 to 12 years inclusive; and he finds that, in 1873, a child of 9 years weighed on an average more than a child of 10 years in 1833; the respective weights being in pounds 58.56 and 57.00. A child of 9 years in 1833 only weighed 51.76 pounds. It is the same all the way through. Three children of 10, 11, and 12 years in 1833 weighed respectively 61.55, 66.68, and 70.57 pounds; while the children of 11 and 12 years in 1833 weighed only 61.84 and 65.94 pounds. There is thus a clear gain in weight on the whole between these ages. A large number of children, however, are now altogether refused for factory-work who may have been included in 1833, and thus the average at an earlier date has been depressed. It is not, however, by counting the number of rejections that we can estimate the benefits of the certifying surgeons; as the very existence of these officers no doubt forms a barrier which many diseased and deformed children never attempt to pass. Comparing boys and girls between the same ages, 9 and 12 years, Mr. Roberts finds on the average that the girls are almost uniformly half-an-inch shorter, have half-an-inch less chest-girth, and are from two to three pounds lighter in weight than the boys. Curiously enough, however, this difference is reversed later; and, at the age of 13 years in this country, girls are a little heavier and taller than the boys.

The statistics of flat foot—which is clearly due to the standing position, and the somewhat stunted growth of the children—show the deteriorating effects of factory work on children in a still more marked manner. Thus, among agricultural children of the ages of 8 and 12 years, 71.1 cases per 1,000 occurred; while in factory children of corresponding ages there were 79.0 cases per 1,000. The rate of its increase from year to year is most remarkable. Thus, of town factory children

Aged 8 years,	15.1	per 1,000	were affected.
" 9 "	45.6	" " "	" "
" 10 "	51.2	" " "	" "
" 11 "	104.2	" " "	" "
" 12 "	132.4	" " "	" "

At the age of 8 years, the rate of 15.1 per 1,000 is below the general rate of the agricultural children. A year later, however, the factory work has increased the number of cases threefold; no similar increase occurred amongst the agricultural children.

With regard to the difficulty of determining the ages of children and the mistakes which occur in attempting to certify them, Mr. Roberts remarks: "I am satisfied, from a large number of observations and inquiries made among all classes of children, that *there are no physical qualities sufficiently distinct and constant to indicate the age of a child between 2 and often 3 years of its actual birthdays, and that a certificate of birth is the only evidence which can be relied on; and the converse of this is equally true, that age is not an indication of any constant physical qualities, and that a certificate of birth is not, therefore, sufficient evidence of fitness for factory work, and cannot supply the place of a proper medical examination.*" We might continue the argument still further, and say that the very complaints made to the Royal Commissioners of a child or young person being passed by one surgeon and being rejected by another, simply proves that, *because a child or young person is fit for work at one time, he is by no means necessarily so another, the very work on which he is engaged may in the meantime have proved injurious to him.* Mr. Roberts gives statistical tables in support of his opinion, showing the principal physical qualities, viz., the height, weight, and chest-girth of 1,000 boys and 1,000 girls of each of the factory ages, from which it appears that *no one of these qualities, nor all three combined, are sufficient to distinguish the children of one age from those on either side of them, except in a few cases of overgrown and undersized children.* Of 2,000 boys of the two ages of 11 and 12 years, 1,996 are of similar heights; and it would be quite impossible to judge by height alone whether any one of these boys was 11 or 12 years old; and the same remark applies to the chest-girths and weights as much as to the heights. Moreover, the wide range of growth at each age extending in 1,000 boys to 16 inches, and carrying with it an almost equal development of other physical qualities, renders height and bulk of body worthless as indications of age.

*Neither are averages of the least use for the purpose.* Thus, the average heights of boys of 11 years is 52½ inches; but, of 1,000 children of that age, there are only 153 of the average height; 420 being above, and the same number below it. At the same height of the 153 boys of 11 years, viz., 52½ inches, there are 4 of the age of 8, 60 of the age of 9, 128 of the age of 10, 121 of the age of 12, and 99 of the age of 13 years. In 6,000 boys, there are 220 boys older, and 192 younger, any one of whom might pass as an average boy of 11 years, so far as height is concerned. The difference between an average child of 10 and an average child of 11 years is two inches; but the difference between the tallest and the shortest boy of each age is 16 inches, or about one-third of the mean height.

*In the weights, there is still greater variation.* The difference between the weights of an average boy of 10 and 11 years is six pounds; but the difference between the lightest and the heaviest is about forty-six pounds; and the heaviest boy of 10 years of age has double the weight of the lightest boy of the same age.

Mr. Roberts considers that the development of the teeth is probably the physical quality which most nearly indicates the ages of children between 8 and 14 years; but he goes on to add, from a careful examination of a large number of children working in factories and others living in town and country districts, but not following any occupation, and, therefore, having no inducement to disguise or misrepresent their ages: "I am convinced that the order of the appearance of the teeth varies so widely in different individuals and different classes of society that it cannot be trusted as a test of age; that permanent teeth are developed *earlier in town than in rural populations*, and oftener in small physically ill-developed children than in well-grown healthy ones." He is disposed to attribute the premature decay of the teeth, much more common in the large manufacturing towns, in both factory and non-factory children, than in the agricultural districts, to this premature development, and to faults in the diet, common to the whole factory population. In the non-factory districts, diseased dentition was found to occur at the rate of 35.6 per 1,000, but to the town factory-districts at the rate of 89.1 per 1,000, or more than double the normal rate. In a letter to the Royal Commissioners, he says: "The development and condition of the teeth in the factory children was very unsatisfactory. Many of the teeth were irregular, of a bad colour, and badly shaped. Teeth with contracted crowns, serrated edges, and deep perpendicular grooves were common; others were marked with deep transverse grooves, as if a file had been drawn across them; and, when caries existed, which was very often, it was generally in the course of one of these grooves. All these imperfections in the teeth point to some fault in the health and nutrition of the child during the early stages of its development, but were not due to congenital syphilis.



In a large majority of the factory children, the gums were red and spungy." (Vol. i, p. 180.)

These facts, it must be confessed, agree but ill with the opinions and unprofessional experience of some of the factory inspectors, or, at all events, with that of Mr. Redgrave, one of the two principal of them. In Mr. A. Redgrave's examination before the Royal Commissioners will be found the following question and answer (Report, vol. ii, p. 37, c. 533). Lord F. Cavendish asks Mr. Redgrave: "Is it at all possible for any surgeon to tell at all accurately the age of a child?" His answer is: "I believe that, with respect to the ages of 8 and 13, there is nothing *more easy* than to ascertain the age of a child. There are the simplest possible marks of age, which a man with very little observation may be able to detect. Almost everyone considers himself able to ascertain the age of a horse; and the age of a child may be ascertained upon the same principle by ascertaining the number of milk-teeth and the teeth of different growths. It is a very simple process, and if to that is added a little observation of the early development of boys and girls, which a man soon acquires if he is in the habit, and he makes it his business to look at children, it becomes a *very easy matter indeed*." Now, if Mr. Roberts be right, and he, at all events, quotes carefully selected facts and figures on his side, which Mr. Redgrave does not, this, which "is a very simple process indeed" in the mind of the latter gentleman, is really in practice a most difficult and onerous one.

As an uniform plan for determining the physical requirements of the children, not only to assist the surgeon in the performance of his duty, but to protect the children, their parents, and employers from inexperienced or crotchety officials, Mr. Roberts proposes the following.

He would exclude, as physically *too short of stature* for factory work, boys of 8 years who were under 42 inches; of 9 years, under 44 inches; of 10 years, under 46 inches; of 11 years, under 48 inches; of 12 years, under 49 inches; and of 13 years, under 50 inches. *The chest-girth* of a child of 8 years should be 20½ inches; for 9 years, 21 inches; 10 years, 21½ inches; 11 years, 22 inches; 12 years, 22½ inches; and for 13 years, 23 inches—the increase being half-an-inch for each year. *With regard to weight*, a child of 8 years should not weigh less than 45 lbs.; one of 9 years, 49 lbs.; one of 10 years, 53 lbs.; one of 11 years, 57 lbs.; one of 12 years, 59 lbs.; and one of 13 years, 65 lbs.

Now, we should like to know what practical experience in the matter Mr. Redgrave has to set against the above, or if he considers all the labour here described as "a very simple process indeed"?

We do not for one moment suppose that Mr. Cross will, in framing his Bill for consolidating and amending "the Factory and Workshops Acts", act on all the recommendations of the Royal Commissioners who were appointed to inquire into the subject, and certainly trust that he will not do so in the matter of the certifying surgeons. With many of them, as we remarked in a former number, we cordially agree; against others we cannot speak too strongly.

The proposed "certificate system" can only be regarded as an attempt to emasculate the Factory Act of its chief sanitary provision, and is as unworthy in its suggestion as it would be mischievous in its results. We cannot too strongly urge the necessity of not only a fresh examination at each factory or workshop, but, in addition, at each hiring at the same factory or workshop, for diseases may appear at any time. If the services of the certifying surgeon are to be interfered with, as such a proposal if carried out will materially, the result will be that our factory population will sensibly suffer, and the mortality, over which Dr. Farr now laments, will be considerably increased.

Then, again, the proposed substitution of the factory inspectors as sanitary inspectors instead of the certifying surgeons is another recommendation fraught with mischief. Surely, sanitary inspection is peculiarly and essentially medical work; and, to hand it over to a body of men who have had no such training, must result in consequences most disastrous, to say nothing of putting on one side, and for no earthly reason except the niggardly one of remuneration, of the very gentlemen whose labours have so greatly contributed to the improvements which have taken place in the last forty years.

These recommendations, we confidently assert, do not tend to carry out the object for which the Commission was appointed. Much has been done in the way of sanitary reform; still, more remains to be done. We have only to refer to the quarterly return of the Registrar-General to see in what direction. Special attention is there drawn to the excessive mortality which prevails in Lancashire towns; for instance, it was equal to 233 per 1,000 in Wigan, 237 per 1,000 in Preston, and 254 per 1,000 in Blackburn; in equal numbers living, we find that no fewer than 183 persons died last quarter in Lancashire to 100 dying in Westmorland. Dr. Purdon shows that the mortality among children in Belfast—the great linen centre—of the professional and mercantile classes under 2½ years of age, is 15.8 per cent.; among the artisans

and labouring classes, it is 20.3 per cent.; while among the factory operatives, it reaches the large figure of 38.5 per cent.—that is to say, of all the children of operatives, about two-fifths die before they reach the age of 2½ years, while among the labouring and artisan portion of the community, only one-fifth die. Surely, this striking disparity shows once more the necessity that exists for improving the physical well-being of the factory children.

## PROFESSOR LISTER.

WE understand that the arrangements which have, during the last three weeks, been in course at King's College Hospital, to induce Mr. Lister of Edinburgh to accept the office of Surgeon and Lecturer on Clinical Surgery at that institution, have so far progressed, that it is now considered certain that the Council of the College will be able to modify the invitation which they have already addressed to Mr. Lister in a manner to meet the views which he has expressed on the subject. Mr. Lister's expressed reluctance to accept the invitation to King's College was based, not only upon his attachment to the great school in which he holds so distinguished a place, but upon the strength of his conviction of the importance of carrying out clinical surgical teaching in a particular manner and with great completeness. Under the proposed arrangements, these clinical and scientific facilities will be afforded to him, and his duties will be strictly those of practical surgery in the wards and clinical teaching. It is understood that Mr. Wood, who has for many years proved himself an able teacher of Systematic Surgery, will continue to give one half of that course, the rest of the course being allotted to Mr. Henry Smith.

## HEALTH OF FOREIGN CITIES.

THE average annual death-rate during the last quarter of 1876 in twenty-six Indian and foreign cities was 25.8 per 1,000, against 22.4 in twenty of the largest English towns, having an estimated population of nearly seven millions of persons. The population of the twenty-six foreign cities is estimated at rather more than eleven millions of persons. The lowest death-rates during the quarter were 19.7 and 19.8 in Philadelphia and Christiania; whereas the rate was equal to 36.3 in Buda-Pesth, 39.0 in Madras, and 45.7 in Alexandria. During the quarter, cholera caused 436 deaths in Calcutta, 41 in Bombay, and 303 in Madras. In Paris, no fewer than 992 deaths resulted from typhoid fever, equal to an annual rate of 2.15 per 1,000 persons living; whereas in London the entire fever-rate did not exceed 0.33 per 1,000. In Paris, therefore, this rate last quarter was more than six times as high as in London, although the average weekly numbers in Paris declined to 64 in the last quarter, from 118 in the third quarter of the year. The fatal cases of small-pox in Paris were 72, against 122 and 78 in the two preceding quarters. Small-pox was also prevalent in Brussels, Vienna, Buda-Pesth, and Naples. Scarlet-fever caused 238 deaths in Berlin, 161 in Vienna, 108 in Brooklyn, and 110 in Boston. Typhoid fever was fatally prevalent in Berlin, where 173 deaths occurred from this disease; and still more so in Philadelphia, where as many as 250 deaths were referred to typhoid fever during the quarter. Diphtheria caused 324 deaths in New York, 190 in Brooklyn, and 136 in Boston.

## CORRESPONDENCE.

### THE AFTER-TREATMENT OF EXCISION OF THE HIP-JOINT.

SIR,—In your impression of the 10th instant, Mr. Hulke has been so good as to notice my article on the after-treatment of excision of the hip-joint, which appeared in your JOURNAL of the 24th ultimo, and refers to the De Morgan splint as having many advantages, as well as to his own method of arranging the patient's bed for such operations.

I have not been so fortunate as to have seen either; but, from Mr. Hulke's description, I should suppose there was considerable restraint exercised by means of the perineal band and long splint, and disturbance of the wound, in consequence of the necessity of rolling the patient towards the sound side when dressing it or applying the bed-pan.

With my stretcher and bed, I have endeavoured to obviate either restraint or disturbance of the wound; and I feel sure it will be allowed that the perfect rest, which is so much insisted upon by authorities on excision of the hip-joint, cannot be enforced if it be necessary to roll the patient towards the sound side for any purpose whatever.—I am, etc.,

J. H. PORTER, Surgeon-Major.

Netley Hospital, March 16th, 1877.



## BEARING-REINS FOR HORSES.

SIR,—In your article of March 3rd upon the subject of "Bearing-Reins for Horses", you made kind mention of my pamphlets *Bits and Bearing-Reins* and *Horses and Harness*. The remarks in that article were excellent; but there is one caution it is necessary to give to those who are wise and humane enough to leave off bearing reins, and which coachmen are very apt to overlook: the *cross-bar*, often used at the end of the bottom of the bit, should invariably be *cut away*, as it may catch on the pole or shaft, and thereby cause an accident. I use, and recommend, a bit of a different construction, as I have explained in my second pamphlet.—I am, etc.,

E. F. FLOWER.

## THE TEACHING OF MATERIA MEDICA.

SIR,—The lecturers on materia medica who placed a grain of good seed in the ground two years ago must see with great satisfaction the first green shoot of coming harvest. To the University of Cambridge (*vide* BRITISH MEDICAL JOURNAL, March 3rd) is undoubtedly due the pioneer's credit in connection with the coming reform; and its action in this matter merits the sincere thanks of all who have the cause of medical education at heart. Your readers will remember that in 1875 we addressed a memorial to the General Medical Council, praying for their consideration of this special branch of teaching, and requesting that steps might be taken to carry their recommendations regarding the separation of pharmaceutical from therapeutical study into effect. Although their sitting was already far advanced, full attention was given to our views, and an instruction, framed in accordance with the terms of our petition, was sent to every examining board throughout the kingdom. Last year we returned to the charge, by a request for information as to what steps had been taken to carry the recommendation of the Council into effect, and in reply we were told that a sub-committee had been appointed, under the presidency of Dr. Andrew Wood, to consider the whole question in all its bearings. We have, therefore, good reason to hope that something may at last be done, and that the London schools may no longer be compelled to perpetrate the glaring absurdity of attempting to instil the mysteries of therapeutics into the unfledged brains of first-year medical students. And it is fortunate that the proposed change will not cause any painful dislocation of present arrangements, or necessitate that interference with vested interests which constitutes the true stumbling-block to most reforms. Professor Harvey has very clearly pointed out how the three months' instruction in pharmacy now enjoined by the examining boards may be developed into the first half of the course, and has shown, by his own successful example in Aberdeen, how it may be raised, from a mere scrambling compounding of prescriptions, into a systematic exposition of the characters, formation, and chemical constitution of drugs, with full demonstration of their purity-tests. Professor Ringer, also, has marched in advance of his time, by handing the pharmacopoeia instruction of University College over to an expert, and devoting his own lectures exclusively to those physiological questions which few are so well qualified to answer as himself. The Apothecaries' Hall has practically recognised the distinction in its own examinations; and little now remains to be done but to rearrange the curriculum at our medical schools so far as to admit of the therapeutical instruction being given as late as possible. If no better plan can be devised, I would throw out the hint as to whether this course might not change places with medical jurisprudence, and appear as a subject to be taken up during the second summer of study.

Much careful consideration, however, must be bestowed on this and other points; and the Medical Council may well expect to be furnished with some evidence and practical hints from those outside their own body whose experience would give true weight to their views. I do not know in what degree the Medical Teachers' Association retains the properties of life; but if it be capable of being galvanised into any semblance of vigour, I would suggest these important points as well worthy of their careful and immediate attention, as the subcommittee to which I have referred will sit for the first time during the approaching session.

I have the honour to be, sir, your most obedient servant,

R. FARQUHARSON, M.D., Lecturer on Materia Medica  
at St. Mary's Hospital Medical School.

Brook Street, March 1877.

## DEVILLE v. THE HARROGATE COMMISSIONERS.

SIR,—Allow me to thank you for your notice of this case in the JOURNAL of Saturday last, and to say that the friends of Dr. Deville intend to solicit subscriptions towards a fund for defraying his legal expenses; and that I shall be glad to receive the names of intending

subscribers and to answer any inquiries which those who take an interest in the case may wish to make.—I am, sir, your obedient servant,

S. W. NORTH.

15, Castlegate, York, March 12th, 1877.

## ASSOCIATION INTELLIGENCE.

## COMMITTEE OF COUNCIL:

## NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Office of the Association, 36, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 11th day of April next, at Two o'clock in the afternoon.

FRANCIS FOWKE,

General Secretary.

36, Great Queen Street, London, W.C., March 19th, 1877.

## SHROPSHIRE AND MID-WALES BRANCH.

THE next quarterly meeting of the above Branch will be held at the Salop Infirmary, on Tuesday, the 27th instant, at 6.30 P.M.: Dr. S. TAYLEUR GWYNN, President, in the Chair.

Gentlemen intending to read papers will oblige by signifying the same to the Secretary.

HENRY NELSON EDWARDS, *Honorary Secretary*.

Shrewsbury, March 23rd, 1877.

## SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

THE next meeting will be held at the Ship Hotel, Faversham, on Thursday, March 29th, 1877, at 3 o'clock; R. S. FRANCIS, Esq., of Boughton, in the Chair.

Dinner will be provided at 5 o'clock. Charge, 6s. 6d., exclusive of wine.

Dr. Gange of Faversham kindly invites members and their friends to luncheon at his house from One till Three.

Notices have been received of the following communications to be read at the meeting.

1. Dr. Walter Beeby: Notes on an Epidemic of Diphtheria at Bromley.

2. Mr. Arthur Long: Case of supposed Dislocation of the Hip.

3. Dr. Hutchinson: Cases of Midwifery.

4. Mr. Garraway: Rotten Teeth, a Rhapsody; with a Remedy.

5. Mr. Francis: On Borough and County Inquests.

6. Mr. Thurston: Case of Inversion of the Uterus.

7. Mr. Thurston: Case of Dislocation of the Astragalus.

Gentlemen who intend to be present at the dinner are particularly requested to inform me on or before Tuesday, the 27th instant.

EDWARD WHITFIELD THURSTON, *Honorary Secretary*.

Ashford, March 20th, 1877.

## WEST SOMERSET BRANCH.

THE spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 5th, at 5 P.M.

The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner:—"What in your opinion is the best mode of feeding infants artificially, both as regards food and method?"

Dinner 5s. a head, exclusive of wine.

Papers as follows are expected.

1. On a Case of Poisoning by Carbolic Acid.

2. On a Case of Hydrophobia.

3. On the advantages of Minehead as a Winter Residence.

W. M. KELLY, M.D., *Honorary Secretary*.

Taunton, March 5th, 1877.

## NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch will be held at South Shields, on Wednesday, April 25th.

Gentlemen who are desirous of reading papers, introducing patients, exhibiting pathological specimens, or making other communications, are requested to give notice to the Secretary.

G. H. PHILIPSON, M.D., *Honorary Secretary*.

Newcastle-upon-Tyne, March 10th, 1877.



## YORKSHIRE BRANCH.

THE spring meeting of this Branch will be held at the Mansion House, Doncaster, on Wednesday, March 28th, at 2.30 P.M.

The members will dine together at the Elephant Hotel, at 5 P.M. Tickets (exclusive of wine), 6s. 6d. each.

Gentlemen intending to join the dinner, or bring forward any communication, are requested to inform the Secretary.

W. PROCTER, M.D., *Honorary Secretary.*

24, Petergate, York, March 3rd, 1877.

## SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE next ordinary meeting will be held at the Stepney Arms, Llanelli, on Thursday, April 5th: President, ANDREW DAVIES, M.D.

The following papers, etc., are promised.

Mr. J. Hancocke Wathen: 1. A New Form of Splint; 2. Notes of a Case of Extra-uterine Fœtation: Operation.

Dr. Sheen: Counter-Practice.

Mr. B. Thomas: Prevention of Contagious Diseases.

Further particulars will appear in the circular.

ANDREW DAVIES, M.D. } *Honorary Secretaries.*

ALFRED SHEEN, M.D. }

March 14th, 1877.

*Medical Defence.*—A meeting of those members who approve of and support the Medical Defence movement will be held prior to the Council meeting, and members are earnestly requested to attend.

J. HANCOCKE WATHEN, *Honorary Secretary (pro tem.)*

## MIDLAND BRANCH: MONTHLY MEETING.

THE fifth monthly meeting was held at the house of the President, on Friday, March 16th.

*Communications.*—The following cases and papers were read.

Mr. Wright Baker: A Case of Rupture of the Superficial Femoral Artery; Amputation; Recovery.

Dr. Brookhouse: Cases of Aortic Dilatation and Aneurism.

Dr. Marshall: The use of Salicylic Acid; and also a Pathological specimen of Rupture of the Common Femoral Artery and Vein.

Drs. Ransom and Phillimore, and Messrs. Stanger, Dolman, H. O. Taylor, and others, joined in the discussion which followed each case and paper.

## REPORTS OF SOCIETIES.

## ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 13TH, 1877.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

THE PATHOLOGICAL ANATOMY OF CANINE CHOREA. BY W. R. GOWERS, M.D., AND H. R. O. SANKEY, M.R.C.S.

THE paper contained an account of the changes found in the nerve-centres in two cases of the disease of the dog which has been termed "chorea", although it bears little resemblance to the chorea of man. It consists of quick muscular contractions, separated by an interval, and without incoordination or fidgety movement. In the two cases, the movements were similar. In one, they were confined to one foreleg, and the changes found in the nerve-centres were slight. The medulla oblongata presented nothing abnormal. In the spinal cord, the large nerve-cells of the cervical region were very granular and appeared swollen, the body of the cell being, in some instances, apparently distended with granules, so that it had an almost globular form. This change was more marked in the right side than on the left. In the upper part of the cervical region, there was a slight increase in the minute nuclei of the anterior column on the right side. In the upper lumbar region, the nerve-cells of the right posterior vesicular column were much more granular than those of the left. In the other case, a young retriever, the twitchings were general, and had commenced (in one foreleg) after distemper, two months before death. They were more marked when the animal was at rest, and were accompanied with considerable weakness in the limbs, especially the hind limbs, sensation was considerably diminished, the posterior half of the trunk and hind limb being quite insensitive. The muscles of the neck and those of the larynx, tongue, and jaw were involved in the twitching. After death, the heart, the muscles, and the cerebral hemispheres, with the central ganglia, were healthy. Microscopic examination showed extensive disease in the spinal cord, medulla oblongata, and cerebellum. The

most conspicuous change was an infiltration of small round lymphoid cells, precisely resembling white blood-corpuscles. Areas so infiltrated were found abundantly in both white and grey substance in all parts of the cord, the distribution varying much, in some parts in the lateral, in others in the anterior, in others in the posterior columns. In some places, the anterior, in others the posterior grey cornua were infiltrated. In some places, the nerve-tissue appeared disintegrated and destroyed, but there the infiltration was slighter, and was in the form of ramifying tracts always corresponding to the course of vessels. From this, the authors were inclined to regard it as a leucocytal infiltration. The nerve-cells in many parts appeared healthy, but in others were very granular, and in some parts were surrounded by the lymphoid cells. Some nerve-cells had a granular centre and an ill-defined boundary. The protoplasm of many was encroached on by vacuoles, partly outside the cells. These had in places almost destroyed the cells. They appeared formed during the process of hardening, but the authors suggested that they are of pathological significance since they were absent in another cord similarly prepared. In the medulla oblongata, the changes were similar but slighter, and confined to scattered areas of cellular infiltration. A similar infiltration existed extensively in the medulla of the cerebellum, and was in some places very dense. The cortex of the folia of the cerebellum was healthy. In each dog, the effect of section of the cord was observed. In the slighter case, Dr. Hughlings Jackson had noted that the movements continued for a few moments after pithing. In the other, in which the changes in the cord were extensive, artificial respiration was kept up after division of the cord, and no movements occurred in the parts below the section, although they continued in the muscles of the head and jaw. In other recorded cases, however, similar movements had been observed to persist after the section of the cord. It was remarkable, therefore, that in this case, in which the cord was so diseased, the movements should have been arrested. It was possible that in some cases the movements might be of encephalic (perhaps cerebellar), in others of spinal origin; but another explanation of the cessation of the movements might be that the section of the cord temporarily inhibited by shock the action of the weakened nerve-cells of the cord. The cellular infiltration appeared from its course to have been the result of vascular disturbance; but, whether primary or the result of functional overaction of the nerve-elements, it was difficult to say. Its random position indicated an independent progress, and accounts for the motor and sensory paralysis, but its limitation to the cord, medulla, and cerebellum suggested a primary dependence on functional disturbance of the nerve-elements. The only morbid appearance common to the two cases was a change in the nerve-cells of the cord, and this might be regarded as the primary morbid change, the indication of their over-action, to which the vascular change and cellular infiltration were secondary in origin. To decide these and other points, however, further observations were necessary.

Dr. CADDY suggested that an examination of the spinal cord in various classes of animals would show a direct relation to exist between its development and the smartness and activity of the animal.—Dr. JOHN HARLEY thought the authors of the paper correct in believing that the chorea was due to some change going on in the nerve-cells, and that the other alterations observed in the cord were secondary. He had been able to induce choreic symptoms in dogs by giving them cryptopia; and the symptoms ceased when the effect of the alkaloid had passed off. In such cases, no evidence of vascular congestion or stasis was found. He thought that the chorea was altogether due to an affection of the nerve-cells.

CASE OF VESICAL CALCULUS, THE NUCLEUS OF WHICH WAS A PIECE OF NECROSSED BONE, REMOVED BY LITHOTOMY.

BY W. D. WILKES, M.R.C.S., SALISBURY.

[Communicated by Sir HENRY THOMPSON.]

The patient, M. P., aged 50, an agricultural labourer, a tall thin man, was admitted into the Salisbury Infirmary in October 1876, for stone in the bladder. A small orifice to the urethra and sensitive passages indicated lithotomy rather than lithotripsy, and the former operation (lateral) was performed on October 30th. After several unsuccessful attempts, the stone was grasped by a large forceps, and became crushed in them whilst holding it firmly for extraction. After extracting the large fragments, a large piece was found on a kind of shelf on the upper and back part of the bladder, of which a piece of necrosed bone was the nucleus. There was no vessel to tie; no tube was inserted; and the patient was in a very fair state. After the operation, it was learnt that, thirteen years ago, the patient fell from a tree, eighteen or twenty feet, upon his right hip. An abscess formed, and two or three pieces of dead bone came away from the inside of the right thigh just below the adductor longus. He had no trouble till March 1876, when bladder-symptoms began. The nucleus of necrosed bone weighed eight grains;



the crushed fusible calculus (dry) weighed four hundred and thirty grains. The patient was now all but well. The case was another illustration of an unusual cause of calculus in the bladder, from necrosed bone detached from a neighbouring portion of the skeleton; the first case having been reported to the Society by Sir Henry Thompson in 1866, who also had had a similar case at University College Hospital in 1872, in a lad fifteen years of age, who made a good recovery.

ON CONGENITAL DISLOCATION OF THE KNEE, TIBIA FORWARDS.  
BY RICHARD BARWELL, F.R.C.S.

Harry B., aged six weeks, was brought to Charing Cross Hospital to see Dr. Barlow, on account of an eruption about the thighs, October 24th, 1876. This was quite unimportant, but Dr. Barlow detected an abnormal condition about the lower limbs, and asked Mr. Barwell to see the child. The posture of the thighs and legs was unusual; the former being kept extended on the body, the latter superextended at the knee. Across the front of the joint was a deep tegumentary fold; above which the parts, more especially in the middle line of the limb were soft, the finger sinking deeply; and below which the tuberosities of the tibia could be felt unduly prominent. The popliteal depression was replaced by a protuberance which could be felt as double, and was as easily recognised as the condyles of the femur. Below this, the normal hardness over the back of the tibia was lost. Mr. Barwell diagnosed congenital dislocation (almost complete) of the tibia forward. On the left side, the patella, though small, was evident. On the right, he could, with the most careful examination, find no patella. Besides this condition of the knees, the following peculiarities existed. The thighs could not be straightened on the pelvis. This was compensated by remarkable flexibility of the loins, the position simulating, though not due to, dislocation of the hip; there were talipes equino-varus of the right foot and slight double internal strabismus. This was the fourth child of healthy parents. There was no deformity in any branch of the family. The birth was normal—a head-presentation. During the third month of gestation, the mother had a fall downstairs; during the sixth, a severe fright. She had a very uncomfortable pregnancy, not being able to get about, for it was very low down. Partly on account of the skin-eruption, partly on account of his being “a very wet baby”, Mr. Barwell thought it better to postpone active treatment, but saw the child from time to time. Although a simple attempt to flex the limb entirely failed, yet he found that, by placing the thumbs on the tuberosity of the tibia in front and the fingers on the femoral condyles behind, he could partially reduce the dislocation, and then bend the limb somewhat; therefore, when circumstances suited, he had the child admitted into hospital; and on January 9th, chloroform being administered, he pressed the joint as far as possible into position, and, having flexed the limbs as much as could be effected without using too much force, placed them in plaster of Paris. The left could be more perfectly bent than the right. In a fortnight, the proceeding was repeated; and both limbs could now be well bent, and the tibia lay in good position. The left patella had increased in size; the right one could now be felt, but was small. On February 10th, the plaster was removed. The knee was in good position, and its movement was good. No dressing was applied, but free passive motion in the direction of flexion was enjoined. On February 24th, the knees were normal; they could both be bent till the heel was close to the buttock. The patellæ on both sides were nearly or quite normal. The fold of skin across the front of the joint had disappeared. This deformity was so rare that there were only about half-a-dozen cases on record, viz., one by Von Ammon; two specimens, probably still-born children, shown by Guérin; one case seen by Mr. Hilton; one mentioned by him as having been seen by Sir Astley Cooper; and one case recently reported at the Clinical Society by Mr. Godlee. Some of these cases were described as congenital absence of the patella; others (Guérin and Godlee) as dislocation forward of the tibia at the knee. The author submitted that, since dislocation was not always present when the patella was absent, and the patella was present when dislocation occurred, this absence or presence was an unessential feature in the case, and ought not to give the name to this condition. The only writers who spoke of any treatment were Hilton and Godlee. Mr. Hilton's patient only learnt to walk fairly well in about twenty-four years. Mr. Godlee treated his case by instruments. The child crept about tolerably well, but did not use the leg nicely at the fifteenth month. Mr. Barwell's case was cured in about six weeks of treatment; and he thought his mode of treating the dislocation the correct one.

Mr. WILLIAM ADAMS thought that too much importance was attached to the partial dislocation of the knee, and too little to the general condition of both limbs. He asked whether Mr. Barwell's case was one of breech-presentation. If so, it resembled cases which he had seen, in

which the limbs were stiff. He would rather regard the affection as one of the muscles. In all his cases, the patellæ, though small, were always present. The children were small and imperfectly nourished. The displacement was slight; he would hardly call it dislocation. The upper limbs were sometimes affected. The cases—of which three occurred in one family—had done well.—Mr. HULKE said that there was an important difference; in the case related, the joints were quite loose and “wobbling”; in Mr. Adams's cases they were stiff.—Mr. JOHN WOOD asked how long the treatment had continued.—Mr. HULKE thought that some of the cases of so-called partial dislocation were, in reality, cases of displacement of the lower epiphysis of the femur.—Mr. BARWELL said that the case was one of breech-presentation, but of natural labour. It was different from those referred to by Mr. Adams. He attributed the displacement to shortness of the rectus femoris muscle. The patient wore the plaster of Paris splints only five weeks.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MARCH 20TH, 1877.

CHARLES MURCHISON, M.D., F.R.S., President, in the Chair.

*Aneurism from Embolism.*—Dr. GOODHART read notes of some cases of aneurism arising from embolism. The first case was that of a lad aged 18, who had had rheumatism twice. He had mitral disease. While under observation, his pulse stopped suddenly from embolism of the brachial artery; he then had head-symptoms. A large clot was found in the right hemisphere from an aneurism, caused by an embolus. The heart weighed twenty-three ounces, and had long vegetations hanging from the mitral valve; while the chordæ tendinæ were ulcerated. The second case was that of a man aged 34, who had had rheumatism twice, and had heart-symptoms. His urine contained one-sixth of albumen. He had convulsions, and died. There was an aneurism of the left cerebral artery, with a large clot. The heart weighed sixteen ounces. It also had long vegetations, and its chordæ were ulcerated. The third was a lad aged 19, who had had rheumatism, and there was a double aortic *bruit*. He had hemiplegia. A small sacculated aneurism of the right posterior cerebral artery was found. There was no other disease of the vessels. The heart weighed twenty ounces. There were long vegetations of both aortic and mitral valves. The fourth case was that of a man aged 50, who had had rheumatism in his ankles, and mitral disease. A swelling showed itself in the arm, which was cured by compression. He then had an apoplectic fit. There was a large clot on the dura mater near the right middle cerebral artery. There was another clot in the left corpus striatum. The heart weighed ten ounces and a half, and was quite natural, except some acute inflammation of the mitral valve. The kidneys were healthy, except some recent embolic patches. The subject of the production of aneurism by embolism was scarcely yet sufficiently recognised. Apoplexy in young subjects was the result of embolism; and heart mischief was also present. As to the formation of aneurism from embolism, Holmes thought it was due to distension behind the plug. Ponfick thought that the embolic plug was calcareous and spiculated, and, by damaging the arterial coats, led to aneurism. He had never yet seen such a plug. He was inclined to think that the clot behind the plug softened, and induced softening of the wall of the vessel, and thence aneurism.

*Aneurism from Embolism.*—Mr. BRYANT brought forward cases of aneurism from embolism in the femoral and popliteal arteries. The first was a large aneurism of the femoral artery in a man aged 29, who had had rheumatism and never had syphilis. He suffered from pain in the groin for three weeks, and a pulsating tumour was found in the groin, and the thigh was everted. The swelling at Poupart's ligament extended two inches up the abdomen. There was marked pulsation. The common iliac artery was tied. The man, however, died from heart-disease. There was a good clot at the seat of ligature. The arteries were sound, except a slit half-an-inch in length at the bifurcation of the vessel. On *post mortem* examination, the arteries were found healthy. The heart weighed twenty-one ounces; and there was old disease of the aortic and mitral valves. There were other embolic plugs found. The second case was that of a man aged 33, who had had three attacks of rheumatism. His heart was enlarged, and there were present aortic and mitral *bruits*. After a walk, he felt a sudden pain in his right foot. The leg swelled. The calf was thick, and marked pulsation was felt in it. There was a large aneurism at the bottom of the popliteal vessel. The patient could not bear pressure, and the aneurism was growing; horse-hair, to the extent of twenty feet, was therefore introduced through a fine cannula. The effect was satisfactory; in a few minutes, a firm clot was formed. The man died of heart-disease five days afterwards. There were old heart-disease, and some ulceration where the vegetations in the valves



came into contact with the arterial wall, but otherwise the arteries were healthy. There were embolic patches in the spleen and kidneys. —Dr. WILKS said that these cases clearly proved that aneurism was produced from embola. Especially was this the case with young people suffering from endocarditis. —The PRESIDENT had seen two such cases.

*Changes in the Blood-vessels in Bright's Disease.* —Dr. G. JOHNSON read a paper on the above subject. In the fifty-fifth volume of the *Medico-Chirurgical Transactions*, Sir William Gull and Dr. Sutton published their celebrated paper, in which they denied, or at any rate doubted, the existence of hypertrophy of the arterioles. They described a change in the vessels, which they designated arterio-capillary fibrosis; and expressed their belief that this was a cardio-vascular change allied to senile degenerative changes, of which the kidney-disease was but a part. They had raised some objections to Dr. Johnson's theory, which he would proceed to consider. One was, that hypertrophy of the muscular wall was simulated by contraction of the artery. He thought that the specimens exhibited would answer that objection. No amount of *post mortem* contraction can simulate the appearance of hypertrophy of the muscular layer to the extent of two or three times the normal thickness, as could be seen in the specimens exhibited where vessels of equal calibre from the same parts of the body in healthy and diseased subjects were shown side by side. In an artery described by Sir William Gull and Dr. Sutton, the inner longitudinal layer alone was referred to as the muscular layer, while the outer circular layer was said to be the outer wall of the vessel. As to the other statement, that the muscular layer varied in thickness in different parts of the same vessel, an hypertrophied artery might, like an hypertrophied heart, undergo atrophy. In those vessels which did not become so much hypertrophied as others, the increased arterial tension would cause dilatation and atrophy of their walls. Their theory of degenerate vessels would not account satisfactorily for the clinical fact of the hypertrophy of the left ventricle. They had said nothing of the effects of possible alcoholism, or other cause of changes in vessels in those cases from which their specimens were taken. Dr. Dickinson, in his recent work on *Albuminuria*, agreed with Dr. Johnson's facts. His interpretation of them was different. He said the impediment was in the capillaries, and that the function of the arterioles was, by their contraction, to assist the heart to drive the blood onwards. In consequence of the capillary obstruction, the arteries became habitually distended, and, being stimulated to overaction, habitually they became hypertrophied. There was also hypertrophy of the outer walls. These changes were found in granular kidneys and in last stages of large white kidneys; and in a case of Dr. Barlow's, in a child aged 5, which did not look like senile degeneration, even where the kidney was deranged from stone in the bladder, these changes were found. This thickening of the vessel arose from impurity of the blood, due to renal inadequacy. The physiological explanation was, that the arterioles thickened as a reflex phenomenon, and that the left ventricle became hypertrophied in consequence of the obstruction, as it did when obstruction existed from whatever cause. There was no "conflict" betwixt the heart and the arterioles. The view that the arterioles thickened to drive the blood through obstructed arterioles was opposed to our physiological knowledge. Possibly other forms of deterioration of blood than that of imperfect depuration from impairment of the kidney might induce thickening of the arteries. The small red granular kidney did not arise from fibrosis or interstitial thickening around the blood-vessels, though there might be some little growth of connective tissue. The primary change was destruction of the epithelial lining of the tubes, which was thrown off as casts, followed by atrophy and contraction of the tubules. Some tubules were distended with fluid, where there was a plug below, and there a cyst was formed. These changes were set up by the presence of the products of imperfect assimilation in excess by alcohol and other causes. Dr. Johnson then referred to the simultaneous observations of himself and Mr. John Simon, published in the thirtieth volume of the *Medico-Chirurgical Transactions*. The small red granular kidneys were inconsistent with the theory of interstitial deposit. Again, compression of the vessels would cause great engorgement. It would require a large number of well observed facts and a very careful induction from them to justify the conclusions that the appearance of an excess of fibroid tissue in the spinal cord was more than a secondary result of antecedent and more essential changes. First, it might be in the blood, and subsequently in the highly organised and easily destructible nervous tissue of the cord. The authors of the theory of arterio-capillary fibrosis attached undue and exaggerated importance to the appearance of fibrosis in the kidney, and he suspected they overestimated its importance in other organs. —Dr. DICKINSON said that nothing in his work could be interpreted as ridicule of Dr. Johnson's views of the opposition of the heart and arterioles in Bright's disease. As to the nature of granular kidney, other

authorities than Dr. Johnson thought there was a growth of connective tissue, and not merely wasted tubules. There was a growth of organised fibrous tissue rapidly forming, and evidently new growth from the numerous nuclei. As to the present controversy, with such careful observers, he thought neither saw erroneously, but that each saw different sides of real truth. That the muscular layer was always thickened in kidney cases was not an accident. Arterio-capillary fibrosis was equally surely proved, and there was a genuine thickening of the walls with it. The facts on both sides were facts. The difference lay in the interpretation. The arterioles were thickened not in granular kidney only, but in all cases of kidney-disease where their function was impaired, as in loss of one kidney, or damage to both by stone. In children, after acute renal disease, the heart was readily hypertrophied in from four to six weeks. The arterial coats were thickened too. Which occurred first, it was not easy to say. They were found close together. The fibrous coat outside was also thickened. When the arteries were thickened, there was increased arterial tension. The arteries were too full of blood. Where there was no increase of tension, there was no thickening of vessels. Venous congestion led to fibrosis of organs; so increased arterial tension caused thickening of vessels. In some cases, the spinal cord was involved. But, instead of a parallel fibrosis, he thought they were affected by the general rise in the blood-pressure, and fibroid thickening around the vessels resulted. —Dr. MAHOMED said that high arterial tension was usually found in the arteries of gouty persons and high livers. Prolonged high tension must produce thickening of vessels. High arterial tension was the key to arterio-capillary fibrosis. In one case, where there had been Bright's disease for ten years, and the kidneys weighed three ounces each, there was no change in the vessels. In acute Bright's disease, the first evidence of recovery was the fall of the arterial tension to the normal state. —Sir WILLIAM GULL said that the question of the nature of the changes in the kidney was not yet done and completed; the accounts of Bright's disease had been written from the changes seen in the dead-house. Clinically, it was found that it does not begin in the kidney. That question might safely be left to time. There was no personality in science. Even if observers were found to be wrong, they deserved praise for their labour. As in the discussion as to the origin of life, he thought the different workers deserved all credit. He appreciated Dr. Johnson's work, though he did not agree with his conclusions. Ranvier did not agree with either, but described the changes as chronic arteritis. It was certain that both sides were not right; and they agreed that they did not agree. The clinical history could not be written from the kidney alone; it must be written from the periphery—from the general conditions. The question would be taken up in the Clinical Society. The changes in the spinal cord occurred with or without kidney-disease. The larger must include the less; and he thought theirs the larger question. —Dr. SUTTON said, as to the artery said to be inaccurately described, the elastic tunica intima protruded. It was difficult to say where the muscular layer ended, as it interlaced with the adventitia. Dr. Johnson could not prove that it was only muscular fibre; he must admit some fibroid thickening. How far was the seeming thickening due to muscular contraction? By what test could it be shown that the new material is not morbid and not healthy muscular fibre? It was more like fibroid material than muscle. The test of hypertrophied muscle is that it has a greater strength than normal muscle. The tunica intima being thrown into a wrinkled condition showed contraction of the muscular wall. The fibroid material is not shrunken connective tissue, but consisted of new spindle-shaped corpuscles. —Dr. JOHNSON agreed that they should agree to differ. There might be some growth of new material. The intratubular changes in the kidney must have more attention paid to them. In arterio-capillary fibrosis, the tension was not so great as in muscular hypertrophy, so there was no heart change. Blood-poisoning excited changes of the arterioles. There was nothing personal in the use of the word opponents. If the inquiry into Bright's disease, as regards the kidney, was not completed, nothing new had been added. In granular kidney, the disease began in the kidney. There were prior blood-changes in all cases. Chronic dyspepsia was a common cause, and the imperfectly assimilated products irritated the kidney, just as in diabetes the kidneys became injured in time from the flow of sugar through them. He defended his account of the thickened renal artery from Dr. Sutton's criticism. —The PRESIDENT announced that a Committee was to be appointed to examine the arteries in Bright's disease.

*The State of the Retinal Arteries in Bright's Disease.* —Dr. GOWERS showed a case of a female with chronic Bright's disease and a hypertrophied heart, where the retinal arteries were small, being only half the diameter of the veins, instead of two-thirds, as was the usual ratio. The pulse was hard and tense.

The meeting, which was a very full one, then adjourned.



## MANCHESTER MEDICAL SOCIETY.

FEBRUARY 7TH, 1877.

ARTHUR RANSOME, M.D., President, in the Chair.

*Stethometer.*—The PRESIDENT exhibited a new and simple form of stethometer for registering the upward and forward movements of the chest-walls.

*Spray-Tube.*—Dr. HODGKINSON showed a spray-tube designed to fulfil two very desirable objects; first, to supply a thoroughly efficacious spray-producer at a reasonable cost, so as to allow its use in the out-patient department of hospitals and dispensaries; secondly, to furnish an apparatus, the construction of which would insure the accurate distribution in the form of spray of small quantities of concentrated solutions of remedies. The fulfilment of the first object was secured by its well-known principle of action, coupled with its extreme simplicity. Regarding the second object, Dr. Hodgkinson said that, in certain irritable conditions of the larynx attended with distressing cough, spasm, and other symptoms of hyperæsthesia, when an immediate effect was desirable, or when any objection to the administration of remedies by the stomach existed, he was in the habit of employing, with the most beneficial results, small quantities of concentrated solutions of remedies in the form of spray. He cited, as an example, the harassing cough of laryngeal phthisis, which might be removed by the inhalation in the form of spray of thirty drops of an aqueous solution, containing a quarter of a grain of morphia and three minims of dilute hydrocyanic acid (*B. P.*) The peculiar form of the spray-tube insured great accuracy in the distribution of these small quantities. The patient was instructed in the use of the spray as follows. The mouth was widely opened and the tongue protruded, when the spray was directed towards the back of the mouth. The hand-ball was suddenly squeezed: at the same time, the patient inspired quickly. Dr. Hodgkinson remarked, in conclusion, that the greater part of the discredit into which the treatment of affections of the respiratory passages by the use of remedies in spray had fallen was to be attributed to the non-entrance of the spray into the larynx.

*Drainage-Tubes.*—Mr. BRADLEY showed some new kinds of drainage-tube. They were of vulcanite, instead of mineralised India-rubber; and their advantages were stated to be that they were not liable to have their sides compressed by bandages or by the surrounding parts, and so were always kept open. They could also be readily cleaned and replaced. They were further said to be quite un-irritating.

*Myxoma from Neck of an Infant.*—Mr. BRADLEY showed a large myxoma which he had successfully removed from the neck of an infant. The tumour weighed seven and a half ounces, and measured four by three and a half inches. The child was seven months old, and otherwise healthy. Mr. Bradley enucleated the tumour, which was situated beneath the deep cervical fascia, on December 10th, 1876, and in three weeks the large wound had firmly healed. He attributed the extreme rarity of records of myxomatous tumours in early childhood to two causes: first, that such tumours were mistaken for other growths, such (*e.g.*) as lipomata or fibromata; and, secondly, that the soft tumours of a connective tissue character, like myxomata, probably underwent a true evolution with the growth and changing tissues of the child, so that, when they were examined at a later date, they were no longer mucoid, but would probably be classed among the sarcomata. Mr. Bradley said that, in his opinion, tumours in early childhood should always be removed at as early a date as possible; no age being too early if they were clearly increasing in size; for, with care, the only grave objection to operation, *viz.*, hæmorrhage, might be effectually prevented. This being done, recovery was highly probable, as there was no preceding and very little subsequent shock in operations in early life. Discussing the question of recurrence, Mr. Bradley thought that prognosis on this point was to be more guided by heredity than by any special anatomical character of the tumour itself; and, as there was no family history of any tumour, and as the growth was removed before the system was impregnated with the peculiar germs, he thought recurrence in this case was, on the whole, improbable.

*Hydatid of the Liver.*—Mr. EWART exhibited a specimen of hydatid of the liver, and related the history of the case. F. S., aged 28, a butler, a native of Cambridgeshire, had noticed a swelling in the right hypochondrium for the last fourteen years. He was first seen by Mr. Ewart about four years ago. A fluctuating tumour was then detected over the liver. The patient was admitted into the Infirmary, and the swelling aspirated. Only a small quantity of fluid could be withdrawn, but this contained hooklets. After this puncture, the growth of the tumour seemed checked, and the patient appeared well for some time. The swelling reappeared, and continued to increase, in spite of

repeated tapplings and large doses of iodide of potassium. In July 1876, galvanised puncture was tried. Four needles were inserted into the tumour, and twenty-four cells used. The pain produced was excessive, and the patient was really never fit for anything after this. In October and November, the tumour was again aspirated, and on each occasion fluid containing hooklets was withdrawn; but never any pus. The patient after this gradually sank; his urine became albuminous; and he died. On *post mortem* examination, the heart and lungs were healthy. The kidneys were large. The liver weighed eight and a half pounds. On the anterior surface, there was a large hydatid sac containing hundreds of small cysts. The sac was as large as a foetal head at full term. Some of the small cysts were empty and shrivelled. The anterior surface of this large sac was adherent to the abdominal wall. A small cyst was situated beneath the liver in the promontory of the gall-bladder, and a third one on the posterior edge. The adhesion of the large cyst fully explained the failure of aspiration, and nothing but free incision could have removed it; but, as no pus was ever diagnosed, this proceeding was not considered justifiable.

## ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, JANUARY 3RD, 1877.

A. J. MANSON, M.D., President, in the Chair.

*Abscess of the Antrum.*—Dr. WIGHT reported a case of abscess of the antrum of Highmore in a child fourteen months old. He had not met in the course of his reading with a similar case, and had not met with any practitioner who had seen one like it; he considered the case unique. J. J., the youngest of six children, whose parents are healthy, was first seen when about nine months old. He then suffered from teething, indicated by general irritability. After scarification of the gums and giving a few doses of grey powder, the upper central incisor appeared, and the symptoms were relieved. Weaning was advised, but this was not attended to. About a month afterwards, he had whooping-cough, with bronchitis, and had frequent convulsions and fits of suffocation. Under belladonna and bromide of potassium, he improved in about six weeks, and was not seen again until he was fourteen months old. At this time, the right side of the face, the cheek particularly, was much swollen, and had a look of erysipelas. On examining the mouth, great swelling was discovered all along the right gum, giving rise to the idea that there was gum-boil; but, on the third day, the swelling decreased below and increased upwards, especially about the orbits. The gum at this time was much less swollen, although the right upper central incisor seemed buried in it. On the fourth day, the right eyeball seemed congested and was pushed forward. This continued and increased until the eighth day, when the eyeball appeared to project about half an inch from its cavity, with much chemosis; the iris was fully dilated, and the eye had a dull heavy lifeless expression. The right central incisor was surrounded by a spongy ulcerating gum, but there was nothing to indicate any connection between this tooth and the swelling. In consultation with Dr. Dyce Davidson, the case was decided to be one of abscess of the antrum; and, the child being put under chloroform, an opening was made with an ordinary hydrocele trocar towards the antrum in the situation of the bicuspid, a counter opening being made at the outer angle of the right eye. A probe was introduced into the floor of the orbital cavity, but little or no matter escaped, although there was a discharge of much dark blood. On again examining the mouth, the right incisor was easily pushed out with a probe, and yellow pus flowed out from the cavity thus left. After the operation, the child seemed much relieved. No pus came from the trocar-puncture. The eyeball slowly returned to its cavity, and for a fortnight the axes of the eyes seemed so much disturbed that there appeared a divergent squint, but this disappeared in about a month. About three days after the operation, when the iris had returned to its natural condition, the lower segment of the cornea became milky, but this soon disappeared; and, six weeks after the operation, nothing unusual remained except a small opacity on the lower part of the cornea. The cavity of the central incisor was still discharging pus. Three months after the operation, there were no more teeth appearing in either jaw. The child seemed to see with both eyes quite well. There was still a fistulous opening at the site of the right central incisor. The treatment consisted of belladonna ointment and grey and compound ipecacuanha powder before the operation. The opacity of the cornea was treated by belladonna to dilate the pupil, and calomel as a local application. The chloroform acted well; and Dr. Wight said that he had the greatest faith in chloroform; and that, in spite of all that had been written against it and in favour of ether, he trusted it would be a long time before the latter supplanted the former. He considered that Dr.



Macleod of Glasgow and others deserved the thanks of the profession for the protest raised so strongly and truly against the objections to the use of this anæsthetic.—Dr. F. MOIR considered this a case in which the root of the incisor tooth had become diseased, pus being formed round the root. There was no connection between the antrum and the central incisor tooth. A case had occurred to him where there had been great swelling in the situation of the false molars in a child, and some months after a piece of dead bone (followed by pus) had been removed. He believed that the swellings and protrusion of the eyeball in the case of Dr. Wight had arisen from extravasation of blood.—Dr. C. CROMBIE thought the case was one of gum-boil; as, if it had been the antrum, at fourteen months the thin plate of the jaw would as readily have bulged as that part near the orbit. Had the case been as supposed, the whole cavity must have been full of pus, but none came from the operation, while much came from the cavity of the incisor.—Mr. DE LESSERT wished to know if there were any swelling of the palate. He thought it important to note that no matter came when the antrum was opened. Sometimes there were bony septa in the antrum, or a band of tissue might prevent the bulging of the cheek, and cause the eye to protrude. The antrum might have been missed by the trocar, or the pressure might not have been enough to cause the walls of the antrum to collapse.—Dr. JACKSON was inclined to consider the case as one of gum-boil.—Dr. MANSON had seen a case of abscess of the antrum where the surface cracked. In this case, a crucial incision followed by nitrate of silver effected a cure. He thought it was important to decide as to whether or not infiltration of the cellular tissue about the eye could arise from the irritation of the gum.—Dr. A. OGSTON never heard of alveolar abscess causing the protrusion of the eye noted in this case. He thought that the permanent incisor might in this case have been lying obliquely above the temporary incisor, and that the abscess may have been around the permanent tooth.—Dr. WIGHT replied that Dr. Davidson and he had no doubt as to the nature of the case. He had at first thought it gum-boil, but the swelling and inflammation left the gums to a great extent, and the protrusion of the eyeball took place, and then he was obliged to seek some other cause than gum-boil. Though no matter came from the wound at once, it may have come afterwards.

*Apparatus for the Cure of Talipes Equinus.*—In this case, described by Dr. F. M. MOIR, the patient was eighteen years old, and he had suffered from infancy from the affection which was the subject of the report. There was no history as to the congenital or acquired nature of the affection, and nothing could be discovered indicating any connection with teething or other irritation of the system in infancy. The case may have been congenital, however, as a younger sister has the same defect to a slight extent. The variety under consideration was the most common and the simplest of all these deformities. The heel was merely drawn up, and the two malleoli grasped, the astragalus also slightly, and thus the deformity was produced. In this case, the heel was drawn up three inches, the muscles of the calf and thigh were wasted to half their natural size, and the lad limped on his toes. The operation performed was division of the tendo Achillis and the extensor longus pollicis. The foot was then bandaged; and three days after the operation a plaster of Paris splint was employed. This splint, however, could not be continued, owing to the pain produced, and it had, therefore, to be removed; and, in consequence of the difficulty arising from this inability to bear the splint, the apparatus which proved effectual was contrived. The apparatus (which was exhibited) consisted of a flat metal pad covered with chamois-leather to go under the metatarso-phalangeal joint, and which is fitted into a recess or hollow in the sole of the boot to be worn, and which had to be specially made for the purpose. To each side of the pad, one of the ends of a leather strap was attached, and to the double of these two ends, which passed through an opening in the upper of the boot, another strap was attached, which passed up in front of the leg to about half way between the ankle and the knee. Round this part of the leg a strap was buckled, and the strap from the foot was attached to the front of this. As this strap round the leg would have been easily drawn down, a strong steel rod was fixed to its upper and posterior part, and passed up from this to another strap buckled just above the condyles of the knee. The patient, with the apparatus applied, was able to wear a stocking in the ordinary way; and, with his trousers cut pretty wide at the feet and long, only a small part of the leather foot-strap was seen. The advantages of this apparatus were stated to be that it was light and inexpensive; and especially that it could be worn while the patient was following his usual avocations without being observed, thus allowing the apparatus to be retained without inconvenience long enough to effect a permanent cure. In the case reported, the apparatus had been kept on for five months, and the limb had continued to improve, the calf being well filled up, though the thigh still remained smaller than

that of the other leg. Dr. Moir concluded by stating that, although the case brought under notice had required nothing but the steel rod and the two straps mentioned, yet, in cases where the thigh was very muscular, the upper strap might slip. In this case, he would add a joint to the steel rod at the knee and carry the rod up to the waist.

## PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, JANUARY 27TH, 1877.

THOMAS HAYDEN, F.R.C.S.P., President, in the Chair.

*"Surgical" Kidney.*—Dr. JAMES LITTLE showed a specimen of this pathological condition from the body of a man aged 68, who had long suffered from an enlarged prostate gland. The calices and pelvis of the kidneys were dilated. The ureters were also much dilated in a sacculated manner. The bladder was hypertrophied, but there was no vesical catarrh or cystitis. The symptoms, in the order of their occurrence, had been thirst, swelling of the feet and legs, a pruriginous eruption on the skin, loss of appetite, nausea, headache, dimness of sight, straining when passing urine, drowsiness, and coma. The urine was limpid, of low specific gravity (1010), and contained only 21 grains per 1,000 of solids, and only 2 grains per 1,000 of urea.

*Thoracic Aneurism.*—Dr. GORDON showed a specimen from a man aged 48, a shoemaker, who had been healthy up to four years ago. He then became subject to recurrent attacks of bronchitis. Last Christmas he fainted. When he came under observation, there was orthopnea, with a frequent ringing cough. The face was livid. Dulness on percussion existed over the upper part of the sternum, where also a distinct double sound was audible. At the left apex, the respiration was feeble. The left radial pulse was weaker than the right. There was inconstant dysphagia. A large aneurism engaged the upper and back portion of the transverse aorta, and the sac exerted pressure on the trachea, œsophagus, recurrent laryngeal nerve, and left subclavian artery.

*Malignant Disease of Liver, Gall-Bladder, and Peritoneum.*—Dr. FINNY presented the liver and neighbouring parts of a gardener aged 76, who used to suffer, three months before admission to hospital, from severe pain in the right side, especially when he lay on the left side. Physical examination showed that the lower margin of the liver was uneven, being raised in bosses, and that there was a fulness in the epigastrium. There was no ascites at first. Jaundice increased in degree; there was great debility; and a slate-blue tinge was noted on the malar prominences and on the backs of the hands. Slight ascites, and ultimately dropsy of the right leg and scrotum, were observed. After death, the peritoneum was found studded over by firm hard nodules. This was particularly the case on the under surface of the diaphragm. The falciform and round ligaments were a mass of disease, being converted into hard bosses of cancer. The right pleura above the diaphragm was also diseased. Under the liver, lay large masses containing a soft yellow size-like substance, the exact nature of which had not yet been ascertained. The gall-bladder was transformed into a cancerous tumour. Enormous dilatation of the bile-ducts had occurred. The last two inches of the ductus choledochus was pervious.

*Giant-celled Sarcoma of the Head of the Fibula.*—Dr. E. H. BENNETT showed the leg of a man aged 36, a small, wiry, able-bodied navy; and also the cast of the limb which he had amputated. An enlargement occurred near the head of the fibula. This tumour was, practically speaking, painless, although sometimes there was an aching in it. The man's constitutional health was good; but a gland of suspicious size lay over the saphenic opening in the groin on the affected side. Large veins grooved the tumour. There was slight œdema of the ankle, etc. The limb was removed by the ordinary flap operation above the knee. The tumour was a lobulated one. It was a giant-celled sarcoma, which grew from the substance of the head of the fibula. No trace of bone, however, could be detected in the centre of the tumour. The superior tibio-fibular articulation was healthy. The growth had caused absorption of the greater part of the muscles of the calf. The perineal nerve had been displaced, but was not stretched. Some enlarged lymphatic glands in the popliteal space, when examined, proved to be simply dropsical, with increase of the lymph-elements. They contained none of the sarcomatous elements of the tumour. The subsidence of the large gland in the groin after the operation also showed the non-infecting character of sarcoma as regards the lymphatic glands.

WEST KENT MEDICAL CHIRURGICAL SOCIETY.—The sixth meeting of the twenty-first session of this Society was held on Friday, March 2nd, at the Royal Kent Dispensary; Dr. T. Creed (President) in the chair. Dr. James Andrew read a paper on Pernicious Anæmia. The next meeting will be on Friday, April 6th.



## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### THE STARVATION CASE AT BISHOPMEARMOUTH, SUNDERLAND.

THE following testimonial, signed by thirty-four medical men of Sunderland, has been forwarded to the Local Government Board in reference to this case.

"Sunderland, March 15th, 1877.

"We, the undersigned medical and surgical practitioners, do hereby cordially bear our testimony to the excellent professional character of Mr. Henry Hylton Taylor. During a long life of industry and usefulness in his profession, we have never known him to have been found wanting in sympathy and humane care for the sick and suffering; and we are of opinion that the severe censure recently passed on him by Lord Coleridge at the Durham Assizes was wholly undeserved; and, moreover, we believe that, when the facts of the case shall be impartially considered, Mr. Taylor will be acquitted of all blame." [Here follow the signatures.]

In addition, we learn that more than a hundred poor persons residing in this district have memorialised the board of guardians in favour of Mr. Taylor; and that the local clergy of the town are moving also in the matter, with the view to relieve this gentleman of the cruel aspersion on his public and private character.

### THE PUBLIC HEALTH (IRELAND) BILL.

A BILL introduced by Sir Michael Hicks Beach and the Attorney-General for Ireland "to consolidate and amend the Acts relating to public health in Ireland" has been printed. It consists of 288 clauses, and fills, with the schedules, 110 pages. A memorandum prefixed to the Bill states that its objects are to consolidate into one Act the various provisions with respect to sanitary matters and burial-grounds of the several Acts, no fewer than twenty in number, now in force in Ireland, and to amend them where amendment is required. Among the sanitary provisions is one which makes the keeping of "swine or pigstye" in a dwelling-house, in any sanitary district, liable to a penalty. The Bill confers more extensive powers upon sanitary authorities for water-supply and upon urban authorities for gas-supply than are at present possessed, and makes some changes in the law relating to burial-grounds. It is provided, among other things, that the sanitary authority of each sanitary district shall be the burial board for that district, instead of the present rule, under which many towns and townships below six thousand in population are the burial board districts, although not the sanitary districts. The Act also provides for the closing of burial-grounds "for the maintenance of public decency, or to prevent a violation of the respect due to the remains of deceased persons".

### PUBLIC HEALTH MEDICAL APPOINTMENTS.

\*JUNEAUX, B., L.R.C.P.E., appointed Medical Officer of Health for the District of Oystermouth.

## MILITARY AND NAVAL MEDICAL SERVICES.

### ARMY MEDICAL SERVICE.

SIR,—A medical officer should have a right to select an army servant, should he desire to do so, and also a soldier-groom, if entitled to forage for a horse. This was the prescriptive right of officers of the medical staff up to September 15th, 1827, when soldiers were discontinued as servants by an order of the Commander-in-chief. The then custom was to select servants from the veteran battalions. The medical staff officers at Chatham were exempted from the order (No. 457), and permitted to retain the servants hitherto allowed them from the depot of the Newfoundland company. The regimental surgeon, by prescriptive right and custom, was allowed a personal soldier-servant and a soldier-groom up to the abolition of the regimental system. The German military surgeon is allowed a soldier, who continues to wear the uniform of his regiment. The usual custom is to allow the soldier-servant to remain with the staff officer until the regiment to which he belongs goes abroad; in the meantime, he is attached for

messaging and quarters to the regiment on the station. All staff-sergeants are allowed fatigue-men as servants. Under these circumstances, I think the privilege might be accorded to medical staff officers.

HISTORICUS.

### THE ARMY MEDICAL DEPARTMENT.

SIR,—I trust Mr. Hardy was sincere in his assertion in the House of Commons on Monday night last, that he has "done his best to arrive at a knowledge of the grievances of the army medical officers, and, if possible, to meet them". If he have done his best, I am sure he will not object to persevere in a manner the most simple and the most likely to be rewarded with success—namely, by appointing a committee to inquire into those grievances which commenced so far back as 1861, when the Warrant of 1858, prepared under the fostering care of the honest and large-hearted Lord Herbert, began to be tampered with, and by degrees dwindled down to a shadow of its former self, until it disappeared altogether to make room for a Warrant and a system which culminated in the discontent of the entire executive grades of the department. How Mr. Hardy can close his eyes to the breach of faith practised towards those who entered under the Warrant of 1858 seems an enigma. Medical men of attainments have never entered the army as a remunerative field of the profession, and certainly will not be found to enter it at all now that the social comforts of an army life have been removed; and such was the opinion of a man whose opinion had weight, and will for ages have weight, in the profession, both in the army and in civil life, the lamented Parkes; and if Mr. Hardy will only turn to the blue-books of 1865, he will see that such was the case.

The real grievances are developed by the details of the new system, which none can feel or be aware of without participating in them—a system which has led to an unequal division of labour amongst individual members of the executive grades, and frequently places a man of long service in a position, as regards detail of duty, degrading not only to his nominal relative army rank, but even to his standing in the honourable profession to which he is proud to belong.

As to the present detail of duties under the new system, I would only ask Mr. Hardy to depute unbiased members of the profession to inquire into them, leaving the military inconveniences of such a system to military men competent by experience to accord their opinion. Rest assured, sir, that where medical and commanding officers unite to cry down a system, there must be something wrong and requiring active treatment.—Yours truly,

A LIBERAL CONSERVATIVE.

## MEDICO-PARLIAMENTARY.

### HOUSE OF COMMONS—Thursday, March 15th, 1877.

*Urban Sanitary By-Laws.*—In reply to Mr. Elliot, Mr. SCLATER-BOOTH stated that the Code of Urban Sanitary By-Laws would be ready shortly after Easter.

*Surgeons of Militia.*—In answer to Colonel Mure, Mr. HARDY said the case of the Surgeons of Militia, who, as the honourable and gallant member stated, had been deprived of a portion of the income derived from their appointments by the clauses of the Royal Warrant of the 19th July 1876, had received a good deal of consideration. He had been requested to receive a deputation after Easter from a medical body in the metropolis who had taken up the subject, and he would give every possible attention to the statements they might make.

*Vaccination.*—Mr. BARRAN presented a petition from the Anti-Compulsory Society of Leeds, which was read by the Clerk at the table.

*Public Health (Ireland) Bill.*—Sir M. H. BEACH obtained leave to bring in a Bill to consolidate and amend the Acts relating to Public Health in Ireland. The Bill was brought in and read a first time.

Friday, March 16th.

*Public Lunatics in Scotland.*—In answer to Mr. Bruen, the LORD ADVOCATE said the total amount of the grant in 1875 towards the maintenance of Pauper Lunatics in Scotland was £59,483, and of that amount the portion contributed towards the maintenance of pauper lunatics in the licensed wards of the poorhouses was £5,283. In 1876, the corresponding figures were £62,637 and £5,803. The amount contributed by Government was half the cost of maintenance, except in cases where the cost exceeded 8s. a week, the limit of the Government grant being 4s. In 1875, the average daily contribution from Government in aid of the maintenance of pauper lunatics in poorhouses was 3s. 6¼d., and in 1876 it was 3s. 9d. In Scotland, those licensed wards in poorhouses were under the direct control of the Board of Lunacy, and not of the authorities for the charge of the poor, and they were inspected by the medical officers of the Lunacy Board. No case was admitted into them unless the medical officers certified that it was a proper case for detention there. In fact, they were used for the purpose of relieving the asylums where violent and incurable cases of insanity were treated, the poorhouse wards being reserved for chronic and harmless lunatics.

Monday, March 19th.

*Soldiers in Hospital.*—Dr. LUSH asked the Secretary of State for War if he would inform the House what was the average number of

soldiers in hospital during the years 1875 and 1876 respectively.—Mr. HARDY: In 1875, exclusive of the Malta Royal Fencible Artillery and of black troops in the West Indies, the coast of Africa, Ceylon, and China, in a strength of 169,235 non-commissioned officers and men, 7,680—being at the rate of 45.38 per 1,000 of the strength—were constantly in hospital. If the colonial troops above mentioned are added—strength, 2,212; daily sick, 113—the proportion of those constantly in hospital will be 45.45 per 1,000. For 1876, as the annual returns from commands abroad have not yet been received, the statistics can only be given approximately, but probably very closely. Those constantly in hospital in 1876, 165,905 non-commissioned officers and men were 7,528—being at the rate of 45.37 per 1,000 men. Adding colonial troops—strength, 2,037; daily sick, 96—the proportion of those constantly sick in hospital for the year will be 45.39 per 1,000. The distribution of those constantly sick in hospital in 1875 in the various commands may be seen in the *Army Medical Department Report* for that year, page 1.

Tuesday, March 20th.

**Medical Regulations in the Army.**—Lord EUSTACE CECIL had his attention called by Mr. JACOB BRIGHT to a War Office order that "No medicine, medical or surgical appliances of any kind will be supplied from the public stores to the wife or children of any soldier who is not married with leave", and to the death of the child of a soldier named Webster, after, as was alleged at the inquest, medical attendance had been refused at the military hospital, Woolwich. The order, Lord Eustace stated, though issued in November 1876, was not a new one, but merely the condensation of an order that previously existed. There was a driver of the Royal Artillery, named Webster, whose child had died at Woolwich while he was absent on service; but the medical authorities knew nothing of any woman giving that name having applied for assistance.

**Vaccination.**—Mr. FORSYTH gave notice of his intention to ask the President of the Local Government Board if he can state whether the vaccine lymph now in use is obtained from the original source suggested by Dr. Jenner, or is artificially produced by inoculating the animal with the small-pox virus; and what securities are taken, by microscopical examination or otherwise, to ascertain the perfect condition of the lymph now distributed by the National Vaccine Establishment in connection with the Local Government Board.—Earl PERCY gave notice of his intention, on the second reading of the Vaccination Law (Penalties) Bill, to move, That, before considering any proposal for the readjustment of the penalties imposed by law on its neglect, it is desirable that an inquiry should be instituted with regard to the practice of vaccination in this country for the purpose of ascertaining whether it cannot be conducted in such a manner as to remove all reasonable objections to it.

## OBITUARY.

THOMAS GREGG, M.D.,

SURGEON TO THE SOUTH INFIRMARY, CORK.

DR. THOMAS GREGG of Cork died a few days ago, after a brief illness, of an intractable form of liver affection. Dr. Gregg had been intimately known for many years as a leading surgeon throughout the city and county of Cork. As one of the senior surgeons in the County Hospital and South Infirmary, he occupied an important and prominent, as well as most responsible, position in his profession. As a skilful and conscientious surgeon, gifted with sound judgment and a manner kind and sympathising in the extreme, Dr. Gregg had but few equals in the profession in Cork, and certainly by none was he surpassed. He laboured in the school in which he was partly educated to the moment, it might be said, of his death, and few more honoured or respected names have ever been connected with the Cork School of Medicine than his. He was a pupil of the late Dr. Woodroffe. He became a Licentiate of the Royal College of Surgeons of Ireland in 1837 and a Fellow in 1845, and graduated as M.D. of the University of Glasgow in 1838. He was an ex-President of the County and City of Cork Medical and Surgical Association and of the South of Ireland Branch of the British Medical Association. In addition to the position he occupied at the South Infirmary, he held other medical appointments, including those of Consulting Surgeon to the Cork Ophthalmic and Aural Hospital; the Incurable Hospital; and the Hospital for Diseases of Women and Children. He was pre-eminently a thoroughly practical common-sense surgeon. His loss will be felt, not only amongst his professional brethren, but by the public. His kindness and geniality of temperament endeared him to all classes.

The blank which Dr. Gregg has left in the Cork School of Medicine and in the County Hospital cannot be lightly supplied. A grave responsibility, and one involving most anxious consideration, now devolves on the trustees of this institution in filling the vacancy which has been thus suddenly created.

PETER MARSHALL, F.R.C.S.

ON Monday, the 12th instant, died Mr. Peter Marshall, universally beloved and regretted by all who knew him. He was born at Aberdeen March 8th, 1809, and graduated at the Marischal College of that city. He formerly lived in Bedford Square, London, where his energy and kindness of heart enabled him to gather a large circle of patients and friends around him. He was Treasurer of the Medical Society of London for several years, and afterwards became President of that Society. Failing health compelled him to retire from active practice, and during the last four or five years he resided at West Cowes, in the Isle of Wight, where, for some time before his death, he seemed to have taken a new lease of life. But the cutting March winds fatally affected him. He was buried in the little churchyard at Whippingham.

## MEDICAL NEWS.

**APOTHECARIES' HALL.**—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 15th, 1877.

Crouch, Edward Thomas, Devonport  
Duncan, George Cuthbertson, Liverpool  
Lawson, Robert Lockhart, R. N. S., Greenwich  
Thompson, Herbert Warneford, Mornington Crescent

The following gentlemen also on the same day passed their primary professional examination.

Biggs, John M., University College Hospital  
Dismorr, Henry, Guy's Hospital  
Ewen, Henry W., Guy's Hospital  
Harrison, Edmund M., Charing Cross Hospital  
Hope, Robert C., Westminster Hospital  
Lunn, John R., St. Thomas's Hospital  
Ross, Richard A., Guy's Hospital  
Stevenson, Walter H., University College Hospital  
Wright, Arthur, St. Mary's Hospital

## MEDICAL VACANCIES.

THE following vacancies are announced:—

ARDNAMURCHAN, Parish of—Medical Officer for the District of Sunart Ardnamurchan, and Moidart. Salary, £100 per annum, with suitable house. Applications to be made on or before the 24th instant.  
BRADFORD INFIRMARY—Resident Medical Officer. Salary, £120 per annum, with board and residence. Applications to be sent in on or before the 24th inst.  
BUCKS GENERAL INFIRMARY—Resident Surgeon and Apothecary. Salary to commence at £80 per annum, with board, lodging, coals, and candles. Applications to be sent in on or before April 3rd.  
CHORLTON-ON-MEDLOCK DISPENSARY—House Surgeon. Applications to be sent in on or before the 26th inst.  
COUNTY AND COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY—House-Surgeon. Salary, £125 per annum, with lodging, fire, and lights. Applications to be sent in on or before May 2nd.  
HULL and SCULCOATES DISPENSARY—Resident House-Surgeon. Salary, £150 per annum, with furnished house, coals, and gas. Applications to be sent in on or before the 31st instant.  
HULME DISPENSARY, Manchester—Resident Medical Officer. Salary, £130 per annum, with furnished apartments, coal, gas, and attendance. Application to be made on or before the 24th inst.  
INGHAM INFIRMARY and SOUTH SHIELDS and WESTOE DISPENSARY—Assistant House-Surgeon. Salary, £60 per annum, with board and lodging.  
ST. GEORGE'S and ST. JAMES'S DISPENSARY—Physician. Applications to be sent in on or before the 29th instant.  
WESTERN GENERAL DISPENSARY, Marylebone Road—House Physician. Applications to be sent in on or before April 5th.

## MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

STEELE, Frederick Henry, M.R.C.S., appointed Junior House Surgeon to the Carlisle Dispensary, in place of W. H. F. Sandes, M.R.C.S. Eng., resigned.

## BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the advertisement.

### MARRIAGE.

WILTSHIRE—WATERLOW.—On March 15th, 1877, at St. John's, Redhill, by the Rev. Henry Goss, M.A., Incumbent, assisted by the Rev. G. C. Dickinson, M.A., \*Alfred Wiltshire, Esq., M.D., of 57, Wimpole Street, Cavendish Square, to Kate, second daughter of the late A. C. Waterlow, Esq., of London.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.—Charing Cross, 2 P.M.
FRIDAY.....	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—	Medical Society of London, 8.30 P.M. Dr. G. de Gorreque Griffith, "Dislocation backwards of the Head of the Humerus on the Dorsum Scapulae"; Mr. A. C. Routh, "A Case of Malignant Small-pox"; Dr. Drysdale, "Further about Animal Vaccination: Dr. Henry Martin's experience".
TUESDAY.—	Royal Medical and Chirurgical Society, 8.30 P.M. Mr. G. Gaskoin, "On the Morphea Alba, or Leuce, with Cases"; Dr. H. Vandyke Carter, "Note on the Delhi Boil".
WEDNESDAY.—	Hunterian Society, 8 P.M. Mr. Jacobson, "A Case of Excision of the Elbow"; Dr. Stephen Mackenzie, "On Retina Hemorrhages in connection with Ague"; Association of Surgeons Practising Dental Surgery, 8 P.M.; Council Meeting, 8.30 P.M.; Mr. Alfred Coleman, "On occasional untoward results of immediate Torsion of the Teeth"; Mr. T. W. Nunn, "On some Reflex Symptoms, and results of Irritation of the Dental Branches of the Sixth Nerve"; Mr. S. J. A. Salter, "Specimens of Exfoliation of the Teeth and Jaws after the Eruptive Fevers"; and other communications.
THURSDAY.—	Harveian Society of London, 8 P.M. Mr. Carr Jackson, "A Case of Traumatic Meningitis"; Dr. Farquharson, "The Diagnosis and Treatment of some forms of Dyspepsia".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

MR. CUFFE (Woodhall Spa).—We never heard before of a hospital where the matron was allowed to contract for feeding the patients and settle her own dietary lists. We can hardly conceive a worse or more dangerous arrangement.

## MOUTH-BREATHING &amp; NASAL RESPIRATION

SIR,—Will you permit me, *à propos* of your article on Respiration in last week's JOURNAL, to call the attention of those of my brethren who are interested in this subject to a paper of mine in the *Edinburgh Medical Journal* for this month, entitled "Shut your Mouth and Save your Life". In that article, I point out some of the evils of mouth-breathing, and show the grounds upon which I base the opinion that nasal respiration is necessary for perfect health. In that paper, however, my chief object is to show that perfect hearing (*i.e.*, perfect health of the hearing apparatus) is not compatible with mouth-breathing, and, by inference, that Nature's air-warmer, the nose and its passages, is the best and only perfect respirator—an inference, by the way, which is capable of experimental proof, were such needed.—I am, etc.,

Glasgow, March 17th, 1877.

JAS. PATTERSON CASSELLS.

M.R.S.—The circumstances alleged of a previous quarrel, of the express preliminary stipulation, and of the obvious facilities for employing some other medical man, take this out of the ordinary range of such questions; and however the conduct alleged may be objected to, the case is not one so uncomplicated that we can pronounce an opinion. We doubt very much whether there is any room for discussing it, and should advise that the matter be left where it is.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## ON THE RELATION OF ALCOHOL TO MEDICINE.

SIR,—I feel sure that the majority of your readers will endorse the tone of your leader in the JOURNAL for February 10th, on the Relation of Alcohol to Medicine. On one point, none have room for difference, the hearty condemnation of the evils and abuses of alcohol in any form, whether of spirits, wines, or other beverages; but it is another question when we are asked to join in the present and somewhat fashionable wholesale condemnation of an agent potent for good as well as for evil, which some zealots seem inclined to enforce.

We are all tolerably acquainted with the varied and various experiments which have from time to time been gone through by distinguished chemists and members of our own profession upon the physiological action of alcohol upon the human organism, and very varied deductions have been the result of these experiments; and yet who will say that a few years may not see them set aside, like other scientific deductions, thought to be proved and approved, and yet, after, all fallacious? We may ask whether too great weight has not been attached to some of the results of experiments on the effects of alcohol, in the face of the practical experience of many competent observers.

I am fully aware of the mistakes into which merely practical men, unguided by scientific knowledge, are apt to fall; but, *vice versa*, I think we all know of the mistakes of the *savants* and *scientists*, and it behoves us, ere we unreservedly accept their conclusions on so important a subject, to pause, lest we permit ourselves to be carried away by the flood of enthusiasm in favour of the total condemnation of alcohol, which is now becoming the rage in some general, clerical, and medical circles.

At a recent meeting, such men as Sir Henry Thompson and Dr. Richardson did not hesitate to give their personal experience upon the subject. I would state my own, simply shunning publicity, but vouching for its correctness. As a student, after the age of eighteen, I became a thorough dyspeptic, and remained so more or less for twenty years. At the age of two-and-twenty, that is, nearly forty years ago, when filling an assistant's situation, involving abundant, but not excessive, out-door work on foot and horseback, I adopted, taking no pledge, the teetotal principles, at that time neither so popular nor fashionable as at present. For nine months, through much expostulation and some ridicule, I held steadfastly by them—nine months of the worst health I ever had in a life of sixty years, with more dyspepsia and liver-disorder than I ever experienced before or since. At last, I became so reduced in health, and my power both of mental and bodily exertion so impaired, that my common sense told me the plan was, in my case at all events, a mistake. I gave it up, took daily a pint of good Burton beer; and having, as matter of experiment, had myself weighed, found that, after resuming this moderate use of stimulant, I gained in six weeks six pounds in weight. These are simple facts, for which I vouch my word, and they taught me a valuable lesson, which has served me well until now both in my personal and professional capacity. I have never since that time ceased to be a "moderate drinker", or tried to give up the moderate use of alcohol in some form, chiefly wine, occasionally malt liquor; and since that time I have done a large, often very large, amount of professional work, and, as my card will tell you, an amount of literary work considerably in advance of most of my medical brethren. Moreover, although never strong, I do not believe that, altogether, I have had a month's confinement by illness during forty years. Further, I took leave of my dyspepsia, etc., twenty years ago, and it took leave of me, and I now enjoy perhaps better health and stronger digestion than at any previous time of my life. Why, may I ask, am I, in the face of this life's experience, to adopt the wholesale and sweeping opinions expressed even by magnates in our profession, far less by those less capable of judging among the general public?

I have known of many cases, probably many of my medical brethren know of them also, of individuals (I believe the late Sir John Forbes was one) who, after years of total abstinence, have been forced, their own common sense approving, to abandon the system; and I say now that any men living who have been so compelled ought, in common honesty, to come forward and state their experience for the sake of truth and of their weaker brethren. I say weaker brethren, for some persons are too weak to take steps, even for their own good, without example. As regards "weaker brethren", it is often quoted against those who do not see right to join the teetotal movement, that they aid in placing stumbling blocks in the way of a weak brother; but may not the quotation apply both ways? may not the unyielding enforcement of the total abstinence system burden the conscience as well as affect the health of a really weak brother? I have known such cases, where health and usefulness have been sacrificed to the bigotry of a congregation or society.

At a recent meeting, under the presidency of Sir Henry Thompson, the remark was made that it is difficult to define what that great bugbear of the teetotaler means, "moderate drinking". Is it not equally difficult to define what moderate eating or moderate anything else can be? Are we such irresponsible creatures that, with common sense and experience, and, above all, with God's gospel and guidance, we cannot, as a body, be trusted to use one of his good gifts without abusing it; for the argument based on abuse is quite beyond the question *per se*? Far be it from me to ignore the awful evils of intemperance; and, where there cannot be use without abuse, I say, unhesitatingly, let there be abstinence, either voluntary or enforced; but I must protest against the tyranny, whether it be of the majority or minority, of fashion or opinion, or of science (sometimes falsely so-called), which is now going from one extreme to another.

Much has lately been made of abstinence in arctic regions. Physiologists must well know that these are the very regions in which a healthy man might, if supplied with abundant fatty food, do best without alcoholic stimulants. It is mere clap-trap to quote the example.

In conclusion, no one can deny that alcohol in all its forms has been the source of terrible evils, and has been terribly abused; we know that there are many to whom it is totally unnecessary, perhaps hurtful; but medical men know, or ought to know, if not blinded by prejudice, that there are numbers whose lives are more comfortable, and whose usefulness is promoted by the proper use of this, I repeat it, good gift of God; and I again protest most earnestly against its sweeping condemnation, in the first place by some members of our own profession, and in the next by overzealous teetotal advocates, who brand indiscriminately every or any one using alcoholic stimulants in the form that he finds suit his taste, health, and pocket. Surely, there are numbers in our profession who could furnish well



proved facts in support of the real truth on this momentous subject. The same Almighty who gave us the grape, gave it also its ready fermentation, almost as if it were for a guile; and I, good natural wine, deny it who will, yet, in the words of the psalmist, "maketh glad the heart of man," taking the expression in its widest sense, and in the sacred writings it is always spoken of as a gift only, with the frequent warnings against its abuse. This letter is already too long; but I could not conscientiously withhold a statement of opinion based upon my own personal experience, as well as upon that of a long professional life amid all classes.—I remain, sir, faithfully yours.

A PHYSICIAN.

In reply to Mr. Arthur Jackson, C. J. (Lancaster) writes:—Warner and Frank were surgeons to Guy's Hospital; Joseph Elise was surgeon to St. Thomas's; and Martin held some office in the same hospital.

VACCINIA AND VARICELA.

SIR,—I have to apologise for not sooner replying to Dr. Allfrey's letter on the above subject. I find that Dr. Chauveau of Lyons, Dr. Drysdale of London, and Mr. Hands of Hammersmith (who was one of Dr. Jenner's assistants), believe vaccinia and variola to be two distinct diseases, and in this opinion I agree with them, for the following reasons.

1. Spontaneous vaccinia in the heifer produces an oblong coffee-bean-shaped pustule of a slate-colour, quite unlike the pustule of small-pox.

2. It is said to be very difficult to inoculate a heifer with small-pox, and much more difficult still to inoculate a second heifer from the first heifer.

3. The declension in power of our present vaccine, as compared with that used by Jenner and his immediate successors, is shown by its diminished and diminishing power to protect human beings from small-pox. This indicates that vaccinia in the human being is an exotic dwindling on a foreign soil.

4. Unlike small-pox, vaccinia can only be communicated to human beings by absorption through a broken surface.

The above four reasons do not prove vaccinia and variola to be two distinct diseases; but they afford strong presumptive evidence, and, I think, sufficient reasons to induce us to revert to the original sources for our vaccine matter.—I am, etc.,

GEORGE WYLD, M.D.

Great Cumberland Place, Hyde Park, March 21st, 1877.

A BOLD ADVENTURER.

The following is from the *Irish Times* of February 23rd, 1877:—"I stake my reputation that a dinner, with *fricassade* to the pot, stomach, an open window day and night, dry toast bread and tea, and repeated spoonful of whiskey, will cure the most malignant attack of small-pox. Washing room floors in a close air, with soiled stale stools, is a great feeder of it. Any one having a dread of it can keep it away by salt friction over the chest and stomach bi-weekly."—CHARLES O'SHAUGHNESSY.—February 23rd, 1877.

MR. JEFFERIES' DEDUCTIONS FROM THE PRACTICE OF MEDICAL MEN TO CHARGE A FEE UNDER THE CIRCUMSTANCES STATED, AND WE APPREHEND THAT THERE MUST HAVE BEEN SOME MISTAKE IN THE MATTER.

GOUT AMONG HOSPITAL PATIENTS IN LONDON AND PARIS.

SIR,—One of the most striking facts in the comparative pathology of London and Paris resides in the paucity of cases of gout seen among hospital patients in the latter city. In a visit to the wards of one of the most learned of the Parisian professors, at the Hôpital Necker, in November last, I was shown by him, as a great curiosity, a case of gout in a man aged about fifty-five. Dr. Potain mentioned to me that, although he had long been in charge of large services of medicine in the Hôpital Dieu and elsewhere, this was only the third case of gout he had seen in Parisian hospital wards. I told him that in London gout was rather a common disease among our working men; and a discussion then arose as to the significance of this curious difference between the hospital population of London and Paris. My thesis was, that the use of strong beer and ale was the main cause why our working men are so frequently gouty. I remembered a saying of my teacher, Dr. Garrod, to the effect that there is no truth in medicine better established than the fact, that the use of fermented liquor is the most powerful of all the predisposing causes of gout; nay, so powerful, that it may be questioned whether gout would ever have been known to mankind had such beverages not been indulged in. Wine, strong ale, and porter, I urged, are very potent agents in producing gout. To this Dr. Potain replied that in Paris, where wine is the beverage of the working men, gout is all but unknown. He therefore was inclined to think that the greater amount of animal food partaken of by our working men was a truer cause of their oftener suffering from this disease than any other cause connected with alcoholic liquors. This is by no means my experience; but I should be glad to know what any of your learned readers think as to this curious fact, in Paris, where wine is plentifully consumed, gout is conspicuous by its absence.—I remain, sir, yours obediently,

C. R. DRYSDALE, M.D.

17, Woburn Place, W.C., February 24th, 1877.

THE DUBLIN CHURCH AND DR. EGAN.

SIR,—Permit me to correct an error into which your Dublin correspondent has been led in his notice of the attendance of Dr. Jacob, proprietor of the *Medical Press and Circular*, at the meeting of the members of this Society. I do not give evidence "exclusively at the Court of Sessions in the city of Dublin"; I am only examined in cases where there has been no doctor in attendance before death, and where the testimony is all given by lay witnesses, for example persons found dead without previous illness, or in violent death, or in cases otherwise, proving immediately fatal. I do not receive a "salary," but am paid by fees at the rate fixed by Act of Parliament—limited, however, to £150 in the twelve months. On the other hand, should my return fall short of the number of attendances necessary to make up that amount, I would receive only the exact sum represented and certified for by the coroner. I may add, that coroners in Ireland are similarly paid by fees limited to a certain fixed annual sum, irrespective of the number of inquests. Your correspondent says "that this mode of payment is considered derogatory." I submit it is as little so as any other medical contract. Poor-law officers, army and navy surgeons, the medical and surgical staff of public institutions, are all paid by contract. This arrangement of payment by limited fees was made for public expediency so far back as 1857. Several gentlemen have held the office during the period since then; among others, Dr. G. H. Porter, ex-President of the Royal College of Surgeons, now Sergeant-Surgeon to the Queen in Ireland, a man whom no one could accuse of holding any position derogatory to the profession of which he is so distinguished a member.

In conclusion, allow me to say that I do not in the least find fault with your correspondent. I believe he but reflected impressions made by erroneous statements, the value of which he had not, perhaps, opportunity to determine.—I am, sir, your very obedient servant,

RICHARD W. EGAN, L.R.C.S. Ireland, L.R.C.P. Ed.

NOTICES OF Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

ANTI-VIVISECTION.

ACCORDING to the *British Daily News* of March 13th, some medical students attended a lecture by a Mr. Binney Douglas, secretary to an antivivisection society, and created some disturbance at the end of the room. We trust that this is an inaccurate report. It is common enough in such cases to describe as medical students whomsoever it is convenient for the purposes of the reporter so to describe. If, however, there be any truth in the matter, or in any case, it may not be inopportune to observe that any disorderly conduct, or indeed any interference on the part of medical students at any such meetings, is very much to be reprehended. Strongly as we may and do differ from the persons who are conducting this mischievous agitation, and strongly as we condemn their inaccurate and violently expressed views, nevertheless their motives and their feelings are to be respected; and if it be necessary to combat their public utterances at all, it should be done in a manner worthy of the cause to be defended; that is to say, with intelligence, care, and by an appeal to the reason of the audience, who are for the most part wholly uninstructed and easily inflamed by the appeals to the feelings by these itinerant lecturers. Any medical man who chooses to master the facts in the evidence of Dr. McKendrick, Professor Turner, Sir William Gull, and Dr. Sharpey, in the blue-book published by the Royal Commission, will find ample materials for refuting these inaccurate statements, and he will also find that the report of the Royal Commissioners themselves is a sufficient answer to the agitation of such persons. If any medical man, therefore, chooses to attend and refute the lecturer from the platform, he will do good service; but any noisy interference by students, however much their feelings may be excited by the unjust and violent charges brought against their profession and those whom they may respect, can only do great harm by giving an incorrect view of the general feelings with which the profession regard this question.

ISOLATION OF INFECTIOUS DISEASE.

SIR,—I beg to forward a copy of the rules and the three last reports of the Delancey Fever Hospital, from which it will be seen that the inhabitants of Cheltenham are showing a laudable activity in isolating such cases of infectious disease as may occur in the town. Through the munificence of the late Miss De Lancey, and of our townsman the Rev. T. H. L. Gabell, supplemented by voluntary contributions, two handsome blocks have been erected for the reception of small-pox and scarlet fever cases respectively. The small-pox block, which contains eight beds, including two rooms for private cases, was opened in the summer of 1874, and has been doing good service ever since, the disease having been imported into the town six times in 1874, once in 1875, and twice in 1876, without in any case spreading beyond the house in which it first broke out. No difficulty has been experienced in inducing patients to remove to the hospital, where the accommodation is everything that can be desired—indeed, one of the cases in last year was that of a young lady, whose friends gladly availed themselves of the opportunity for isolation which the hospital affords. The disinfecting oven and laundry are on a very complete scale, and have been much used by the public during an epidemic of scarlet fever in last year. The scarlet fever or "Gabell block" will, in the course of a week or two, be ready for the reception of patients, and the experiment will be tried of offering means of isolation to all cases of scarlet fever which may occur in the town and its neighbourhood. The central portion of the block now completed contains eight rooms for private cases, three for nurses, and three convalescent wards—two of which, in the absence of the wings (which are to be built at a future time for public cases), will for the present be devoted to this class of patients, and will accommodate about a dozen beds.

The complete plan of the hospital will comprise, besides the portions already mentioned as completed, two additional wings for the scarlet fever block, to accommodate twenty-four beds; a typhoid block with ten beds; and two separation wards for cases of an exceptional nature; and lastly, an administrative block for the accommodation of matron, nurses, cooking, etc.

The buildings, which are of red brick, with all the latest sanitary improvements, stand on six acres of ground, in a fine open situation, about half a mile from the town. Ambulances are provided for the sick, and a special truck for bedding and clothes. The charges are, for public cases, 2s. 6d. *per diem* in small-pox, and 2s. *per diem* in scarlatina, for which everything necessary is provided. In the private wards, the charges are not to exceed half a guinea *per diem*, exclusive of medical attendance.

The management of the hospital is in the hands of twelve trustees, who are thus placed in a somewhat anomalous position with regard to the sanitary authorities of the urban and rural districts: I am glad to say, however, that up to the present time all have worked together harmoniously for the good of the town and its neighbourhood. It remains to be seen whether the poor will avail themselves of the advantages thus placed within their reach. The upper classes will undoubtedly do so, and the results cannot fail to be beneficial to the general health of the town.

The symptomatic death-rate of Cheltenham is even now exceptionally low; but if the Delancey Hospital be properly utilised, it must be lower still, and the reasonable anticipations of those who are promoting the erection of the hospital will be fulfilled. I am, sir, yours, etc.,

Cheltenham, February 14th, 1877.

TREATMENT OF HYDROPHOBIA.

SIR,—Will you permit me to state that I have suggested to the profession the treatment of hydrophobia by rapid salivation induced by the fumes of camolol? I subjected a case of the disease to this line of treatment in India in 1867 with complete success; it was published in the *British Medical Journal* of 1867. I have not a copy of my communication by me to give the details of the case. I regret that I had no other opportunities of testing the efficacy of this remedy, or I should have brought the subject prominently before the public. As, however, under present modes of treatment a patient with hydrophobia is doomed to certain death, any reasonable suggestion, I think, deserves a trial. The fumigation should be conducted as follows. The patient is to be reclined, with his head on a low pillow, and the whole body up to the neck encased in blankets. Under the head, a Langston Parker's lamp (Savigny) is placed. In this a spirit-lamp, holding the required amount of spirit, is protected in a cage, on the top of which is a receptacle for the camolol (twenty or thirty grains), and a saucer for water. The flame beneath boils the water and volatilises the camolol. Moderate salivation, which is all that is required, may be maintained in a quarter of an hour, and may be repeated if the symptoms seem benefited by the treatment.—I am, yours, etc.,

Wanstead, Essex, March 25th, 1877.

G. D. M. REDDIE.



**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

**ON "DEAD FEELINGS," OR LOCAL ANÆSTHESIA.**

SIR,—Will any of the experienced physicians that are your readers explain what is the rationale of the "dead feelings" we meet with occasionally in the course of experience? They often affect the extremity of the ulnar nerve, and then the medical practitioner attributes them to loaded bowels; but, in fact, they sometimes display considerable proportions, and throughout life are more or less persistent. The whole hand and arm "goes dead" with ageish cold and blueness from venous congestion, and so remains for several hours, generally independent of atmospheric conditions. I know nothing like it out of the sphere of anæsthetic leprosy; and, curiously enough, with much frequency one or more of the family will be found to have asthma. Does this throw any light on the pathology of asthma? Does it help to form a neural pathology? What is very certain is, that these dead feelings run in a family: they are an hereditary and constitutional affection. What is this local anæsthesia?—I am, etc.,

G. GASKOIN, Surgeon, etc.

**DESIREE IN LOCO.**

*Preservation of a Favourite Minister.*—A minister was called in to see a man who was very ill. After finishing his visit, as he was leaving the house, he said to the man's wife, "My good woman, do you not go to any church at all?" "Oh yes, sir, we gang to the Barony Kirk." "Then why in the world did you send for me? Why didn't you send for Dr. Macleod?" "Na, na, sir, deed no; we wadna risk him. Do ye no ken it's a dangerous case o' typhus?"

*Consolation from Statistics.*—"Infinitely," answered the man of medicine, taking from his pocket a paper full of figures. "Here, look at the statistics of your case; you will find that one per cent. of those attacked with your malady are cured." "Well?" said the sick man, in a dissatisfied manner. "Well, you are the hundredth person with this disease that I have had under my care, and the first ninety-nine are all dead."

*Professional Zeal.*—In Lord William Lennox's *Celebrities I have Met*, the following anecdote occurs. "While Mrs. Butler was playing Juliet at Philadelphia, and just when she had exclaimed—

'What's here? a cup, clo'd in my true love's hand?

Poison, I say, hath been his timeless end.'

a tall, lean, gaunt, sandy-haired medical student in the stage-box, deeply absorbed in the scene, thrust down his hat on his head with a convulsive effort, crying out in a voice of thunder at the same time, 'Keep him up, Juliet; I'll run and fetch the stomach-pump!'

**MATERNAL IMPRESSIONS.**

SIR,—The following case, I think, will be of interest to some of the profession. I attended Mrs. M. about three years ago in her first confinement, and she was delivered of a boy. When this boy was two years of age, he cut his upper lip severely with a pair of scissors, so that I had to, in fact, operate for hare-lip, leaving the usual cicatrix. Mrs. M. was then pregnant about six months. To my surprise, on delivering her of her second child, it had a cicatrix exactly similar on the upper lip, and on the same side of the face. Having been in a large midwifery practice in Kent, I have had many of these cases of "maternal impressions" under my notice, but none so wonderfully marked as in the above case.

I shall feel obliged to any of my brother practitioners if they can give me their opinion as regards these "impressions"—viz., are they invariably connected with hysteria or cerebro-spinal lesion? I think I may safely say in every case I have found the former. Also, whether it has been noticed in these cases that the "shock" has generally occurred about the same time during pregnancy. I remain, yours obediently,

T. DUDLEY SAUNDERS, L.R.C.P.Ed., etc.

Bath, March 13th, 1876.

**NOCTURNAL CRAMP.**

SIR,—Having suffered severely from nocturnal cramp for years, allow me to give my experience. I believe that it is nearly always caused by acidity of the stomach, and I find that a small dose of Howard's bicarbonate of soda (ten or fifteen grains) dissolved in water invariably gives speedy and certain relief.—Yours truly,

J. E. C., M.D.

March 1877.

**TREATMENT OF SYPHILITIC WARTS.**

SIR,—Your last issue gives Medicus a choice of treatments which may have already disposed of his case. If not, I would suggest one more simple and of good effect in all the cases to which I have applied it. It is in powdering over the surface twice daily with equal parts of burnt alum and tannin. As these growths occur chiefly in situations where mucous or skin surfaces are in contact and moist, this plan suggested itself to me some years since. In the first case in which I applied it, the warts were easily rubbed off in the course of three or four days, and other cases have given equally good results.—I am, sir, yours, etc.,

March 12th, 1877.

JOHN H. GALTON, M.D.

**RECIPT FOR BROWN BREAD.**

WE have received a number of answers to the query, which we somewhat incautiously inserted: the following is one.

'Take four pounds of brown flour, one ounce of German yeast, and mix together with as much warm water (same as white bread) as will take up all the flour without making it too soft (as it becomes soft in rising). Let it rise about an hour and three-quarters, then beat up and put into tins, and put into the oven at once. By brown flour is meant the flour direct from the miller—viz., the wheat ground together, and having (if preferred, and which I think is better) the coarsest bran only taken out; and if then found too brown, mix two pounds of white and two pounds of brown, which makes a very nice brown bread, and which is constantly used in this family. The baker's brown bread is merely bran put into white flour, which was found to be very irritating to the stomach, and which was consequently abandoned.

**DOCTORS' CARRIAGES.**

SIR,—If your correspondent is still inquiring what kind of carriage he should use, I can most strongly recommend him one of Windover's (Long Ace) four-wheeled phaetons of hickory and steel. I have used one for some time now, and, for lightness (mine is under 4 cwt.), durability, and comfort, I do not think they can be excelled; the price is also very reasonable. For country work they are inestimable, and, with a large umbrella fixed between the seats on a revolving joint, one can ride almost free from rain on the roughest day.—Yours faithfully,

March 10th, 1877.

W. B. HOLDERNESS.

**CUTANEOUS ITCHING.**

SIR,—A gentleman, aged 50, one of my patients, has been suffering for the last six months from an intolerable itching of the skin—unattended, however, by any eruption, and not produced by any known cause. On examination, the skin, which is fair and soft, seems to be in a perfectly normal state, little or no perspiration during the day, but at night free diaphoresis takes place, and then the itching, which is general, becomes almost insupportable. His general health is excellent, and he is a man of most abstemious habits. I may add that he is most particular as to cleanliness, etc. Various remedies, including medicated baths, have been tried in vain. Sponging with warm vinegar seemed at one time to give relief, but the irritation soon returned with redoubled force.

Hoping that some of your readers who have met with similar cases will favour me with their experience and suggestions for treatment through your columns, I am, sir, faithfully yours,

YOUNG PRACTITIONER.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Sheffield Daily Telegraph; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Warrington Express; The Croydon Chronicle; The Northampton Herald; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; The Hull Criterion; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The High Peak News; The Metropolitan; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Middlesex Advertiser; The Rock; The St. Andrew's Gazette; The West Cork Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Richmond and Twickenham Times; The Western Morning News; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; etc.

\*\* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. T. Lauder Brunton, London; Dr. Braidwood, Birkenhead; Dr. J. Braxton Hicks, London; Surgeon-Major Porter, Net'ey; Dr. Goldie, Leeds; Dr. J. B. Bradbury, Cambridge; M.B.; Dr. F. P. Atkinson, Kingston-on-Thames; The Secretary of the Dental Hospital of London; Dr. A. S. Taylor, London; The Secretary of the Hunterian Society; Dr. J. W. Moore, Dublin; Mr. Francis Hollinshead, King's Norton; Mr. H. R. Hatherly, Leaton; Dr. Egan, Dublin; Mr. Christopher Heath, London; Mr. H. Lowley, Reading; Dr. Marshall, Nottingham; Mr. Hyde Houghton, Dudley; Dr. Alexander Ogston, Aberdeen; An Associate; Dr. Wight, Aberdeen; Our Paris Correspondent; The Secretary of the Harveian Society; Dr. J. Hnghings Jackson, London; Dr. W. R. Gowers, London; Mr. H. C. Burdett, Greenwich; Dr. W. Fairlie Clarke, Southborough; Historicus; Mr. Wanklyn, London; Vir Tardus; A Member; Mr. T. M. Stone, London; Our Edinburgh Correspondent; Dr. Kelly, Taunton; The Registrar-General of England; Mr. H. Sewill, London; Dr. Bathurst Woodman, London; Dr. J. Milner Fothergill, London; The Registrar-General of Ireland; Mr. N. A. Humphreys, London; The Secretary of Apothecaries' Hall; Mr. E. W. Thurston, Ashford; The Registrar of the Medical Society of London; Dr. Tripe, London; Mr. C. Creighton, Cambridge; Mr. Cuffe, Derby; Dr. Arthur Leared, London; Mr. James Hay, Wolverhampton; Dr. Cotton, London; Mr. Knapton, Cambridge; Dr. Philip S. Fentem, Bakewell; Dr. C. E. H. Rogers, Retford; Our Dublin Correspondent; Dr. Macnamara, Bruff; Mr. W. Bailey, Chichester; Dr. Joseph Rogers, London; Dr. Bathurst Woodman, London; Dr. A. D. Keith, Aboyne; Dr. McCook Weir, Leicester; Mr. E. St. George Baldwin, Edinburgh; Dr. Patterson, O'dham; Dr. Thos. Jones, Manchester; Parish Medical Officer; Mr. J. R. Gregg, Cork; Mr. E. J. Hicks, London; Mr. H. Nelson Edwards, Shrewsbury; etc.

**BOOKS, ETC., RECEIVED.**

Debrett's Peerage, Baronetage, and Titles of Courtesy. Illustrated. London: Dean Sons, and Co. 1877.  
The Scholar's Handbook of Household Management and Cookery. By W. B. Tegetmeier. London: Macmillan and Co. 1877.  
Diseases of the Kidney and Urinary Derangements. By W. Howship Dickinson, M.D. Part II. Albuminuria. London: Longmans, Green, and Co. 1877.  
A System of Medicine. By J. Russell Reynolds, M.D., F.R.S. Vol. iv, containing Diseases of the Heart. London: Macmillan and Co. 1877.  
Tom Allardyce. By Mrs. Flowers. Glasgow Scottish Temperance League. London: Houlston and Sons. 1877.  
Journal of a Residence at Vienna and Berlin in the eventful Winter 1856. By the late Henry Reeve, M.D. Edited by his Son. London: Longmans, Green, and Co. 1877.  
How to Use a Galvanic Battery in Medicine and Surgery. By H. Tibbits. London: J. and A. Churchill. 1877.  
Tables of Materia Medica: a Companion to the Materia Medica Museum. By T. Lauder Brunton, M.D., F.R.C.P., F.R.S. London: Smith, Elder, and Co. 1877.  
Six Months under the Red Cross with the French Army. By George Halstead Boyland, M.D., Ex-Chirurgien de l'Armée Française. Cincinnati: Robert Clarke and Co. 1873.



# THE CROONIAN LECTURES

ON

## THE DIFFERENCE BETWEEN THE SEXES IN REGARD TO THE ASPECT AND TREATMENT OF DISEASE.

*Delivered at the Royal College of Physicians of London.*

By J. BRAXTON HICKS, M.D., F.R.S.,

Physician-Accoucheur and Lecturer on Midwifery and Diseases of Women and Children at Guy's Hospital, etc.

### LECTURE II.

IN my first lecture on Wednesday, I concluded, after discussing the nature of the change called puberty, which was shown to be not so abrupt as generally supposed; was not dependent on uterus or ovaries entirely; but was the outcome of a primordial force acting on the general economy, but towards the end particularly, on the sexual organs and the nervous structures, directly and indirectly in sympathy with them, gradually becoming more intense at the time which we call puberty, till it culminated in the full development of the man and woman. It was noticed that it was much more rapid and strongly marked in woman than in man; that the ovaries regulated the menstrual function, setting up local hyperæmia, as also general vascular and nervous excitement.

Hence we are drawn on in our thoughts to the causation of *anæmia* and *amenorrhœa*. I think I shall find most of you agreeing: 1. That with *anæmia* in the female, we very frequently find *amenorrhœa*; 2. That *anæmia*, however, is not necessarily attended by *amenorrhœa*. 3. We have already granted that, the ovaries being absent, we find *amenorrhœa* without any exception. Hence may we not fairly conclude that, where *amenorrhœa* exists in these *anæmic* cases, we have a negation or sedation of the ovarian stimulus; or, at any rate, a want of response in the nervous system, not sufficient to cause, that is to say, the local hyperæmia? Can we go still further and say that, in all cases of *amenorrhœa*, the ovaries existing, we have such a negation, although not caused by the *anæmic* state?

Is it not a fair conclusion to draw, also, that *anæmia* is one of the causes of *amenorrhœa*; that, the blood-supply being deficient, the maturation of the ovum, if it occur, is not sufficiently vigorous to cause the necessary action or excitement, and, as a rule, not sufficient for the process of ovulation? If this be so, we have an explanation why, generally, in these states we find sterility; howbeit, when conception does take place, as sometimes it does, most probably there is sufficient force to ovulate, but not to menstruate.

*Anæmia* about puberty is common to both sexes, though more so in the female. I should be inclined to call it "idiopathic", had that term not been given to a spontaneous form occurring in later life. But its causation is not very difficult to find. The demand on the system for the perfecting of the sex is great, and sometimes so abrupt that it is difficult for the system to meet it; a diminution of nourishment takes place from the nervous system and blood-producing organs, so that they cannot properly perform their functions. How much more severely does this act on the female than on the male, whose puberty is more gradual.

In cases of the *anæmia* of puberty, the cessation of the menses acts in a salutary way, instead of remaining to increase the exhaustion. Hence the unscientific treatment of those who, under this *anæmic* condition, endeavour by local stimuli to force their presence. Now, poverty of blood or *spanæmia*, of course, occurs from many other causes, all of an exhausting and depressing kind; and it is notorious how much more powerfully they act at the time of puberty than at any other time. I have used the word *anæmia* in a general sense, as the older term; *spanæmia* would indicate best the condition referred to above, because its origin is constitutional, and is more liable to be accompanied by, or, as I have suggested above, to produce *amenorrhœa*. Although severe blood-loss or true *anæmia* may, and not unfrequently does, produce *amenorrhœa* at first, still this symptom more quickly passes off, not being caused by a previous vice in the system. Still, from the effects of traumatic *anæmia* we can learn much; for, if it be very severe, it causes such depression that the symptoms very much correspond with those of spontaneous *anæmia*. Of course, it may be asked, If it be so, is not the absence of blood the sole cause; is not the deficiency of action of the blood-producers the cause of the *amenorrhœa*?

Granted; in part it undoubtedly is so, but subsequent to the depression which produced it.

Is *anæmia* of puberty common to both sexes, or is it entirely a female complaint? I have already stated my belief that it is found in both sexes, but much more frequently in the female. I have also endeavoured to show one reason for this; there are many others of an extraneous kind. Boys are brought up much more in open air and invigorating sports; generally girls are kept more in the house, have less free healthful exercise, and, as regards learning, are kept more continually at it. Their whole treatment is more enervating; and, I suppose, we shall most of us admit that the essence of this form of *anæmia* arises from a depressed vital force, or, taking all things into consideration, deficient action of the ganglionic centres.

But this is not peculiar to women. Perhaps the difference of opinion in this matter arises from the different discrimination of the causation. Sir W. Jenner, in his address before the Clinical Society, pointed out how often we were apt to look upon the disease which followed as the cause of the preceding cachexia, whereas it was the cachectic condition which permitted the occurrence of disease. And thus, a lad overgrown, pale, and *anæmic*, languid, dull, and fainting on slight overwork, goes on without medical assistance, gradually shows signs of phthisis; and we are apt to consider the phthisis the cause of the cachectic state, whereas it resulted from it. Nothing can show this better than the recovery of these chest-cases taken in time; we hear soon of the subsidence of the unhealthy appearance, and the general improvement of the local symptoms. Supposing this occurred in a girl in whom the menses had appeared, the attention of her friends would be called to the accompanying *amenorrhœa*, and advice taken about it.

In adult life, it is much more rare to see *anæmia* in either sex. It is uncommon in women, especially the married, apart from blood-loss. I have generally found those of them who have spontaneous *anæmia* to have had *anæmia* at puberty; and it is almost always easy to trace some distinctly depressing influence in these cases. In those extreme cases which have been called "idiopathic" or "pernicious" *anæmia*, both sexes share the disease; but the causation of these is probably the same as is found in the *anæmia* of puberty. Extreme blood-loss, although for the time recovered from, produces sometimes death, in the same manner as does the idiopathic form.

And thus we naturally are brought to the consideration of *chlorosis*. What is it? Is it a separate disease? Is it an *anæmic* person with a green or sallow complexion, the result of *cholæmia*; or is it quite a separate disease, with some other colouring matter in the blood? Authors so much differ, that it would be a bold thing on my part to venture to decide. Perhaps we would arrive nearer at its elucidation, if we were to argue thus. The chlorotic woman is *anæmic*; she is almost always *amenorrhœal* (although Trousseau says he has seen cases with *menorrhagia*—to this I shall again refer). These conditions are the effects of depression of the action of the ganglionic system. And thus, if this condition last long, it is not to be wondered at if the various vital organs should fail in their duty, and, like the ovary, be unable to accomplish their task. And thus, in the general system are retained materials that should have been evolved. For instance, the liver secretes little bile; the bowels are inactive, the accumulations causing annoyances and irritations; and thus are set up, in addition, a number of reflex symptoms and neuroses, which the weakened state of the patient renders her ill able to bear. Would it not be a wonder that, weakened and depressed in body, she should possess an active brain; or, if active under impulse, she would be able to sustain its exertion without exhaustion? And is it to be considered surprising that, these states existing, the will would possess its natural regulating control; but that, more or less released from its restraint, the emotional system would preponderate in force, ready as it always is to do in woman upon the least opportunity? Add to this yet one or more of the thousand stimuli which intensify the emotions, and let there be an hereditary fault in this direction, and we can perceive how readily an opportunity is given for the development of the hysterical paroxysm, and why these states should be often associated. With regard to the statement of Trousseau, that he had seen chlorotic cases with *menorrhagia*, it is quite in accordance with what I have before stated of *anæmia* with *amenorrhœa*, namely, that blood-loss produces the same secondary results as a defect in the manufacture of blood; and thus a condition of similar kind occurs, with this exception, that the vice in the system is not original, but induced. I have myself, within a few weeks, seen two excellent examples of this kind.

But does *chlorosis* exist in the male? Theoretically, upon consideration of the above argument, we see no objection to the supposition; though, practically, we seldom recognise its presence. Is this because we do not look for it? As the symptoms would be necessarily slighter in the male, they may be readily passed over. Still, I seem to remem-



her many cases that have presented themselves, bearing a great similarity to this state, which, I am inclined to think, is hardly a distinct disease, but a condition superadded to anæmia. It must be borne in mind that the blood of the female is not so robust as that of the male, having less red corpuscles. This renders her somewhat more susceptible to anæmia and chloranæmia.

One cannot pass by this subject without alluding to Virchow's researches on chlorosis, in which he has apparently shown the frequent association of this disease with congenital contraction of the aorta. It is difficult to say how far one is the cause of the other. It is not difficult to understand how long depression, low arterial tension, and feeble heart would allow the aorta to remain somewhat below the normal size.

A well marked contrast between the male and female is known to all, in regard to a disease which stands in close relationship with the subjects just considered, namely, with anæmia and amenorrhœa: I mean the simple ulcer of the stomach. This complaint, although it occurs at all ages, yet is more frequent in the female than in the male; between twice and three times altogether; but at certain epochs much more. Thus Willich gives, out of 108 fatal and open ulcers, from the ages of 10 to 20, two in the male to thirteen in the female; from 20 to 30, nine males to twenty-one females; from 30 to 40, they are about equal, while from 40 to 50 the females exceed, in proportion of eight males to fifteen females; and from 50 to 60, there are two males to eight females—making it more than three times as frequent in the female up to the age of 30.

On inquiry into the influences which favour this dangerous condition, we find, amongst many, suppression of the menses, anæmia, and chlorosis to be very frequent. But certainly anæmia is not the only cause. For instance, after burns on the skin, it is not very unfrequently seen. I shall not attempt to follow the different views which have been expressed as to the pathogenesis of this disease; but I would venture to suggest that at least a help in the solution will be found in a careful consideration of the several differences in health and disease between the two sexes, and then comparing this with the variable states of ill health associated with this complaint.

We have already seen that about puberty, and for some period afterwards, there is a great demand on the vital powers, the effects of which are especially noticeable in the anæmic and chlorotic; we also know, but to this I have not yet alluded, that the walls of the blood-vessels are more fragile, and rupture more easily. We also know that the woman is more liable to local variations of vascular engorgement, dependent on her more mobile ganglionic and vaso-motor system. We all know that, in depressed nervous states, the resistance of the tissues to external influences is not so great as in perfect health; and it is possible that the lessening of this conservative force may be sufficient alone to permit the gastric juice to act on the mucous membrane. But, however this may be with other conditions, such as extravasation, it may be that the ulcer may be formed. Much, no doubt, has yet to be made out; but it is not difficult to suppose that the natural differences in nerve-force and firmness of tissue existing between man and woman render the latter more obnoxious to this trouble.

I hope you will pardon me, Mr. President and gentlemen, for considering it necessary to make some remarks upon that many-faced and apparently chaotic disease *Hysteria*. I would spare you if I could; but in such a subject as the differences of the sexes, it is impossible to do so. I, therefore, beg your tolerance while I get through my task.

At the outset, I must take exception to the term; for, if both sexes are liable to hysteria, how can it be applicable to the male? By this remark, you will perceive that I consider that what has been called "hysteria" in the female is to be found in the other sex. If so, then we must at once admit that the existence of the uterine organs is not an essential to the complaint. I know that with this most of you will agree. But what is hysteria? A refuge for the destitute—I mean destitute doctors. Is it not, in actual practice, a convenient term for any peculiar and apparently causeless symptom? Is it not a term used when, after many fruitless trials, we find ourselves baulked by the inherent difficulty of the research, or, possibly, when we are languid and indolent?

Otherwise, how are we to account for such terms as "hysterical peritonitis", "hysterical convulsions" of the pregnant, "hysterical pains", "hysterical vomiting", and a hundred other such phrases? No doubt it is convenient to have a single term to include a class of symptoms; but it gives rise to endless difficulties when this term is not actually correct, or very ill-defined.

But, what is it that we are talking about? Are those cases of "hysteria", where we find, about the period of puberty and a little afterwards, particularly in girls, actions approaching insanity, false accusations, tricks to deceive and damage, swallowing pins, raising blisters deceit-

fully, and a number of other similar freaks? Are not these forms of mental perversion mild forms of insanity, associated of course often with emotional excitability and deficiency of control; and then mis-called "hysteria"?

Are those forms of pseudo-paralysis to be rightly called "hysterical paralysis", which, in a considerable number, are doubtless associated with mental peculiarity or low conditions of the mental powers, and an oversensitive emotional nature? Is it not rather a paralysis of the will to move, in girls and women, whose force of will never was great, but, when something has occurred to make it painful to walk, or languor has been indulged, and the will never fairly exerted, until after a time the power to will fails? I have seen such cases delicately tutored by my friend and colleague and your Censor, Dr. Wilks, until gradually the power has returned. I have seen him taking their arm, and, with true maternal care, teaching them to walk as they were once taught in infancy. Many of these patients wish to attract sympathy, and for this reason do not or will not will, and gradually the will is lost.

The whole subject of true functional paralysis is at present so little understood, that we shall be wise if we merely note the associations with which it is blended. The condition would not exist without some general vital depression preceding; a state also sure sooner or later to permit the preponderance of the emotional system, hyperæsthesia, etc.

As an instance of functional paralysis, I may quote a case of a young married woman of the least hysterical character possible. She had had for a month or so complete paraplegia. At the time of my visit, this still existed with most complete anaesthesia; she had no power over the sphincter ani, and the urine dribbled away. I could run pins into her leg without her being aware. Her history was this. She had suckled her first child for a year, had fallen pregnant during the nursing, and was already three months advanced; consequently she was very anæmic and weak. In three days, she was quite well.

Then, are we to include in "hysteria" patients suffering from pains in various parts, and of which much complaint, and perhaps exaggeration, is made? Why should we denominate these as "hysterical"? and, because no lesion can be found to explain the pain and it disappears suddenly, why are we to call it "fanciful" and "hysterical"? If, by this term we mean to express disturbance of the nervous structures, then the word is a misnomer, because it occurs in the whole race under conditions which, although they may develop the emotional paroxysms, by no means necessarily do so, and are often not dependent on an uterus. Till we have learnt to discard the term "hysteria", as applied to the various reflex pains and to simple hyperæsthesia, we shall fail to seek for and find the cause of the disturbance whereof the patient complains. For I desire emphatically to lay it down as a cardinal rule, that, when pain is complained of, there is a definite cause for it, centric, local, or reflex. The pain may have an exaggerated value in the patient's mind; and, if it persist long, it may become so objective that the patient may observe it even to the exclusion of other pains or influences; yet, it is our duty as medical practitioners to seek that cause.

If a patient suffering from anæmia or chlorosis have facial neuralgia, it is not called hysterical, because it is a well-recognised and frequent malady; and even were she emotionally sensitive, we should not account it hysterical. If this patient at the same time have a pain in some part of the body not usually complained of, and there be a difficulty in finding a definite lesion, it is put down then as an "hysterical" one; and generally the patient would be called "hysterical". Let us cast off these cloaks of ignorance and indolence. It behoves us to find out the cause; and, as sometimes the cause of the reflex pain is in a locality different from ordinary, it will require much research to detect it. Still, we ought to bear in mind the well known rule in physics—"no effect without a cause".

There are doubtless some difficulties attending these examinations; because, when a pain taking its origin in a slight cause has existed a long time, besides the prominence it attains in the mind of the patient, it causes also an extension of sensitiveness to the general nervous system, and thus in its turn gives rise to various neuralgias. Besides this, also, there is a change set up in the centres themselves, which remain sensitive after the cure of the original cause; and, even if this sensitiveness be cured, it is relied upon the slightest cause much more quickly than it was at first.

Nothing shows this better than the effect of irritation of any one of the pelvic organs in a woman. If either the bladder, rectum, or uterus be the subject of abrasions or ulcerations, the back over the sacrum is more or less complained of; and, if the hand touch the surface, it is more sensitive at a certain part than others, showing that there is some change in the state of the nerves of the skin. But the other organs complain of pain and tenesmus, so that it is often difficult in a long-standing case to discover the starting-point; and then, after the erring part has been put into a sound state, the pain still remains, though it



gradually subsides under anodyne and tonic treatment. Thus, many cases are overtreated, although the original state required treatment, this being kept up beyond the real cure, because the patient was still feeling pain.

Now, we will suppose a patient of naturally sensitive emotional temperament to have an affection of this kind for a year or two. We well know that, especially if the uterus be involved primarily, the stomach will sympathise by reflex irritation of the sympathetic nerves; and dyspepsia in its varieties will arrive, and even vomiting. And thus we must conclude that the nerves of the stomach are, in their way, as tender and irritated as those of the skin over the sacrum. An exaggerated instance of this is seen often in pregnancy; and then, the greater portions of the ganglionic system being already in a state of irritation, it is not difficult to understand that other organs in their turn become troubled, and headache, hypochondriasis, palpitations, etc., follow in their wake. The whole body in consequence suffers; for, the stomach and digestive organs failing duty, there must ensue debility; and thus the emotions assert superiority, and paroxysms of hysteria are not remote.

The distress of such a condition is often increased, in cases of uterine abrasions and hypertrophy, by the hæmorrhages frequently attending them; and thus anæmia intensifies the liability to neurosis and its sequents.

Of course, I do not deny that the state of the nervous centres themselves, both cerebro-spinal and sympathetic, may give rise to the same phenomena as when derived from eccentric irritation. Mental depression, impoverishment, anxiety, etc., or actual disease of the centres, may doubtless set up such troubles as we have been considering; but I think that, in the large majority of cases, there is a reflex cause to be found after careful observation.

In our research after it, we must bear in mind that it may seem to us, who are in health, slight; and that pain, depression, exhaustion, etc., will magnify its power of annoyance. The study of these matters has been carried on by the male sex, most of them in good health, who personally can but slightly appreciate the susceptibility of the female economy. These phenomena have been viewed rather from the masculine than the feminine aspect; and some have gone so far as to deny these well-known facts. Yet one might appeal to those who have suffered severe and chronic ailments, whether the train of symptoms just narrated have not a reality for all.

Supposing, then, a train of symptoms similar to those instanced from uterine or rectal irritation to arise from abrasion or irritation of the stomach, ultimately reducing the patient to a highly sensitive state with dysæsthesia of many kinds, discomforts, and exaggerated complaints, so that finally the whole balance of the reason and emotions becomes disturbed; can we in fairness call the *whole* of such a state "hysteria"? But it surely cannot be called a disease peculiar to woman. With less emotional disturbance and more rational force the man suffers, and then we call it dyspepsia in its milder forms; but, supposing the man had been previously depressed by overwork, anxieties, watchings—added to, perhaps, by tea-drinking to excess—then, if he were overanxious about himself, and overvalued the importance of his trouble, he would be called an hypochondriac.

But there is a reality in the pain; there is a reality in the causation; a man in this state will, on excitement, soon show the susceptibilities of his emotional system.

Yet one more instance. It is a very common thing for women to complain of pain in the groins; and some put it down to ovarian irritation or ovarialgia. If it continue a long time, the patient is worried about it, and in her mind it attains a prominence it does not deserve as regards danger. But it is much increased at monthly epochs, when it may be very severe for a few hours or days. After a time, the general system is disturbed, there are neurotic pains and aches; more emotional disturbance, and the stomach begins to complain, and even vomiting to occur. If this go on for one or two years, gradually increasing in severity, then we find globus hystericus, hysterical paroxysms, and an instability of the balance between the reason and emotions; and, if the patient be originally of firm will, she may preserve a moderate appearance of quiet, but otherwise there will be the usual phenomena of the hysterical state.

But is this only irritation of the ovary? In the vast majority, there is some definite trouble. Look at the function of the ovary; how many Graafian follicles are maturing in various stages; see how dense a tissue each has to penetrate; consider the congestion, beginning some days before the bursting, and then the actual extrusion of the ovum with a drop of blood, or sometimes more, into the peritoneum, even if taken up well by the Fallopian tube; supposing the tunica albuginea to be unusually dense, or the Fallopian tube prevented by adhesions from grasping the ovum, then the latter falls into the peritoneal

cavity. And does it require much imagination to conceive that pain, excitement, and reflex phenomena should be present to develop by reiteration the hysterical phenomena?

But ought we not to call this in all its stages hysteria? In some cases, these latter symptoms would never be developed; and thus we can only say that hysteria may arise out of this as out of other irritations. Again, suppose that previously the whole nervous and general system were depressed by the many troubles of life, then we should find that the case would proceed with greater rapidity.

May I not say, with your acquiescence, that any source of irritation in any organ or part of the body existing and continuing, other parts in nervous relationship with it are influenced, till a condition of hyperæsthesia, dysæsthesia, and overaction ensues, tending in various ways to reduce the patient; so that, sooner or later, there is a greater prominence given to the emotional system, which may or may not be subject to the control of the will?

[To be continued.]

## THE GOULSTONIAN LECTURES

ON

### PHARMACOLOGY AND ITS RELATION TO THERAPEUTICS

*Delivered at the Royal College of Physicians, London.*

By T. LAUDER BRUNTON, M.D., D.Sc., F.R.S.,

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#### LECTURE III.

IN my last lecture, I described some examples of the method by which medicine is at present advancing, and to-day I purpose to enumerate some of the gains already achieved by the employment of this method. These are fourfold in their character. We have new remedies. We are taught how to use our old remedies. We learn what to do. We learn what to avoid. We discover that the action of *casca* on the heart and vessels indicates it as an useful remedy in defective circulation. At the same time, we are cautioned that the drug may disturb the digestion and cause an unpleasant surprise if carelessly given.

If *casca* is to be beneficial in one form of heart-disease, why not in another? If it is to do good in mitral, why not in aortic, incompetence?

To answer these questions, let us consider the pathology of the disease. During the normal condition of the cardiac diastole, the left ventricle usually receives only the blood which pours into it from the auricle. When the aortic valves are incompetent, the ventricle receives in addition the blood which flows back from the aorta. It thus becomes filled to a much greater extent than usual. The quantity of blood, therefore, which is propelled by it into the arterial system by each systole is very large, so that the arteries become tense. During the diastole, the blood which ought to be retained in the aorta by the sigmoid valves is allowed to flow backwards into the ventricle; so that the arterial system may be compared to a vessel open at both ends—viz., at the capillaries and at the heart—instead of at one end only, as in health. It thus becomes much emptier during the heart's pause than it should be. The condition, indeed, is comparable to that of a man from whose artery a jet is allowed to flow between every pulsation, only that the blood flows back into the heart instead of out of the body. The differences between the tension of the arteries in their full and empty states are thus very much greater than in the normal condition; and we get the full and bounding pulse first recognised by Corrigan as characteristic of the valvular lesion we are now considering. We all know how difficult it is to break a cord by steady strain, and how easy by a sudden jerk. The arteries in aortic regurgitation are subjected to a greater strain than usual by the great variations in tension which occur. Supposing, then, that we were to increase the force of the heart by such drugs as digitalis and *casca*, we would increase the strain upon the arteries. But, besides the increase in the force of the heart, these remedies would make it pulsate more slowly, and more time would thus be allowed for the blood to flow into it both from the auricles and from the aorta. The ventricle would thus become fuller than usual; a greater volume of blood would be poured into the arteries at each beat; and the tension would be increased by the size of the wave, as well as by the rapidity of its pro-



pulsion. But the increased length of the diastole would also allow the arterial system to become emptier both from the onward current through the capillaries and the backward flow into the heart. The variations in tension would thus be rendered still greater. At each pulsation of the heart, the tension would become exceedingly great, but at each pause exceedingly low—so low, indeed, that the current through the capillary system might cease entirely, especially in those parts of the body, such as the brain, where it is counteracted to the greatest extent by the force of gravity. Syncope would, therefore, be likely to ensue, and might pass into death if the cardiac diastole were much prolonged. We see, therefore, that the use of *casca* in such circumstances would be highly injurious. But if the ventricle, subjected to constant strain by the blood flowing into it under pressure from the aorta even during its period of rest, should begin at last to yield and dilate, so that the bicuspid valves become incompetent to close the enlarged mitral orifice, the regurgitating blood will obstruct the circulation through the pulmonary vessels, the strain will be transmitted back to the right ventricle, and we shall have all those symptoms of obstructed respiration, oedema, etc., which we have already considered. The danger now is, not of death from syncope, but death from suffocation. The condition now approximates to that which we have already considered under the head of mitral disease, when *casca* or digitalis proves most beneficial.

2. The recognition of digitalis as a cardiac stimulant is one of the great advantages which we have derived from experiment; for, although clinical experience seemed to show its utility in cases of cardiac debility, yet, until its power to strengthen the cardiac pulsations was actually shown by experiment, many practitioners were afraid to employ it even in those cases in which it would have been most serviceable.

But it is not only in the treatment of organic diseases of the heart that we have gained much from scientific pathology and pharmacology. \* One of the greatest obstacles to the successful employment of any general empiric rule, such as *contraria contrariis curantur*, or *similia similibus curantur*, is, that symptoms do not always arise from disease of the organ apparently most closely related to the disordered function. Thus we have seen that, although the laboured respiration may be the most urgent symptom in mitral disease, the heart, and not the lungs, is at fault. In the same way, we sometimes may have the heart palpitating and the pulse irregular or intermittent, when the disorder is really in the stomach. But physical diagnosis enables us to ascertain the absence of organic lesion, and experimental pathology has shown us the mechanism by which gastric disturbance produces cardiac irregularity. The irritation from the stomach is transmitted up the afferent nerves to the medulla oblongata, and down the vagus to the heart, interfering with its pulsations. It is evident, then, that, instead of meddling with the heart, the proper treatment is to remove the irritation of the stomach; but, if we cannot immediately do this, we may prevent its effect upon the heart in two ways. As the action is reflex, we may lessen or destroy it by diminishing the activity of the centre through which it occurs. Since it is produced through the vagi, we may stop it by destroying their power. So far as I know, no experiments have been made on the influence of drugs over this particular form of reflex action; and we must, therefore, use one which we know to lessen reflex action generally, such as bromide of potassium, opium, or chloral, without being able at once to select the best. But we do know that, if the long intermissions should threaten danger, we can avert it by a free use of atropia; for this alkaloid completely paralyses the ends of the vagus in the heart, and no amount of stimulation to the nerve, either direct or reflex, can then stop the pulse.

Nor is this the only action of this drug. It has another of considerable importance, for it paralyses the sensory nerves of the heart. Increased pressure of blood in the arteries has a double action on the circulation. It stimulates the heart to quicker and stronger pulsation; but it also stimulates the medulla, and thus, through the vagus, tends to retard and weaken the heart's action. In health, the vagus has the upper hand and restrains the heart's action whenever the blood-pressure rises; but, should the heart become irritable from any cause such as strain, the conditions may be reversed, and the heart, breaking loose from its usual bonds, responds to the stimulus by palpitation. During violent muscular exertion, the blood-pressure rises enormously; and it is in persons who are subjected to such strain by their daily avocations that the so-called irritable heart is found. In animals with the vagi divided, rise of pressure excites the heart, because the usual restraining influence is destroyed; but in such animals the blood-pressure may be raised to three times its usual amount without any effect on the pulse, if a dose of atropia or belladonna have been given somewhat larger than suffices to dilate the pupil (Schiff, *La Nazione*, 1872, No. 235). Belladonna is, therefore, theoretically indicated in irritable heart; and I have been informed that at Netley Hospital it has practically been

found very efficacious. I have myself prescribed it with great advantage in such cases; but, while successful when given shortly after the first appearance of the symptoms, it failed to benefit at a more advanced stage of the disease.

Besides the mechanism which we have already considered in the vagus, there seems to be another nervous apparatus for regulating the blood-pressure. This acts, not upon the heart, which the blood is forced into the arteries, but upon the arterioles or capillaries, through which it flows out of the arteries into the veins. The veins form a great reservoir, large enough, when dilated completely, to hold all the blood in the body, as they indeed do after death. From the heart sensory fibres proceed to the vaso-motor centre, and when they are irritated they cause the arterioles to dilate, so that the blood flows freely into the veins, and the pressure sinks in the arteries. Increased pressure in the heart is probably the normal stimulus to these fibres. As regularity of motion in a steam-engine is obtained by governing balls, so regularity of the blood-stream appears to be obtained by the nerves which act upon the heart and vessels. When the regulating mechanism is disturbed, either in the steam-engine or circulation, danger is the result. This is the case in angina pectoris. Some years ago, I was placed in exceptionally favourable circumstances for studying this disease. I was able to watch a patient at every hour of the day and night, and to observe every phase of the attack. By the aid of Marey's sphygmograph, I discovered that, during the paroxysm, the blood-pressure rose and the pulse became quick. I might have imagined that the rise in pressure was due to the quickness of the heart's pulsations; but the experiments of Marey and Chauveau enabled me to say, from the form of the tracing, what I could not have discovered by the finger, that the arterioles were excessively contracted.\* As the pressure rose, severe pain came on in the heart, and when the pressure fell the pain disappeared. It was, therefore, natural to look upon the pressure as the cause of the pain, and my opinion was confirmed by the effects of bleeding; for this lowers the pressure, and each bleeding prevented an attack. The pathology of the disease thus seemed clear, and the next question was how to treat it. The remedy wanted was one which would dilate the vessels, and this the researches of Richardson and Gamgee supplied. Nitrite of amyl they had shown to possess the very power which I desired, and thus their experiments on the pharmacology of the drug and my observations on the pathology of the disease, united, led to successful therapeutics. I administered the remedy, and the pain disappeared. In the hands of others it has usually produced similar results; but sometimes it has failed. The failure has been used as an argument to prove that angina does not always depend on excessive blood-pressure. This may be the case, but the proof is insufficient; for in some patients the nitrite ceases to act after it has been kept a few days, while the newly made drug always affords relief. Had such a case been treated with old nitrite only, it would have been recorded as one of failure. Whether the loss of activity is due to conversion of the nitrite into nitrate or to decomposition or evaporation of some nitrous compound present in the newly formed nitrite, but still more active and unstable than it, must be determined by future research.

While angina seems to depend on spasmodic contraction of the vessels generally, local spasm may cause pain or disturbance of function. Du Bois Reymond's observations of the contracted condition of the arteries in migraine led me to use the nitrite in headache, and sometimes with success. On the hypothesis that epilepsy depends on spasm of the cerebral vessels, I administered it during the fits of epilepsy, but without result. By giving it before the fit comes on, Dr. Crichton Browne has been more fortunate, and has succeeded in averting the paroxysm. But in this disease the remedy *par excellence* is bromide of potassium, for the extended use of which we are much indebted to the late Dr. Begbie. How it acts in epilepsy we do not as yet know; but experiment has shown that it lessens reflex action generally, and we thus have a general rule to guide us in its use. It is not an astringent in the usual sense of the term, yet it may sometimes check diarrhoea. In a patient where the looseness of the bowels seemed to depend upon reflex irritation from the uterus, the general rule I have just mentioned led Dr. Ferrier to use it, and his success was complete.

Various researches have shown that the substance of the nerve-centres may be affected by drugs independently of the circulation, but the experiments of Durham have shown the connection between sleep and anæmia of the brain. The difficulty which the congested condition of this organ, after poisoning by opium, was supposed to present to Durham's theory, has been explained by the experiments of Hammond. He finds that in the sleep produced by a small dose of opium, the brain is anæmic, but, as the sleep passes into coma after a large dose, the anæmia gives place to venous congestion, slow circulation to stagnation.

\* See woodcuts of tracings in *JOURNAL* of January 13, 1872, page 45.



tion. Knowing, then, the connection between anæmia and sleep, active circulation and mental activity, we are able to choose our remedies accordingly. If the patient constantly fall asleep when standing or sitting, and cannot sleep when lying down, we know that the vessels are probably flaccid and allow the blood to gravitate to the lowest point, away from the head in the upright and to it in the recumbent posture. In such cases, we know that digitalis will probably be useful by giving contractile power to the vessels and chloral injurious by weakening them. But when the tight arteries and powerful heart seem to be driving the blood rapidly through the brain, then we have recourse to chloral, for its weakening action on the heart and vessels will now aid its action on the nervous tissue.

Nor is it only on the nerve-centres that we are able to act. As Bernard showed, we can influence peripheral nerves also by our drugs. It is impossible to look at the jerking limbs and irregular movements of chorea, without wishing that we could load every muscle with lead, and still its useless and disturbing movements. Sleep will do this and opium will produce sleep, but we cannot keep the patient constantly in a state of insensibility; we wish to leave their activity to the mental powers, and only to quiet the muscles. This we might do by curare, but we have another remedy, which seems still more suitable; for conia acts on the motor-nerves in the same way as curare, and methyl conia lessens the functions of the spinal cord. Ordinary hemlock contains both, and thus the succus conii, by deadening the motor-nerves and enfeebling the cord, should render movement more difficult and wearisome, the very result which we desire to produce. We should thus be able to ameliorate the symptoms, even though we may not touch the real source of the disease.

Let us now pass on to the respiration. The object of respiration is to give oxygen to the tissues, but these are far removed from the outer air and, therefore, must have the oxygen brought to them. This is done by the blood, and internal respiration consists in the interchange of gases between it and the tissues. If this go on quickly, a necessity arises for increased contact of the blood with the outer air, so that it may give off its carbonic acid and take in fresh oxygen. The necessary correspondence between the internal respiration in the tissues and external respiration in the lungs, is effected by the respiratory centre in the medulla oblongata. The activity of this centre increases or diminishes with the venosity of the blood which circulates through it, although it may be reflexly affected by various nerves. When the blood is exceedingly venous, the respiratory movements become great or convulsive; when it is excessively arterialed, they cease altogether. If the blood be deficient in hæmoglobin, as in anæmia, it cannot carry a sufficient quantity of oxygen to the medulla, and thus such patients pant and blow after slight exertion. The administration of iron has been shown to render the blood-corpuscles more numerous, to increase the hæmoglobin they contain, and augment the oxygen-carrying power of the blood. Iron is consequently the remedy indicated in anæmic dyspnoea, and clinical experience shows how beneficial is the result of its administration. We have already seen how cardiac disease may prevent the blood from sufficiently getting to the air, but obstructions to the respiratory passages may also prevent air from getting to the blood. The former condition required remedies which act upon the heart, the latter those which will affect the lungs. In bronchitis the air-tubes are clogged with mucus, which interferes with the passage of air through them, and by its constant irritation causes troublesome cough. Cough being a reflex act, we can diminish it, like other acts of the same sort, by drugs, which, like opium, will act on the reflex centres. But in old and debilitated persons, this centre, though irritable, lacks power, and the expulsive expiratory efforts require increase rather than diminution. Clinical experience has shown the value of carbonate of ammonia in such cases; but it is pharmacological experiment which informs us that ammonia stimulates the respiratory centre, and thus gives us a reason for our treatment. But atropia combines two qualities likely to make it useful in the cough of debility. It stimulates the respiratory centre, but at the same time it lessens the irritability of the sensory nerves of the lung, and will thus, while increasing respiratory efforts, diminish the sensibility of the lung to irritation. Hyoscyamus has an action almost the same as that of atropia, and often proves a valuable remedy in chronic bronchitis. But here the question of dose comes in, and although experiment assures us that certain drugs have certain actions, we may not get the result we desire when we administer them in disease, because we give too small doses, either from ignorance, timidity, or from the action of the drug upon other organs of the body preventing its being pushed to a sufficient extent. Regarding the action of drugs upon the bronchial secretion, we have no experimental knowledge. We know that something to eat and a drink of warm fluid before rising generally lessen the troublesome morning cough of chronic bronchitis better than any expectorant; but still experience shows that

tartar emetic, ipecacuanha, and iodide of potassium will also diminish the tenacity of mucus, and aid expectoration, while balsams will lessen the profuse secretion in bronchorrhœa. But how these drugs act on the bronchial glands we do not know, and it is a comfort to turn from our unsatisfactory acquaintance with the action of expectorants to the action of remedies on digestion. For here we are acquainted with the chemical processes which go on and the agents which originate them. We have a good knowledge of the mechanism of secretion in the various glands of the alimentary canal, and in the case of the stomach we have the great satisfaction of being able to see what our drugs are doing inside the body. It is cheering, too, for the physician who has been giving cough-mixtures without success until he has nearly lost all confidence in medicine, to have his faith re-established by a sight of the wonderful relief given by rhubarb and soda in flatulent dyspepsia.

Hope rises in our breasts when we compare the wild fancies of our predecessors with our own certain knowledge, and we look forward to a bright future for medicine. Mayow, for example, thought that digestion was performed by the vital spirits which came down from the head to the stomach, did their work, and then returned to the head again. Thus he explained the drowsiness which comes on after eating, and the digestive disturbance which deep thought and anxiety occasion. For the vital spirits could not be in two places at once: so when they were digesting the food in the stomach they left the head, and so caused drowsiness; when they were busily engaged with cogitations or passions in the head, they neglected their work in the stomach, and the food remained undigested. It would be impossible to bottle up such intangible beings as Mayow's vital spirits and make them do their work in a water-bath or oven, but we can do this with ptyalin or pepsin; it would be difficult to localise the paths by which the spirits ran backwards and forwards, but we know the vessels by which the blood flows to the stomach and brain, and we are beginning to learn the exact nerves which cause it to flow to the one rather than the other.

[To be continued.]

## ABSTRACT OF A CLINICAL LECTURE

ON

### THE DISTAL LIGATURE IN AORTIC ANEURISM.

*Delivered in University College Hospital.*

By CHRISTOPHER HEATH, F.R.C.S.,

Holme Professor of Clinical Surgery, etc.

THE history of the application of the distal ligature for the treatment of aortic aneurism is briefly this. There were certain cases on record of a ligature having been put on the left carotid for what was assumed to be carotid aneurism low down; and in some of them, notably those recorded by Tilanus and Rigen of Amsterdam, the patients recovered from the operation, living many months afterwards, and then died from some other disease, the aneurism being cured. In both these cases, it was proved after death that the diagnosis had been incorrect, and that the aneurisms had been aortic, and had been cured by being filled with clot. In 1829, a surgeon named Montgomery tied the left carotid for an aneurism which proved to be aortic, and it was nearly cured when the patient died some months afterwards. Mr. Samuel Lane tied the left carotid for an aneurism, partly carotid and partly aortic, in 1852; and Pirogoff appears to have had two similar cases.

These facts were known, but no special conclusions were drawn from them for the cure of aortic aneurism by surgical interference of this kind till Dr. Cockle wrote a paper in the *Lancet*, in 1869, where he recommended the application of a ligature to the left carotid as a means of treating aneurism of the arch of the aorta.

I have for some years taken considerable interest in the treatment of aneurisms of the root of the neck. I had a patient at the Westminster Hospital, in 1865, on whom I performed the operation of simultaneous ligature of the carotid and subclavian arteries for a supposed innominate aneurism; and, although the patient was under very unfavourable circumstances, she lived four years after the operation, and at her death the disease proved to be an aortic aneurism.

In 1872, with Dr. Cockle's concurrence, I tied the left carotid in a case of aortic aneurism, and the patient derived very great benefit, the aneurism subsiding immediately, and all urgent symptoms passing off until he renewed hard manual labour, when the sac again enlarged and killed him in September 1876. The preparation, which is in the College of Surgeons, shows a large sac arising from the first or ascending portion of the arch of the aorta. In 1874, I again placed a ligature on the left carotid in a case of aortic aneurism which had baffled treatment, but the patient died a few hours after from want of blood supply



to the brain. In 1875, Mr. Holmes successfully tied the left carotid in a young woman believed to have an aortic aneurism, and she is still alive and well. During this session, a man was under my care on whom I wished to operate, but he declined, and six weeks afterwards returned in great distress and died in a few hours. The specimen shows that this would have been a very favourable case for ligature of the left carotid.

The last case was in the woman on whom I had proposed to operate on Wednesday last. This woman had an aortic aneurism; and it was evident that, if something were not done, her life must shortly cease. She was forty-three years of age, and was admitted under Dr. Wilson Fox on January 10th. She was submitted to treatment by rest, by appropriate medicines, rigid diet, and so on, and particularly by the administration of iodide of potassium; and it is well to say that some physicians lay great stress upon the effect which iodide of potassium has in producing clot. She was fairly put under the influence of it, but experienced no benefit. The aneurism varied a good deal, but, on the whole, was increasing in size; and she was transferred to me, with the view of having the carotid tied. I had no doubt myself that the left was the proper one to tie, because it is essential that we should be beyond the disease; and, by tying the left, I made pretty certain that we should be beyond the aneurism. The death of the patient was due to the fact that we were obliged to lay her down; and, the trachea being already very much compressed by the aneurism, it became practically occluded. You will remember that I did laryngotomy; and, as the anterior jugular vein was very large, it was unavoidably divided during the operation; but still blood did not reach the lungs, and, except for the flattening of the trachea, the patient would no doubt have had sufficient air and have lived for the operation to be performed. Had I known that there was so much flattening of the trachea, I should not have operated on the patient lying down; I should have had her sitting up in a chair and without an anæsthetic. But, in these cases of dyspnoea, we find chloroform gives so much relief, that we determined to administer it. If there ever was a favourable case for ligature of the left carotid, this was the one. The aneurism just involves, and no more, the orifice of the innominate, and springs from the upper part of the transverse portion of the arch of the aorta between the innominate and left carotid. If I were asked what case I should by preference choose for the operation, it would have been this very case. I think, in all probability, we should have had a good cure; for, even under very unfavourable circumstances, she had already a small clot in the aneurism; and, much as the untoward result is to be regretted, it must be remembered that she laboured under a disease necessarily and rapidly fatal if untreated.

### ON DENGUE OR DANDY FEVER.\*

By WILLIAM R. E. SMART, C.B., M.D.,

Inspector-General, Haslar Hospital.

FEW diseases have had more numerous synonyms than dengue, owing chiefly to local or regional variations in the predominance of one or other of its phenomena. Thus groups of synonyms have arisen having relations to the altered state of the skin, or to the painful symptoms, or to the equal display of these, or to a first-sight resemblance to other diseases; and to either of these groups or single names the features of epidemicity may have been appended or not. The title now generally accepted is that given by the West Indian negro slaves to it, when it first appeared among them in 1827: the "dandy fever", from the strange attitudes of the sufferers, translated dengue in Spanish, altered into denguis for scientific classification.

The invasion of this disease is not usually attended by rigor, although the first stages of heat and sweating have been observed, in the West Indies, to have had throughout a sense of cold in a painful degree. This stage may last from six to thirty-six or to forty-eight hours, during which the whole surface is of a more or less scarlet hue, and there are more or less acute pains in the head, spine, and limbs, creating much alarm. It often terminates abruptly, on awaking, in apyrexia so complete that the sick take to their ordinary avocations, a general stiffness, and soreness in motion alone remaining, which gradually wear away in many cases; and to this condition the term dandy-fever was applied. But more frequently, after a period of from one to four days, there comes a second accession of fever, characterised by a rubecoloid eruption which ends by desquamation, and by a return of the pains, with which there is a remarkable fall of the pulse, sometimes to fifty beats. The continuance of this stage is uncertain, lasting but three or four days, then disappearing gradually, but sometimes very slowly, through

weeks in which there are exacerbations that impart to the disease a relapsing character.

The pathological features are those of an exanthem, with muscular and arthrodial pains, without effusions into the joints, and with lesions of innervation, with diminished force of circulation, and gastro-hepatic disturbance, which may be indefinitely prolonged.

In children, the attack may be ushered in with convulsions, and the resolution may be attended by sensorial depression, approaching more or less to "dementia", which last condition may attend the stage of resolution of the disease in elderly persons also; but its duration is only temporary, and concurrent with the induced conditions of general debility. Nor can the disease, however severe, be said to have any special sequelæ proper to itself, like the typical exanthemata, which it simulates in its eruption; nor like acute rheumatism, to which it approaches in its painful symptoms. Nosologically, its position appears to be with exanthematous fevers, while from all of these it is distinguished by the absence of uniformity of symptoms, of normal courses of distinctive organic lesions, and of definite sequelæ, by its greater liability to recurrence in the same individual, and by its extreme rarity of fatal results relatively to the amount of suffering.

The infectiousness of "denguis" has been a disputed point from the moment when its epidemic nature first attracted attention. The affirmative opinion seems to have been first entertained in the West Indian epidemic of 1827, when it was traced from island to island by isolated importation. But even then, there were those who attributed its diffusion to a widely spread so-called "epidemic constitution of the atmosphere", such as was at the same period maintained to be the sole cause of epidemic of yellow fever. Now there are probably in that region very few acquainted with the disease who doubt its intrinsic infectiousness by importation, or its propagation and diffusion from solitary cases; for this property of diseases is more concisely defined in insular than in continental positions. And thus it has happened that the discussion has remained an open one to a later date in the East Indies. There, however, the facts connected with the last epidemic, 1871 to 1874, have brought the question within more definite limits.

The earliest epidemic display was at Zanzibar in 1870, and then at Aden, holding monsoon commerce with it; in June 1871, both Zanzibar and Aden having commercial intercourse with India, especially Bombay; and Zanzibar with the Arab coast of the Persian Gulf. It is, therefore, of interest that it was epidemic at Aden and at Muscat before any notice was taken of its presence in either of the Presidencies of India. But after it had become epidemic in Bombay and Calcutta, in the spring of 1872, there were recollections of its having presented cases in Bombay so early as August, and in Calcutta in November 1871, both of these ports maintaining frequent intercourse by steamers and sailing vessels, some of them native craft, with Aden; and it has been stated by Dr. Charles, no mean authority, that cases of the disease are seen in Calcutta almost every summer. The period between the unrecorded isolated cases and the epidemic outburst was such as to raise a doubt whether the entire visitation was not of Indian origin, independent of importation; it is clear, however, that there was no epidemic outburst in India previously to the arrival of a vessel from Aden bearing the disease in epidemic form. This vessel was the *Dalhousie*, a Government steam-trooper, whose movements were easily ascertainable. She arrived at Bombay from Aden early in December, then having the disease among her Lascar crew, and was on that account cleared out, cleansed, and painted, but not disinfected. After that, she embarked European artillery, with whom she reached Cannanore, on the Malabar coast southward, about January 1st, 1872. During the voyage, the disease broke out among her European officers, who had been in her from Aden to Bombay without suffering when the native crew did so; and the troops she brought from Bombay only showed the epidemic type almost immediately after their landing at Cannanore, and the disease was afterwards seen as an epidemic in that district so far south as Alleypa and Cochin.

After the disease had established itself in epidemic type at Bombay and in Calcutta, it spread throughout India to the foot of the Himalayas, and from Kurrachee, in the extreme west, to the banks of the Bramah-Pootra, in the extreme east, extending along the railway routes, and being frequently conveyed from station to station amidst infected detachments of troops, and it was thus carried into our garrison in Burmah. It appeared in Singapore, from which it was taken to Amoy in China, spreading into the southern provinces. It also made its appearance in Batavia. In this wide dissemination, there was sufficient evidence of its infectious, if not of its contagious, properties.

In the western hemisphere, there has been a very observable complicity of its epidemics with those of yellow fever on several occasions, both as prodromic and as concomitant. This feature has been noted in the Southern United States and in Bermuda; and it is further

\* Read before the Epidemiological Society.



noticeable that the only European region it has not visited is the Spanish Peninsula, which alone has undergone epidemics of yellow fever. The widest, however, of those connected diffusions was in South America, from 1846 to 1858. It appeared first in 1846, in Brazil, which holds much commercial intercourse with the United States, where it had prevailed in Louisiana in 1844, and, simultaneously with yellow fever, in the summer of 1848, at New Orleans, and at Mobile in Alabama. It spread in Brazil during the summers up to that of 1849, and in the next year yellow fever superseded it, returning through six successive summers. In Peru, it commenced in January 1852, having broken out at Lima amidst a body of one thousand German immigrants, who had recently arrived, after touching at Rio Janeiro, where yellow fever was epidemic. From Lima, the disease spread far in the coast towns, and ascended to the inter-Cordillera provinces, but ceasing at Lima in July. Dr. Archibald Smith has described it as a fever, commencing with flushed face and injected eyes, and bruised sensations in the limbs and loins, ceasing about the fourth or fifth day by crisis, often hæmorrhagic, with appearance of roseolous eruption, the transition being often sudden from pyrexia to apyrexia; the eruption lasting several days, and often with spongy bleeding gums. The usual course was one of about eight days, leaving recurrent neuralgic pains for weeks or months, the fatal cases being few. It disappeared in Lima in July, but reappeared in January 1853, attacking many of the previous sufferers, and generally without the roseolous eruption. At the middle of March, Dr. Smith attended the first case seen of "black vomit, with jaundice"; such cases being rare that summer.

In January 1854, yellow fever of a fatal type ravaged Callao and Lima, continuing through the summer, attacks of the milder fever in the previous summer affording no immunity, as true yellow fever does, from future attacks. These diseases ought, perhaps, to be described as distinct entities constituting one epidemic; the principal feature in common being the tendency to a shorter or longer period of apyrexia, between the primary and secondary stages of the febrile action.

The question of the correlation of diseases in epidemic seasons or cycles, of which this seems to have been an instance, and which is generally observable in epidemics of other zymotic diseases, appears to be one worthy of the consideration of this Society.

#### NOTES OF A CASE OF TRANSFUSION BY AVELING'S APPARATUS.\*

By GEORGE HOGGAN, M.B., AND FRANCES ELIZABETH  
HOGGAN, M.D.

THE following notes are offered as a small contribution to the history of immediate transfusion of blood in man, in deference to the general opinion that it is only by the careful study of individual cases that a safe or correct general conclusion can be arrived at; and that it, therefore, becomes the duty of every physician to put on record every case of interest that may occur in practice, and to make public the reasons, if they can be discovered, which have led to success or failure.

Mrs. S., aged 49, was admitted on March 31st, 1874, into the New Hospital for Women, Seymour Place, under the care of my wife. She complained of having suffered from great pain and constant sanious discharge from the vagina during the previous three months. This discharge was independent of the monthly flow of the catamenia, which were still quite regular. She was tall and fat, even flabby; the vessels of the face were dilated; the heart was large, and had a slight systolic murmur at the apex. She was also subject to spasms of the heart, and had all the symptoms of exophthalmic goitre. She was the mother of a grown-up son and daughter; had menstruated for the first time when under twelve years of age; and, with the exception of the abovementioned symptoms, she considered her health to be otherwise good.

On examination, the uterus was found to be enlarged, the fundus being felt externally above the pubes. The cervix was indurated, nodulated, and ulcerated, bleeding freely when touched. The vaginal walls seemed to be quite healthy.

The treatment first applied was to touch the cervix with strong carbolic acid at intervals of three days; while internally infusions, first of quassia and afterwards of bark, were administered.

This treatment seemed to have no effect; and, the sanio-purulent discharge having been examined microscopically without finding any cancer-cells, it was considered advisable to remove the lower part of the cervix by means of the wire *écraseur*.

Accordingly, on April 20th, the operation was performed by my wife, assisted by Mrs. Garrett-Anderson, M.D., I giving the chloroform, which was well borne by the patient. The steel wire with which the *écraseur* was unfortunately provided gave way before the cervix was completely severed, and the operation had to be completed with a pair of scissors. The free bleeding from the cut surface was effectually stanchied by the application of the actual cautery; the vagina was plugged; the patient dressed and carried to bed.

During the next twenty-four hours, the patient complained of throbbing of the temples, and the face was flushed. There were, however, no other symptoms, and she had several hours of refreshing sleep; indeed, altogether, she was considered to be in a very satisfactory condition.

On the following night, there was slight hæmorrhage; otherwise, things were satisfactory.

On the 23rd, the patient had a slight heart-attack, and was rather restless. A mixture containing five minims of tincture of aconite was ordered every four hours, in addition to the ice, which, ever since the operation, she was allowed to suck, and to have applied to the head while the throbbing continued.

On the 24th, the patient had another attack, consisting of irregular weak action of the heart, with a feeling of fulness in the epigastrium. Brandy was given during this attack, and the patient seemed much stronger after it had passed away, and ate a little meal for the first time since the operation. She passed a good night; but there was still slight hæmorrhage.

On the morning of the 25th, five days after the operation, my wife was summoned about 7.30 by a messenger from the hospital, giving her the intelligence that the patient was losing much blood. Setting off immediately, she found the patient much blanched and almost pulseless. The vagina was filled with clotted blood, which she immediately cleared out, and applied oil of turpentine as a hæmostatic. The bleeding being thus for the time stopped, the vagina was again firmly plugged. She now learnt that, early in the morning, a drunken disturbance had taken place immediately under the windows of the hospital, which had greatly frightened and excited the patient. As a result of this excitement, there had probably been increased strength of the circulation, and consequently flooding. The hidden condition of the parts and insidious flow had, however, caused it to be overlooked until the patient was observed to be sinking, on which my wife was immediately sent for and acted as described.

After waiting about an hour (during which a little brandy was administered every ten minutes) without seeing any satisfactory change in the condition of the patient, my wife returned to breakfast; and, after a brief consultation with me, determined to try transfusion of blood as the only means of saving the patient; I at the same time volunteering to give whatever amount of blood was necessary. She then sent a request to her colleague, Mrs. Garrett-Anderson, to come and assist in the operation; we meanwhile going with the transfusing apparatus to the hospital. On arriving there, we found the patient, if anything, worse than when seen an hour previously, and there was no time to lose if we intended to act at all. Soon an answer came that Mrs. Garrett-Anderson had gone on her rounds to see her patients, and would not return for some time; but, as the son of the patient arrived at the same time and volunteered to give his blood to try to save his mother, we two set about performing the operation ourselves at once. The special transfusing apparatus we possessed was that invented and introduced by Dr. Aveling; but, after having examined it very carefully, I must acknowledge that I acquired anything but a cheering opinion of it or of the chance of successfully transfusing with it.

I had already had good opportunities of acquiring experience in the manipulation of living blood-vessels, having assisted for some months in a physiological laboratory while an extensive series of experiments on the circulation of the blood was being made on dogs, rabbits, etc. In these experiments, the circulation was generally connected with the barometer, etc., by means of tubes filled with solution of carbonate of soda, to prevent coagulation; but, though every effort was made to obviate this tendency on the part of the blood (which was never exposed to the air), continual interruption took place through it. I have often seen during experiments on a dog, lasting, perhaps, a couple of hours, that the apparatus would require to be disconnected two or three dozen times to clear the cannulæ of clots which had formed in them and prevented the impulse of the circulation from being transmitted to the instruments. These clots seemed to form on the slightest provocation, more especially when the turning of a stopcock in the tubes filled with alkaline solution gave a shock to the circulation at its junction with the cannulæ, and in that way appeared to cause the formation of a clot.

The experience thus gained made me, rightly or wrongly, suspicious

\* Communicated by George Hoggan, M.B., to the Section of Obstetric Medicine at the Annual Meeting of the British Medical Association.



of the instrument now to be used; but, at the same time, made us careful to try to obviate what appeared to be faulty tendencies entailed upon it by its principle and parts in its construction. These seemed to me to be:

1. There are the two long metallic tubes or cannulæ, one at each end of the apparatus, which have to be plunged into the tender blood-vessels.

2. There is the shock of turning the stopcocks at each end when the two circulations are to be connected.

3. There is the double shock of the blood entering and leaving the ball or chamber of India-rubber in the centre of the apparatus, at each filling and discharging of an ounce.

4. There is the long rough India-rubber tube connecting the different parts together. In this tube, all friction and shock to the passing blood had to be sustained.

5. The substitution in the instructions accompanying the instrument of water for alkaline solution was, if necessary, much more conducive to the chance of coagulation.

These objectionable points in the instrument seem to me to be so from their tendency to form clots of blood in the apparatus, which might interfere greatly with the success of the operation, or render it entirely abortive.

It was, therefore, with a full anticipation of the difficulties which seemed to lie before us that, having mastered the paper of instruction, we commenced the operation, and connected the two circulations without the slightest hitch. The first three or four pumps or syringefuls were cautiously discharged into the patient with success; but it then became evident, by the refusal of the ball-pump or syringe to dilate, that no blood, or but a very small quantity, was flowing into it from below, and that probably a clot was causing the mischief.

After a little unsuccessful manipulation, with the chance of sending no blood, or, perhaps, a clot into the system of the patient, we disconnected the apparatus, and found that no blood came from the entrance or afferent cannula. This we cleared out with a stylet until the blood came with a gush; so, having again filled the apparatus with water, we reconnected it.

The next attempt had exactly the same success. After the first three or four pumps, dilatation no longer ensued; and, the blood-giving patient having declared his inability to give more blood (shouting during the latter part of the operation that he was going to faint, and having had to be plied with brandy throughout), we were very unwillingly compelled again to disconnect the whole apparatus, suspend the operation, and bind up the two wounds. This time the clot was found within the India-rubber tube on blowing through it into a dish of water. So much for the apparatus.

The effect on the patient, however, seemed very beneficial; her spirits and her circulation improved greatly, although at most she had not received above eight ounces of fluid, and much of that was probably warm water. Indeed, the latter presumption was probably true, for three hours afterwards she quietly sank. Under the circumstances, we did not dare to attempt another operation with defibrinated blood, although we had reason to feel assured of its having the best effect on the patient. Why we did not interfere further may be imagined from the fact that, even in the case under consideration, some titled friends of the poor patient, who had sent her into hospital, were afterwards heard to express in a high circle their opinion that their *protégé* had been unjustifiably experimented upon. The conclusions forced upon us by our operation need not be stated at great length; and we believe that, with the same experience, most people would come to the same conclusion. We would certainly never again try immediate transfusion with any of the special and complicated apparatus for that purpose, of which Aveling's apparatus is one of the best. We would only use defibrinated blood with any syringe that came first to hand. The reasons for such a course are to be found stated in the works of most of the adherents of the mediate system.

At the same time, we are quite ready to admit that Dr. Aveling's apparatus may often succeed. We simply give our experience of it, and say that the same may happen with the best operators; and that such risks of failure, or even worse, by the introduction of clots into the system of the patient, make it an instrument upon which little dependence may be placed, and which we would, therefore, never again use.

**DONATIONS.**—The Clothworkers and the Merchant Taylors' Companies have each contributed one hundred guineas to the fund being raised by the Chemical Society for the promotion of chemical research. A few months ago, the Goldsmiths' Company presented £1,000 to the same fund. The Merchant Taylors' Company have contributed two hundred and fifty guineas towards the fund for rebuilding the Metropolitan Free Hospital.

## CLINICAL MEMORANDA.

### DR. BYROM BRAMWELL'S CASE OF DISEASE OF THE SUPRARENAL CAPSULE.

I AM hardly prepared to admit unconditionally that the disease in this case was lympho-sarcoma, or that the melasma was not that of Addison's disease. Indeed, my own opinion is, that the discoloration of the skin was due to the suprarenal lesion. It (the discoloration) was well marked, and the lesion was such an one as frequently results from the quasi-tubercular change. In the face of Dr. Pye-Smith's letter, endorsed as it has been by Dr. Greenhow, who very kindly a few days ago gave me his opinion on the case, I do not like to insist on this view, especially as full data, in the shape of the exact character and distribution of the discoloration, are wanting.

In reporting the case, I purposely avoided naming the lesion, which in all its features except "caseation" exactly resembled lympho-sarcoma. Caseation, however, is very rarely seen in the lympho-sarcomata of man. Indeed, no less an authority than Virchow himself states that lympho-sarcoma may be absolutely (*rigoureusement*) distinguished from tubercle by the absence of miliary granulation and of caseation.\* Cornil and Ranvier say caseation is sometimes seen.†

I may, perhaps, take this opportunity of supplying an omission in my paper, and of stating that, on microscopical examination, the capsular lesion was found to consist chiefly of broken-down debris and fatty molecules. Where the caseation was least marked, lymphoid elements similar to those found in the intrathoracic growth were found. I maintain that, had the capsular lesion been solitary, it would have been impossible, either by its naked-eye or microscopical characters, to have distinguished it from a quasi-tubercular capsule which had undergone retrogressive changes.

BYROM BRAMWELL, M.B., Newcastle-on-Tyne.

### LEAD-POISONING.

"THE predisposition to lead-colic is very varied, but among the predisposing causes we only know the great tendency to the disease left by a previous attack." The above-quoted remark of Niemeyer's is very well illustrated by the following case. A. B., a gamekeeper, was seized with most pronounced symptoms of lead-poisoning. The colic was most intense and the suffering great. There was difficulty in tracing any exposure to the influence of lead; but at last the following particulars were elicited. A fortnight previously to his seizure, he had been engaged one afternoon in making cartridges, for which purpose he had mixed some shot of various sizes in a basin which he had stirred round a few times with his hand. The hand was blackened or "leadened" as he called it, but he washed it three times before sitting down to his evening meal. He acknowledges that the black colour was not entirely removed. As persons of his class are in the habit of handling their food a good deal before eating it, we can imagine that some of the lead at least found its way into the mouth through the food, although part of the poison was also absorbed through the skin. With regard to the predisposition, he stated that he had been a house-painter, but that, owing to four distinct attacks of lead-colic, he had given up his business and taken service as a gamekeeper. This present attack was the worst he had ever had. The last attack previous to the present one occurred more than two years ago; during this interval, he had enjoyed the best of health. There was no debauchery or drunkenness to increase the predisposition.

The interest of the case lies in the marked predisposition this individual had to lead-poisoning, which permitted so small a dose of the poison to be followed by such severe symptoms in so short a time.

R. BRUCE LOW, M.D.,  
Medical Officer of Health, Helmsley District.

## THERAPEUTIC MEMORANDA.

### TREATMENT OF RINGWORM BY PERCHLORIDE OF IRON.

SOME months ago, a paper by Mr. Hopgood of Sunderland was published in the *Students' Journal*, in which he advocated the use of solution of perchloride of iron for ringworm. Since that time, I have

\* "Mais ce qui en distingue le lympho-sarcome rigoureusement, c'est l'absence de granulation miliare et de métamorphose caséuse." (Virchow's *Pathologie*, French edition, vol. iii, p. 177.)

† *Histologie Pathologique*, page 253.



tried this agent in several cases, and with very excellent results. I generally paint the affected parts with a solution made of equal parts of water and the liquor ferri perchloridi fortior of the *Pharmacopœia* on three successive days, and then wait for a few days to observe the result. This is generally sufficient for a cure, but occasionally one or two further applications are necessary.

GEORGE BROWN, M.R.C.S., Islington.

## REVIEWS AND NOTICES.

VITAL MOTION AS A MODE OF PHYSICAL MOTION. By CHARLES BLAND RADCLIFFE, M.D., F.R.C.P., etc. 8vo., pp. 252. London: Macmillan and Co. 1876.

THIS work is divided into two parts: 1. Vital motion considered physiologically; 2. Vital motion considered pathologically. The second part is naturally founded on the theories which the author attempts to establish in the first. In this notice, therefore, we shall direct attention mainly to the first part. At the same time, the second part merits careful perusal, especially by those physicians who have specially to do with the treatment of nervous diseases.

The first chapter is a prologue entitled "Vital Motion Regarded Historically". Dr. RADCLIFFE has certain opinions regarding (1) the intimate nature of muscular contraction and (2) the relation between muscular contraction and the kind of blood supplied to the nervous centres. At the commencement, he announces the view of muscular contraction which it is the design of the book to prove and illustrate. After describing the tetanic condition of the body of a rabbit killed by strychnia, he says: "It seemed as if the spasm had passed at once into rigor mortis. At first, all my prejudices were against such a notion; in the end, I came to believe most unhesitatingly that a radical change was necessary in the doctrine of vital motion; that the interpretation of spasm was to be sought, not on the side of life, but on that of death; that spasm and rigor mortis were to be regarded, not as signs of vital action in certain vital properties of contractility, but as physical phenomena akin to, if not identical with, the return of an elastic body from a previous state of extension; that muscular contraction, in all its forms, might be the simple consequence of the operation of the natural attractive force or forces inherent in the physical constitution of the muscular molecules; that life is concerned in antagonising contraction rather than in causing it; that this antagonising influence might have a physical basis; that, in short, vital motion might have to be regarded as a mode of physical motion."

Dr. Radcliffe then states his opinion regarding the second point. "In an epileptic patient, it had been thought expedient to try to cut short a succession of very violent convulsions by taking blood from the temporal artery. The artery was divided when the fit was at its height, and the blood escaped by jets in the usual way, but not of the usual colour. Instead of being red, the blood was black; instead of being arterial, that is to say, it was venous. The state during the convulsion was evidently that of suffocation; and, on this account, black un-aërated blood had found its way into the arteries and was being driven through them at the time. The case was intelligible enough as regards the suffocation; for, in this case, the simple fact is, that black blood does for a time penetrate into and pass along the arteries; but it was not intelligible as regards convulsion, if convulsion were, as it is assumed to be, a sign of exalted vital action. I could connect such exaltation with increased supply of red blood to certain nerve-centres, but not with the utterly contrary state of things involved in the actual circulation of black blood; and, do what I would, I could see no other conclusion than that which had been already forced upon me by the history of the poisoned rabbit; namely, this, that the convulsion pointed to a state of things which had to do with death rather than with life; that, in short, this state of muscular contraction was due, not to the black blood having acted as a stimulus, but to the withdrawal of an inhibitory influence which had served to keep up the state of muscular relaxation as long as certain nerve-centres were duly supplied with red blood."

He then proceeds to give what may be termed his electrical theory of muscular contraction. His views on the subject may be briefly summarised as follows.

1. Muscular relaxation may be explained by supposing that muscle is composed of molecules separated from each other by minute distances, in consequence of some repulsive force.

2. Muscular contraction may be explained by supposing that the molecules approach each other in consequence of some attractive force.

3. The relaxation is to be accounted for by supposing that the

molecules are kept in a state of mutual repulsion by the presence of an electric charge; and the contraction by the discharge of this charge and the attraction of the molecules towards each other.

4. The influence of nervous energy emanating from the nervous centres is not to cause the molecules to approximate, but to keep them in a state of mutual repulsion; and consequently, when the nervous influence ceases, the charge which keeps the molecules in repulsion is discharged, the molecules come closer together, and the muscle contracts.

5. The nervous centres, under the influence of arterial blood, are constantly transmitting along the nerves to the muscles nerve-energy, which keeps the molecules in a state of repulsion; but, when the blood becomes venous, the action of the nervous centres is inhibited, and consequently the muscles contract.

We have now to inquire what are the facts on which these statements, some of which are in direct antagonism to what is usually taught, are based.

The usual method of investigating the electrical condition of living tissues is by means of a galvanometer. Dr. Radcliffe, however, claims for the quadrant electrometer of Sir William Thomson an important position in these investigations. He says: "The apparatus of any physiological laboratory would, to say the least, be far from complete in which this instrument was wanting." If Dr. Radcliffe have succeeded in procuring and in manipulating an instrument of this description of sufficient delicacy to detect the electro-motive force of living nerve and muscle, and the variations in this force during the physiological action of these tissues, he has made a great step in experimental science, and he ought to give a public demonstration of his methods to physiologists.

In a chapter on the Electro-physics of Amoeboid Movement, Dr. Radcliffe arrives at the startling conclusion that they are due to, and correspond with, the oscillations in the electrical condition of the earth. The one fact on which Dr. Radcliffe bases this statement is, that amoeboid bodies in pus, mucus, fresh water sponge, and myxomycetes, when connected with his electrometer, showed no differences in electrical potential from that of the earth; in fact, they behaved like a mass of sculptor's clay. Now, Dr. Radcliffe must admit that his mode of experiment on such microscopic organisms was very rough and unsatisfactory. We do not dispute the accuracy of his observations, but we regard his method as imperfect and liable to fallacy; and we cannot consider it proved that living protoplasm, even in amoeboid bodies, has the same electrical potential as the earth.

The next chapter is devoted to the Electro-physics of Simple Muscular Movement and Simple Nervous Action. With regard to the electrical condition of muscle, Dr. Radcliffe has considerably modified views put forward in his previous works, and he now supposes that the contents of each cell or fibre in muscle, like protoplasm, remains negative, and the sheath or membrane, "by reason of juxtaposition with the contents, together with oxidation, or some equivalent operation", becomes positive, so that each cell is an electro-motive element in open circuit. Dr. Radcliffe then asserts that the effect of the charge is to set up a state of mutual repulsion among the molecules of the charged body (say a muscular fibre), and that consequently, during the state of charge, the muscle-fibre is elongated. He ingeniously argues that the expansion is similar to that of a portion of an amoeba, with this difference: that, in the amoeba, the only charge operating, and the fluctuations of which are observed, is the "terrestrial charge"; whereas, in the living muscle, the charge is the result of the interaction between the sheath and protoplasmic contents of the cells. Thus the operation of the charge is to keep up a state of muscular elongation; and, if the charge were discharged, it is evident, according to this theory, that contraction would be the result. The discharge of this charge through the agency of the nervous system Dr. Radcliffe accounts for by the "development of instantaneous currents (in the nerve and muscle) of high tension, extra currents in the actual circuit, and induced currents in the neighbourhood of the circuit", which "are also known to have the power of discharging the charge which is associated with the state of rest, and which may act by counteracting or inhibiting the state of action".

The next chapter deals with the Electro-physics of Cardiac and other forms of Rhythmical Vital Motion. Dr. Radcliffe assumes that the electrical charges which accompany cardiac contraction are traceable to charges in the aëration rather than to charges in the nutrition of the rhythmic centres. According to him, electro-motive action is set up in these centres by the oxygen of the arterial blood. This electro-motive action is kept up by the oxygenised blood during the state of diastole; indeed, the state of diastole or muscular relaxation, according to Dr. Radcliffe's theory, is the consequence of the static condition of the muscular and nervous apparatus causing extension of muscle-



substance. The moment the electro-motive action fails for want of red blood, muscular contraction or systole occurs. The systole injects a new supply of arterial blood into the vessels, which again excites electro-motive action and consequent relaxation or diastole. In a somewhat similar way, Dr. Radcliffe explains the rhythmic movements of the respiratory apparatus of mammals, the rhythmic motion of the mantle of the cuttle-fish, the undulations of the margin of the disc of the pulmonigrade acephalæ, the to-and-fro movements of the oscillatoria, and, lastly, ciliary action. There can be no doubt as to the ingenuity of these theories. The difficulty which keeps us accepting them is, that they are founded on too few experimental facts.

Chapter IV is devoted to the work of Artificial Electricity in Vital Motion, and constitutes, we think, the most important contribution to scientific exposition the author has made. The result of his inquiries is, that muscular contractility is affected by electricity, "not by the muscle or nerve being polarised in one way when the current is 'inverse', and, in the other way, when the current is 'direct', but simply by the muscle or nerve being acted upon by the positive charge ordinarily associated with the inverse current, and by the negative charge ordinarily associated with the direct current". In the interesting section "on the influence of electrotonus upon muscular motion", Dr. Radcliffe asserts that he has been able to show that, if a gastrocnemius muscle be slightly tetanised by a drop of a solution of salt on the nerve, and anelectrotonus be excited in that, the effect is to suspend the tetanus and to cause the gastrocnemius to become slightly elongated. In the case of catelectrotonus (excited by one element), however, the tetanus is increased and the muscle contracts; whereas, with several elements, the results are the same as with anelectrotonus; namely, suspension of tetanus and muscular elongation. This phenomenon he explains by stating "that the artificial charge belonging to the electrotonic states may set up a state of muscular elongation, which is more marked than that which is natural to the muscle; for it may be supposed that the artificial charge is more powerful than the natural charge, and also that it may at the same time act like the natural charge in antagonising or inhibiting contraction". In his opinion, contraction is inhibited more effectively by anelectrotonus than by catelectrotonus. But it seems to us that the return of a muscle from a slightly tetanised condition to its original length can scarcely be called muscular elongation. The weak catelectrotonic or anelectrotonic state simply diminishes the irritability of the nerve excited by the drop of salt and water, and consequently the muscle returns to a condition of relaxation. The drop of salt and water does not paralyse the nerve, and consequently, according to Dr. Radcliffe's theory, permit muscular contraction by removal of inhibitory power, but it keeps up a state of irritation; the result is the transmission to the muscle of nerve-energy which excites muscular contraction. This will be evident, if we suppose the nerve to be sensory and terminating in the brain, instead of motor and terminating in muscle. In these circumstances, would not the saline irritant cause constant pain?

In Chapter VI, Dr. Radcliffe discusses the question of the Work of the Blood in Vital Motion. He describes carefully the well known ligature experiments of Sir Astley Cooper, and of Kussmaul and Tenner; the experiments of Dr. Harley as to the poisonous action of strychnia and brucia on the respiration of the blood; the experiments of John Reid and Draper as to the difficulty of venous blood forcing its way through the capillaries; the interesting experiments of Spiegelberg as to the action of the blood on the peristaltic movements of the bowel of the rabbit; the elaborate researches of Brown-Séquard on the removal of rigor mortis by the injection into the vessels of defibrinated blood; and, lastly, the observations of Stannius on the effect on muscular contractility of preventing the flow of blood into the limbs of dogs by ligaturing the abdominal aorta and crural arteries. All of these results, Dr. Radcliffe holds, are in opposition to the theory that "blood produces contraction by acting as a stimulus to a vital property of irritability inherent in living muscle and motor nerve", and are to be explained by his theory, that the oxygen of the blood keeps up that electro-motive condition in nerve and muscle "which antagonises the state of action in nerve and muscle, and which in muscle keeps up, in addition, the state of relaxation".

Again, we have to say that Dr. Radcliffe's theory, no doubt, accounts for many of the phenomena; but we must not take it for granted that his theory is correct. When we cut off the supply of blood from the motor nerve-centres, no doubt there are frequently convulsions, which are produced, we hold, by irregular discharges of nervous energy from the nervous matter undergoing those rapid molecular changes that precede death. In like manner, death occurring in the nerve-centres from sudden deprivation of blood is preceded by convulsions of various groups of muscles.

In Chapter VII, Dr. Radcliffe attempts to support the position "that one way in which the great cerebro-spinal apparatus must work upon the muscles is, not by provoking muscular contraction, but by preventing it".

Chapter VIII concludes the physiological part of Dr. Radcliffe's work. In it he attempts to remove certain objections to the view taken by him of muscular motion. Here, he alludes to the experiment of Dr. Joule, showing that a bar of iron lengthens and shortens as it gains and loses magnetism, without undergoing the least change of volume; and he establishes a parallel case between this and the fact that muscle may relax or contract without change of bulk. He also ingeniously attempts to reconcile with his theory various facts in the physiological history of muscular and nervous action. He thus concludes: "In point of fact, electricity and elasticity would seem to be everything in vital motion, and vitality nothing".

We have given an account of Dr. Radcliffe's theories, as far as possible, in his own words. They are evidently produced by a man who is working out what may be termed the chief train of thought of his life. Learned in electrical science, he evidently runs the risk of attributing too much importance to the electrical phenomena manifested by living structures. We are not prepared to dispute his facts, because they demand more rigid scrutiny than has yet been accorded to them. If Dr. Radcliffe's statements as to the electrical potential of amoeboid bodies, and of the protoplasm and sheath of muscular fibre, should prove to be correct, then we can see a solid basis for his theories. In the meantime, how can Dr. Radcliffe explain by his theory the following simple observation? We take off the leg of a decapitated frog, skin it, expose the sciatic nerve, keep it in a moist chamber, and leave it alone; the muscles remain relaxed and free from contraction; while, if the nerve before death be irritated by a stimulus sufficiently strong, the result is contraction. According to Dr. Radcliffe's theory, if we understand it rightly, weak stimulation of the nerve, even while it is still in connection with a nerve-centre, should produce slight elongation of the muscle. But it never does so. We cannot, therefore, assent to the view that nervous influence maintains the muscles in a state of relaxation, so that, when it is removed, the muscles contract. We still must adhere to the old doctrine, that it is precisely the opposite way. In conclusion, we would strongly recommend physiologists to read Dr. Radcliffe's book. It is the product of an able mind given somewhat to speculation and the theories of the study, but one full of suggestive ideas and tinged with that legitimate scepticism of recognised opinions which is often the guiding star of scientific research.

THE MUCOUS MEMBRANE OF THE UTERUS, WITH ESPECIAL REFERENCE TO THE DEVELOPMENT OF THE DECIDUA. By GEORGE J. ENGELMANN. New York: 1875.

THE author, along with Dr. Kundrat, made a large number of investigations on the above subject in Vienna and Berlin. The results of their joint work were published by Dr. Kundrat in Stricker's *Medicinische Jahrbücher* for 1873. Dr. ENGELMANN, wishing to correct some of the views expressed in their previous communication, which he cannot endorse, and which were developed after he left Vienna, has been led to produce in English his own views of the results of the joint investigation.

*The Uterine Mucous Membrane in its Development up to the Time of Puberty.*—The essential difference between the fully developed and the infantile uterus consists in the absence of all glandular structure in the latter; nor do we meet with any trace of glands during the first years of life, during which the membrane increases but little in thickness, averaging about 0.0078 inch (0.2 millimètre). In the third or fourth year, the first trace of the development of the glands appears in the shape of small crypt-like depressions, either simple or in clusters of two or three with a common opening. A delicate epithelium lines these sinuses, for glands we can scarcely call them. From this time onwards, very few changes take place until the tenth year, when the uterus develops more rapidly, the glands forming straight ducts sometimes extending even into the muscular stratum.

*The fully developed Membrane during its Period of Rest* is closely and inseparably attached to the muscular tissue, there being no submucous areolar tissue. The uterine glands possess no basement-membrane.

*The Transformation of the Uterine Mucous Membrane during the Menstrual Period* is partly due to the hypertrophy of its superficial layers. These are rich in embryonic cells, and grow far above the original openings of the glands, circumvallating them, and thus causing the funnel-shaped depressions, those small pits which make the ostia seem enlarged. The upper part of the glands is also much enlarged; their lower part, like the stroma surrounding them, remaining unaltered. Anatomical



experience does not bear out the current theory that the menstrual changes in the mucous membrane come and go as rapidly as the menstrual period itself. During the period of menstrual hæmorrhage, there is a more or less marked accumulation of fat-granules within the interglandular cells of the upper layers of the membrane, fatty degeneration of its blood-vessels, and of the glandular and surface epithelium. The relation of these changes to the menstrual discharge is, according to the author, one of cause and effect. Not only are these changes found to exist, developed independently of the hæmorrhage, but they are, in fact, the cause of that hæmorrhage. The entire epithelium of the surface is not lost during the retrograde metamorphosis.

*Normal Development of the Decidua.*—The appearance of the uterus in the third week of pregnancy is then described. The decidua vera of the first week of pregnancy is characterised by a prolific development of the mucous membrane, especially of the interglandular tissue of its upper layers, and by an increase in the length and volume of the glands themselves. The appearance of the opening of glands on both surfaces of the decidua reflexa and of the longitudinal course of the ducts within its tissue proves that the membrane is developed from folds of the mucous membrane whose approaching borders unite with each other.

The author finds that the villi of the chorion do not regularly enter the gland-tubes, but that the adhesions existing are owing to an agglutination of the parts, and to the growth of the serotinal tissue around the villi. The changes in the decidua in the second month, and from the fourth month to the termination of pregnancy, are then described. The development of the placenta, and the retrograde metamorphosis of the membranes, are then discussed.

As to the expulsion of the decidua during normal parturition, the parts of the maternal membranes adherent to the ovum are the whole of the decidua reflexa, the entire upper cellular layer of the serotina, and the more superficial parts of the upper stratum of the decidua vera. The greatest part of the decidua vera, and the spongy lower half of the serotina, remain *in utero*.

As to the mode of regeneration of the mucous membrane after parturition, the author states that in the second week only a thin film, hardly to be called a membrane, is left on the inner surface of the uterus; and it already begins to assume the appearance of an active germinating tissue, still retaining the well-marked yellowish colour. Only the deepest layers thus remain; these are thoroughly infiltrated with round cells, and but few of the fatty disintegrating decidua-cells are to be seen. This process lays open the deepest of the glandular spaces, and even the fundi, which now form part of the surface; and their epithelial lining appears as that of the surface. An active cell-proliferation now begins in these remnants of the glandular epithelium, as seen in the segmentation of the nuclei.

The paper is illustrated by fourteen figures.

## NOTES ON BOOKS.

*The Appointment Dial*, designed by Dr. DOBELL (London: Maw, Son, and Thompson) consists of a series of sheets ruled in lines corresponding to intervals of a quarter of an hour on a printed "dial". For the sick-room in urgent cases, such sheets would ensure rigorous attention by the nurses. They are also recommended for use in the consulting-room, library, or office.

*Scurvy in High Latitudes: an attempt to explain the Cause of the Medical Failure of the Arctic Expedition of 1875-6*, by PATRICK BLACK, M.D., Physician to St. Bartholomew's Hospital (London, Smith, Elder, and Co.), is one of those pamphlets by which Dr. Black has done much lately to show that a physician may hold a position as a teacher at a great hospital without having a correct appreciation of the foundations of medical knowledge. His teaching is, that "There is now no antiscorbutic, or, in other words, all food is antiscorbutic, although in most unequal degree. Fat and oil stand", he says, "at the head of the class. Sugar has a high place on the scale. Lime-juice is inferior to barley-water in keeping scurvy at bay, and would be on the same level with toast-water." We cannot but regret that a physician holding a position at St. Bartholomew's Hospital should put forth doctrines so calculated to mislead.

*Outline Diagram Forms for Clinical Case-Books.* By G. ROWELL, M.D. London: Smith, Elder, and Co. 1877.—This excellent and timely publication will, we believe, be found of very great value to all clinical students, physicians, and surgeons. We have here, in a neat and convenient form, a complete series of sketch-outlines of all parts of the human body on gummed paper, so that the

outline sketches can be torn out and stuck into a neat book. In this way, graphic notes are obtained without any trouble and very readily by those who have little or no skill in drawing. Those who are acquainted with the excellent use to which these outline diagram forms are put in the Leeds Infirmary, where the system has been largely carried out for years, will thank Dr. Rowell for putting the whole series into this neat and convenient form for every-day use. This little volume of outline diagram forms should be on the table of every practitioner.

DR. G. H. B. MACLEOD has published, for the use of his students in the University of Glasgow, a short *Clinical Guide*, summarising in the most convenient way all the main points to be observed in clinically studying surgical diseases in the wards of the hospital. Some years ago, he printed a somewhat similar one, and found it of great help in teaching. This new series is a much enlarged and improved edition. It is given to the students at prime cost, and is printed, bound, etc., at a cost of two shillings, at which price it is sold, and can be got by the students of any school. It is written very concisely, and exactly serves the purpose in view, viz., that of keeping before the students in a systematic form different points into which they should inquire in keeping records of the cases under observation. We can strongly recommend it as a most useful clinical guide.

## REPORTS AND ANALYSES

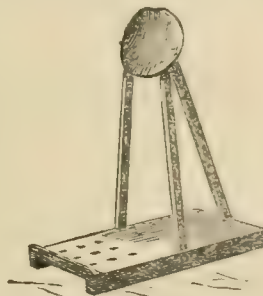
AND

## DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

### THE STAND-REST.

THE object of this invention is sufficiently plain from the woodcuts which we present. There are many persons who find the sitting position extremely fatiguing when too long continued, and unquestionably the attitude into which it throws the upper part of the chest for writing and other purposes, is an injurious one. On the other hand, others are compelled by their occupations to stand erect during long hours, the whole weight of the body being supported by the lower limbs in a



state of extension. In all such cases, it is obvious that a judiciously constructed stand-rest, such as that which has been invented by Dr. Kendrick of Warrington, and is manufactured by Messrs. John Heywood, Deansgate, Manchester, is likely to prove comfortable, and to afford a healthy change from either the standing or sitting positions.

These stand-rests are likely to be particularly useful to teachers, to lecturers, to men of business, clerks, art students, and others. The contrivance is simple, effective, and cheap.

### CALLARD'S IVORY JELLY.

THIS jelly, which is prepared from pulverised ivory, contains a certain amount of phosphates, and is therefore decidedly superior in its nutritious properties to ordinary calves'-foot jelly. It is probable that the bone-salts in this jelly are in a very soluble and digestible state; and the use of this jelly might frequently supersede the administration of phosphatic medicines. The value of a jelly rich in bone-salts as an element of nutrition in many of the forms of rickets and in defective nutrition of scrofulous and phthisical patients has long been admitted; and Mr. Callard, of St. John's Wood, London, in preparing this ivory jelly, places at the disposal of the profession an element of diet of which, we think, they will not be unwilling to avail themselves.



## REPORTS OF SOCIETIES.

## CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 23RD, 1877.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

*Rare Eruption on the Arms, the Result of Infection from a Horse.*—MR. MORRANT BAKER exhibited for Mr. LANGTON, who was unable to be present, a patient with a rare eruption on both forearms, simulating vaccinia. There were twelve large vesicles on one arm, and seven on the other, besides one on the back of the hand. Excepting their large size, and the comparative absence of local inflammation, there was nothing to distinguish them from vesicles resulting from vaccination. There was now no constitutional disturbance, although soon after the eruption first appeared there were pains in the head and limbs, and some feverishness. The patient was a healthy man twenty-two years old, a groom, who, eleven days before, began to tend a horse suffering from inflammation of the legs and cracked heels. On the following day, he noticed on both arms, at a place where the skin was somewhat chapped, several red pimples; and these gradually developed until they assumed the appearance of mature vaccine vesicles. On the seventh day of the eruption, the patient came to St. Bartholomew's Hospital, and was admitted in order that the case might be watched. No fresh symptoms, however, appeared, and now, on the tenth day, the eruption was subsiding exactly like vaccinia of a similar age. There could be little doubt that the case was one of infection from a horse, suffering from the disease which was described by Jenner as the "grease", and which, when transplanted to the cow, developed further as cow-pox. The patient had been exposed to no other likely source of infection; and the appearance of the disease was identical with that delineated by Jenner in his work on the *Cow-pox*, as produced on a child's arm by inoculation from the hand of a man who had become diseased in consequence of dressing a mare's legs affected by the grease. The patient had been vaccinated in infancy, and bore good scars. A drawing of the disease as it appeared on the seventh day of the eruption was also exhibited.

The PRESIDENT had seen such cases but very rarely.—DR. SOUTHEY had never seen such a case in the skin department of St. Bartholomew's Hospital. The man's axillary glands were enlarged.—DR. DYCE DUCKWORTH said the vesicles were quite characteristic when first seen. It was curious that ordinary vaccinia did not protect from this.—DR. GREENHOW remarked on the fever which accompanied vaccinia direct from the heifer.

*Excision of Lingual Epithelioma by Dr. Paquelin's Thermo-Cautère.*—MR. BARWELL read notes of this case. He remarked that experience in the use of a new and ingenious instrument which appeared to be valuable induced him to bring before the Society the case of Mrs. —, in which he was consulted by Dr. Spurrell of Belvedere, November 29th, 1876. He found a rough nodular excrescence, about the size of a cherry-stone, on the edge of the tongue opposite the right second molar tooth; the substance of the organ was hardly indurated at all or enlarged. The tumour had been stained brown by the application of nitrate of silver. It was diagnosed as an epithelioma (a diagnosis which had since been verified by the microscope), and its removal advised. It appeared unnecessary to amputate the whole tongue, although safety demanded the excision of a considerable extent round the tumour; and for this purpose, Mr. Barwell preferred the new cautery-knife of Dr. Paquelin to the galvanic *écraseur*. This knife, which was shown at the meeting, consisted of a hollow platinum blade, half blunt, and about one inch and a half long, into which the vapour of benzoline being pumped and there burning, kept the metal glowing. In the operation, Mr. Barwell was assisted by Dr. Spurrell and Mr. Conolly. He passed an armed needle through the middle line of the tongue as far back as was desirable. Mr. Conolly, by means of the cord, drew the tongue well forward and to the left. Dr. Spurrell held the lips apart with properly protected retractors. The operator then seized the side of the tongue well beyond the tumour with a pair of vulsellum-forceps, and with the red-hot knife removed a semicircle of sufficient size. No blood save a drop from the needle-prick was lost. Mr. Barwell thought that the instrument was, with a little previous practice, easily manageable; and he described certain arrangements which would leave both hands of the operator free.

*Cancer supervening on Ichthyosis Linguae of twelve years' standing: Removal of Diseased Portion: Rapid Recurrence: Excision of Tongue: Recovery.*—MR. GEORGE BROWN read a paper on this case. The patient, a man aged 55, first consulted Mr. Brown in April 1876. At that time, the dorsum of the tongue was covered with white ichthyotic patches; and about an inch and three-quarters from its tip, and immediately to the left of the raphe, there was a hard lump about the size of a hazel-nut, having down its centre a small fissure. The patient stated that he had observed the white condition of the tongue for more than twelve years, but the lump had not existed for more than five months. A mixture of iodide of potassium and arsenical solution was prescribed, which the patient took for about two months, but without any benefit. As he resided a long distance in the country, Mr. Brown had not an opportunity of seeing him again until the end of June, when the tumour was found to have increased considerably in size, and the fissure had become converted into an ulcerated surface three lines long and one and a half broad. Mr. Brown now recommended an operation; and, after consultation with Mr. Hird, it was decided to endeavour to save the tongue by removing the tumour only. On July 17th, the tumour was cut out by means of a scalpel, and the cut surface well cauterised with the actual cautery. The portion removed measured two inches in length and one inch in breadth. The patient made a good recovery, and in five weeks the wound had entirely healed. However, the relief was only temporary, as the disease recurred in two months, giving rise to much pain and difficulty of mastication and swallowing. By the third week in November, it was found that two distinct cancerous nodules about the size of a horse-bean had developed in the substance of the tongue. The patient having consented to another operation, Mr. Brown removed the whole of the tongue as far back as the circumvallate papillae by means of the wire *écraseur*. The operation was attended with considerable difficulty, in consequence of the disease extending so far back towards the root of the tongue. The little hæmorrhage which took place was readily controlled by the application of solution of perchloride of iron. The patient made an excellent recovery. In thirteen days, he was able to walk out; and within a month the wound in the floor of the mouth had entirely healed. There were now two enlarged glands to be felt in the neck. Remarkings on the physiological aspect of the case, Mr. Brown said that, although nearly the whole of the tongue had been removed, the patient could articulate almost every word with sufficient distinctness to be well understood. He transacted his business—that of an hotel-keeper—as before the operation; and he had even ventured to address a public meeting. Taste was scarcely impaired. Not only did he readily distinguish the simple tastes, sweet, sour, salt, and bitter, but he could judge of the nature and qualities of wines and spirits. The mastication of solid food and deglutition were performed with difficulty, and it was in these particulars that he really felt the loss of the organ. As to the causation of the disease, there was no history of syphilis or of hereditary predisposition to cancer. The patient believed that it was caused through excessive smoking, as he smoked from a quarter to half a pound of tobacco weekly for a considerable time before the tongue became affected. In conclusion, Mr. Brown said that this case showed that it was useless to temporise or adopt any half-measures with this disease. When ichthyosis linguae had developed into cancer, the sooner it was removed the better; and there was danger of removing too little rather than too much of the organ. The patient was then exhibited, and examined by the members present.

*Case of Recurrent Cancer of the Tongue treated by Ligature of the Lingual Artery.*—MR. WARRINGTON HAWARD read notes of this case. A man aged 54 had suffered for nine months from cancer of the tongue, which had invaded the left side of the organ. The root of the tongue, the epiglottis, and the floor of the mouth, were free from disease. The greater part of the tongue was removed by the *écraseur*, and the stump healed well; but at the end of a month a fresh growth appeared at the left side of the root of the tongue and rapidly increased, the submaxillary lymphatics also becoming affected. The left lingual artery was now tied, after which the growth rapidly sloughed and diminished. Six weeks after the operation, the new growth had entirely disappeared and the tongue was very nearly healed. The patient was attacked, however, with erysipelas, followed by suppuration, and subsequently by symptoms of pyæmia, from which he died three months after the ligature of the artery. The case was related as an example of the effects of ligature of the lingual artery upon a cancerous growth of the tongue. The recurrent growth had attained the size of half a walnut, and was rapidly increasing when the artery was tied. From that time, the tumour ceased to grow, immediately became pale, and soon began to slough; gradual separation of the growth took place, and eventually the part healed. It was important to re-



member, however, that a great part of the tongue had been removed, so that the anastomosis between the arteries of the two sides would be greatly diminished. The case confirmed the opinion of Demarquay, Moore, and others, that deligation of the lingual arteries might be usefully undertaken for the starving of cancerous growths of the tongue.

The PRESIDENT thought the cases described were interesting as to the origin of the disease, the plan of operation determined upon, the instruments by which such plan should be carried out, and as to the subsequent treatment of the cases.—Mr. MYERS thought that Paquelin's cautery might be useful in the treatment of these cases; but it must be remembered that, in using a cautery at a white heat, one was likely to have secondary hæmorrhage. In using the cautery for piles, etc., it was always recommended to use the instrument at a dull red or black heat. He related particulars of a case. A man had a wart on the tongue, which was cauterised and kept down with caustic. He made a small incision into the wart, in order to insert the caustic more deeply; subsequently a cancer became developed at the spot, and the man died. Mr. Myers thought a free removal of the growth itself and the surrounding healthy tissue at an early period of the case was of the utmost importance.—Mr. HULKE thought the cases very interesting in many points. The case in which epithelioma first occurred in the lip and ten years afterwards in the tongue, the second growth being quite independent of the first, was very remarkable. He had rarely seen such an independent upspringing of epithelioma in two distinct parts. As to the various plans of operation proposed, he felt indifferent as to the form of cautery. He believed Paquelin's to be the best. Middendorpf's instrument had the disadvantage that, if the knife were used, it became coated with a layer of charcoal from the burnt blood. Operations done with the cautery were very liable to be followed by secondary hæmorrhage. This was not so disastrous in hospitals, where the house-surgeon was at hand, as in private cases. The eschar produced by the heat was usually thrown off after about a week, and hæmorrhage was then very likely to be induced. On the whole, he thought the best instrument was the *écraseur* armed with a thick rope. He gave particulars of a case now proving fatal, the patient being a member of the medical profession, aged 40, who originally had ichthyosis of the tongue. At first, there was no epithelioma, and nothing for several years followed the ichthyosis; then a hardness appeared on the side of the tongue as a tiny point opposite the only remaining molar tooth, which had sharp front and back angles. Mr. Hulke thought the nodule was an epithelioma, and advised its removal. Another surgeon thought it was syphilitic; but the patient was married, his wife and children were healthy, and he had never had any secondary symptoms. He was advised to go home for two months and take iodide of potassium. A third surgeon, however, being consulted, advised excision. The growth was consequently widely removed. Other knots of disease, however, recurred in all directions, accompanied by glandular enlargements. The surgeon should not yield to any entreaty upon the part of the patient, but should remove the whole tongue for cancer. Such certainly was the teaching which he had derived from his cases. As regarded the deligation of the lingual artery, Mr. Haward's case was not an unmixed one. Was not the benefit following the ligation of the artery perhaps partly caused by the attack of erysipelas? Mr. De Morgan used to think a sharp attack of erysipelas produced much benefit in a cancerous growth. In reply to questions, Mr. Hulke said that, in his case, the ichthyosis of the tongue formed a large thick patch, with a number of little filmy patches scattered here and there above and under the tongue. The patient had been a great smoker.—Mr. BRYANT believed that, of the points mentioned, the principal was that of the connection between ichthyosis and epithelioma. He thought most surgeons were agreed that an ichthyotic tongue would become the seat of a cancer; he also thought that, when the cancer appeared, it would be one of a virulent form. In three such cases in which he had removed the original growth, it had returned at the part; in two cases, it had returned in the glands as rapidly growing medullary cancer. In half of the cases of cancer of the tongue, the return of the disease after operation was not in the tongue, but in the glands; and that was an advantage, as it then destroyed life in a manner less distressing to the patient than if it were in the tongue itself. In any case where the disease was far advanced, it was better to remove the whole tongue. He thought the *écraseur*, in one of its forms, was superior to the cautery, and he considered the galvanic better than the ordinary *écraseur*. The best method of introducing the instrument was that from below the jaw through an incision in the median line. The rope then worked in a vertical direction, and the surgeon was able to make the line of incision so much farther back. The knife was not so good an instrument as the *écraseur* for this operation. As regarded the ligation of the lingual artery, that procedure was new to him, but it seemed to have produced some relief.—Mr. MORRANT BAKER said

that he had been in the habit of removing a portion of the lingual gustatory nerve for the relief of cancer of the tongue. When that operation was effected in the ordinary manner, it was very painful to the patient, whilst it was difficult for the surgeon to reach the nerve. He thought, therefore, that, if some operation, a larger one perhaps it might be, could be devised without those drawbacks, it would be highly advantageous. One simple procedure, generally very beneficial, he found to be often neglected; he alluded to the removal of all the teeth, in whatever condition they might be, from the lower jaw opposite the cancer. The benefit was of two kinds: a hard substance was removed which fretted the cancer, and a diminution resulted in the vascularity of the whole of the same side of the mouth. He mentioned the case of a man who had been greatly benefited by such removal of the teeth. In that man, he (Mr. Baker) had since tried to remove the lingual gustatory nerve, but had failed; and he would be glad of any hint enabling him to obtain his end more readily by varying his course of procedure.—Mr. PICK did not quite agree with Mr. Haward as to the best method of exposing the lingual artery. In one of his cases, he had determined to remove the tongue and tie the lingual artery. The patient was fat and the artery difficult to find. The external carotid artery was exposed, and an artery coming off from it, and which was thought to be the lingual, was ligatured. Then the wire *écraseur* was applied and the tongue removed. Secondary hæmorrhage ensued, and the man died from pyæmia, as did Mr. Haward's patient. At the *post mortem* examination, it was discovered that, instead of the lingual, the superior thyroid artery had been tied, the latter vessel in that case having come off higher than usual.—The PRESIDENT said that, as regarded the operation itself, he had never seen a case in which he was unable to remove the tongue through the mouth in the usual manner; it was not necessary to operate from below the jaw, as recommended by Mr. Bryant. By scooping away the mucous membrane from below the tongue, that a groove might be formed for the chain of the instrument to work in, and by passing a needle through the tongue, behind which the *écraseur* could act, he had always removed all that it was necessary to take away. That, he thought, was the best operation. He some time ago came to a decision in favour of the ordinary *écraseur* as the best instrument to employ. He had had no secondary hæmorrhage after the use of any instrument, but he believed it was rather the more likely to occur after the galvanic *écraseur*. After operations with the latter instrument, an eschar was formed on the surface of the wound, the result of the great heat. That eschar had afterwards to be removed. Thus those cases took almost a week longer to recover than the cases operated upon with the chain *écraseur*.—Mr. HEATH said, in reference to the tying of the lingual artery, that the method tried by Mr. Haward was not the best. The hyoid bone was not a good guide to that vessel. The best method of operating was to go into the digastric triangle and cut through the hyoglossus muscle. The surgeon must not, however, go too deeply, as only the mucous membrane of the pharynx lay beneath; and, although the opening of that was probably not productive of much harm, still it was well to avoid it. He agreed with Mr. Hulke as to the liability there was to secondary hæmorrhage in cases operated upon by the cautery. He had had such a case in his private practice last year.—Mr. MORRIS said that he had had occasion to tie the lingual artery three times; and he thought the operation beneath the hyoglossus was preferable to the ligation near the carotid. He had seen both the facial and superior thyroid arteries tied instead of the lingual. Mr. Haward had mentioned the enlarged glands found in his case beneath the jaw, in which there occurred abscess and sloughing. Was it not likely that the benefit that resulted was thereby produced rather than by the ligation of the lingual artery? The disease was at the base of the tongue, where several other arteries besides the lingual fed the parts. He was glad the term "ichthyosis," first suggested by Mr. Hulke, was being generally adopted. He himself had had a patient with congenital ichthyosis. As regarded the mode of operating, the cases suitable for this or that operation must be selected. In the case of cancer in the floor of the mouth, the symphysis even should be divided. The needles devised by Mr. Croft passed well up through the tongue afforded much assistance to the operator.—Mr. BARWELL then briefly replied, and mentioned that he should not again use the galvanic *écraseur*.—Mr. G. BROWN also made some remarks; and Mr. HAWARD said that he had only suggested that the lingual artery should be sought at its origin, where there was difficulty in finding it beneath the hyoglossus. That muscle and the adjacent parts might be so changed by disease as to be almost unrecognisable. As regarded his own case, the growth in the tongue had begun to diminish before the erysipelas supervened, also before the sloughing and the pyæmia which had produced the sloughing. Ligation of the lingual artery certainly had great effect on the vascularity of the tongue.



## HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 1ST, 1877.

T. CARR JACKSON, F.R.C.S., President, in the Chair.

*Fracture of Femur of Child during Labour.*—Dr. LANGMORE, jun., related the case of a breech-presentation in a multipara, where the child was so jammed into the pelvis by the vigorous pains that a thigh was fractured in extracting it. The liquor amnii had escaped early.—Mr. OWEN, the President, and Dr. GRIFFITH took part in the discussion; agreeing that sometimes such accident is unavoidable.

*Cardiac and Renal Dropsy.*—Dr. MILNER FOTHERGILL related a case of combined cardiac and renal dropsy in a man aged 69. He was admitted into the West London Hospital on January 25th, and discharged on February 17th. The treatment consisted of purgatives, the use of the vapour-bath, and digitalis. The quantity of urine rose from half-a-pint in the twenty-four hours to three quarts under the treatment. The case was of interest, because there was a distinct mitral complication.—Dr. C. J. HARE said that digitalis was a drug which acted with great certainty.

*The Sphygmograph and Aortic Aneurism.*—Dr. MAHOMED read a paper on the value of the sphygmograph in the diagnosis of aortic aneurism. He described three normal pulse-waves: 1. The percussion; 2. The tidal; and 3. The dicrotic. He then showed the changes produced by high or low arterial tension. The importance of ascertaining the amount of tension in cases of aneurism was pointed out. The signs of aneurism in a tracing were as follow: 1. Diminution of volume of the pulse-wave; 2. A sloping upstroke; 3. Impairment of percussion-wave; 4. Obliteration of dicrotic and other secondary waves; 5. Inequality of pressure requisite to obtain a perfect tracing on the two sides. The sphygmograph was useful as a means of accurate diagnosis; and, from its indicating the amount of arterial tension, pointed to the right remedial measures to be adopted.—Mr. CRIPPS LAWRENCE related a case where the subclavian artery was tied for aneurism with fatal consequences, when really it was a fatty tumour pressing on the artery.—Dr. FITZPATRICK, Dr. HARE, and the PRESIDENT took part in the discussion which followed; after which Dr. MAHOMED replied. He said that the instrument would never be essential to the practitioner. It would not tell the form of valvular disease; but it would indicate the amount of disease in many cases.

## MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, JANUARY 3RD, 1877.

J. D. GILLESPIE, M.D., President, in the Chair.

*Injury of the Knee-Joint.*—Mr. JOSEPH BELL showed a little girl, who, two months ago, while playing at the top of a stair, fell to the bottom, a distance of forty feet. There was a railing in a recess at the foot of the stair; and on one of the spikes of it she was caught, and, turning over, hung suspended. She was immediately seen by Drs. Young and Cuthbert, who carefully protected the wound with lint steeped in carbolic oil. On examination at the Infirmary, it was found that the spike had entered the popliteal space, and without injuring the blood-vessels, had split the bone and passed out again on the outer side. In this way, the knee-joint was opened, so that a finger could be passed in. The whole wound was washed thoroughly with solution of carbolic acid (one in twenty), the edges brought together as well as possible, and free drainage, with antiseptic precautions, used. The highest temperature she ever had was 101 deg. Fahr. The result was that the child had a movable joint and could walk well, any stiffness being merely muscular. Ten years ago, Mr. Bell would have amputated without hesitation. He had certainly never seen a worse case saved. The only other wound she sustained was a slight cut on the head.

*Rupture of Ligamentum Patellæ.*—Mr. CHIENE showed a man admitted into Mr. Lister's wards in the summer for a rupture of the ligamentum patellæ. The patella was drawn up so as to lie over the lower end of the anterior surface of the femur. The limb was placed on an inclined plane with a footpiece, and adhesive plaster put on the anterior and lateral aspects of the thigh. By means of India-rubber, the footpiece and lateral parts of the plaster were joined; and in this way the patella was drawn down. The recovery was perfect after eight weeks' confinement. He had no doubt that the same plan would answer in fracture of the patella.

*Shot in a Tooth.*—Dr. ROBERTS showed the fang of a tooth with a pellet of shot embedded in it. The young lady from whom he had obtained this had been accidentally shot five or six years ago. From that time, the tooth had gradually decayed until now, when it had come

away. The lady informed him that there were still a few pellets elsewhere.

*Oil of Turpentine in Sciatica.*—Dr. JAMIESON read a paper on the uses of the oil of turpentine in sciatica. He regarded cases of sciatica as referable to three classes, viz.:—1. Those cases where it was due to peripheral irritation of the sacral plexus, generally in branches near the genital organs; 2. Those cases occurring at the age of tissue-degeneration; 3. Those cases dependent on a specific poison, either gouty, syphilitic, etc. In cases due to the cause given under the second head, he had great success with oil of turpentine, viz., in ten out of eleven a cure was effected. The turpentine required to be given in two-drachm doses, with castor-oil, mucilage, and cinnamon-water, and repeated three or four times.—Dr. YOUNG had used turpentine in cases like Dr. Jamieson's after hearing the late Dr. Warburton Begbie's paper. In half-drachm and drachm doses, he had found it of no effect. But he would again try it in the way recommended in the paper. The best treatment, so far as he knew, was iodide of potassium pushed to iodism. This was often very effectual in relieving pain. He had got good results—the best results indeed—by the use of acupuncture. In every case, of course, it was important to remember that they had to consider the constitutional state of the patient. In the case of a lady, he had found turpentine in drachm doses of no effect. Benefit was obtained from iodide of potassium in doses varying from four to six grains thrice daily; and, after a three months' stay in England, the pain never returned. He could not say whether the iodide of potassium or change of air had been the cause of cure, but probably both had been of advantage.—Dr. C. MUIRHEAD, during the last week or two, had in his wards at the Infirmary three cases of sciatica. In the first case, two drachms of turpentine were administered every second night on three occasions, but no castor-oil was given along with it. No effect followed. In Glasgow, where the patient had been previously, almost every remedy except turpentine had been tried. He next injected chloroform in five-minim doses, thus relieving the pain almost immediately, but producing a feeling of numbness not yet gone. He had also in this case used iodide of potassium in twenty-grain doses thrice daily, on the ground that there might have been thickening of the nerve-sheath at the sciatic foramen. The use of acupuncture-needles gave him most relief; but he believed the case was one where the sciatica would continue during the man's life. In the second case, a blister was applied over the tendo Achillis. He had found it of most advantage when applied in this situation, as it was nearer the branches of the nerve than when applied over the gluteus maximus. In the third case, he had used the needles and iodide of potassium with considerable benefit. He wished to allude to the first case where he had used turpentine. Perhaps, the want of success was due to the non-employment of castor-oil along with it.—Dr. G. W. BALFOUR said that it would be a pity if anyone went away with the idea that turpentine was a specific for sciatica, or that sciatica was anything more than a symptom. In the last case he had treated, the remedy he had found most effectual was quinine in large doses. He completed the cure by large doses, up to thirty minims, of liquor arsenicalis. The patient had been treated in the Isle of Man by morphia; but had only recovered sufficiently to come to Edinburgh. His reason for giving the quinine was that there was evidence of an attack of malarious fever in Burmah. As to the purgative action of turpentine and castor-oil, it had long ago been pointed out by Sir R. Christison that they formed the mildest of purgatives. Syme's plan, indeed, was to give croton-oil; and this was especially good where there was constipation.—Dr. JAMIESON thanked the members for the kindness with which they had received his paper. His experience of iodide of potassium had not been favourable. He did not wish turpentine to be held as a specific, but as useful in those cases of sciatica which occurred at the age of tissue-degeneration.

*Badly United Fracture.*—Mr. JOSEPH BELL read an account of a case of badly united fracture. A young gentleman, aged 12, was knocked down by a horse, and his left thigh broken within four inches of the hip. It was treated by a quack with small splints, with the result, after eight weeks of pain, of shortening of the limb to the extent of five inches, with angular projection of the bone and rotation outwards of the foot. Mr. Bell, after unsuccessful attempts to refracture the bone in the usual way, and also by Mr. Butcher's osteoclast, cut down on the angle with antiseptic precautions, sawed the bone nearly across, then broke it thoroughly across his knee, and replaced it in proper position, retaining it by a heavy bag of shot and extension by pulleys and plasters. The deep wound healed absolutely by first intention, and the result was most excellent, only one inch of shortening remaining.—The PRESIDENT thought it was a most interesting paper on the treatment of a troublesome case.—Mr. CHIENE was glad that Mr. Bell had adopted the true treatment of such cases, viz., that of cutting boldly down on the part, and not the method of sawing sub-



cutaneously and having the track of the wound filled with sawdust. The case seemed to him a perfect one; and he only wished surgeons elsewhere would follow such a plan, and avoid others not devoid of risk.

**Pneumothorax in Phthisis.**—Dr. ANGUS MACDONALD read a paper on three cases of pneumothorax occurring at an early stage of phthisis. After pointing out how pneumothorax was generally regarded as a late symptom of phthisis, Dr. Macdonald gave details of each of his cases. In the first one, subsequent consolidation at the left apex indicated that probably the pneumothorax was due to tubercular softening. The patient, however, recovered and is now well. In the second case, death followed from exhaustion. In the third, no trace of tubercle could be found; and, therefore, the exact cause of the pneumothorax could not be made out. In the necropsy, however, only the chest was allowed to be examined. In all of the cases, the existence of the pneumothorax was beyond a doubt.—Dr. SANDERS said that, as to the relation of pneumothorax to phthisis, while it undoubtedly occurred in the latter stages, it was often one of the first symptoms of consumption, using this term not in the special sense of a tubercular or bronchopneumonic process, but applying it to cases where there was some yellow deposit at the free surface of the lung softening and breaking down. The pneumothorax occurred in the early stages, because there were no adhesions; while in the later stages it was prevented by these. Some accordingly believed that pneumothorax was most common in the early stages, perhaps, because it was then more important and striking than when it occurred at an advanced period of the disease. He thought the second case was like an early giving way of a bronchopneumonic deposit at the margin of the lung. The anxiety as to a pneumothorax arose not from the mere presence of air in the pleural cavity, but in the underlying cause, whether tubercular or not. Of the three cases, the first was the most interesting; because, although we do meet with permanent cures, yet the recorded cases are rare. It was important, too, from the subsequent consolidation of the apex giving rise to the anxiety that the previous pneumothorax had been due to tubercular softening. From the favourable termination of the case, it was probably something simpler than a cheesy pneumonia. This, however, did not negative the probability of its having been such a lesion running a favourable course. Perhaps, as Dr. Macdonald had said, it was something simpler. The last case was interesting because rare. In the necropsy, only the chest was examined; but there might have been some cause elsewhere for the pneumothorax. It may have been due to a local bronchopneumonia that sloughed away, thus showing that a pneumothorax might result from a disease not constitutional. Some other points, such as the *tintement métallique*, he did not allude to; but he wished finally to express the interest with which he had listened to the paper.—Dr. A. MACDONALD said that the difficulties which Dr. Sanders had suggested had been those which had presented themselves to Dr. Warburton Begbie and himself. In the first case, the previous good health, slow convalescence, and present state of health of the patient made him think it was not primary tubercle, but a slight giving way of the lung or a bronchopneumonic process. The second case was purely tubercular. In the third case, he had found no tubercle, and no evidence of a septic origin. After alluding to the bearing of this last case on life-assurance, Dr. Macdonald concluded by thanking the members for their kind criticism of his paper.

#### GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, JANUARY 9TH, 1877.

JOSEPH COATS, M.D., President, in the Chair.

**Aneurism of Aorta.**—Dr. MCVAIL showed an aneurism of the first part of the aorta, opening into the right ventricle just at the pulmonary valve, one segment of which was stretched over the aneurism. The patient, a blacksmith, was admitted into the Western Infirmary on August 30th with cough, shortness of breath, and dropsy, of four months' duration. There was a blowing murmur after the first sound, heard best at the apex of the heart. The second sound was then clear; but, nine days after admission, it too became merged into a soft blowing murmur, heard best over the right ventricle, but not audible over the second right costal cartilage. No new symptoms appeared with this new murmur, nor was the cyanosis unusually marked before death, which took place on September 22nd. The first murmur might have been due to incompetency of the mitral valve from dilatation of the left ventricle; the second murmur probably to the bursting of the aneurism into the ventricle.

**The Laryngoscope in Diagnosis of Aortic Aneurism.**—Dr. ROBERTSON showed parts from a case illustrative of the value of the laryngoscope in diagnosis. The patient, a female aged 50, was under treatment in

the Town's Hospital for hoarseness, dyspnoea, and cough. A slight and doubtfully limited dulness was detected over the manubrium sterni; and the laryngoscopic examination, repeated by Dr. Foulis, showed total paralysis of the left vocal cord; the right cord, at each intonation of A, passed the middle line and overlapped the flaccid left cord. There was no cardiac murmur until just before death, which occurred suddenly. At the necropsy, an aneurism of the aorta was found compressing the left bronchus, and just on the point of bursting into it; the left laryngeal nerve was pressed upon.

**Cystic Kidneys.**—Dr. FOULIS showed kidneys from two cases of cystic disease of these organs. In the first case, the patient, a clerk aged 29, had been under treatment by Dr. Charteris, in the Royal Infirmary, for chronic pneumonia. During life, there was nothing to induce suspicion of the kidneys. The kidneys were large, pale, and thickly set everywhere with small cysts averaging about the size of a horse-bean; their contents were clear and watery, and a trace of albumen was detected in the fluid. The renal tissue, under the microscope, appeared to be in a condition of diffuse nephritis. The two kidneys weighed together twenty-eight ounces. The origin of the cysts was regarded as due to obstruction: the notable point in the case was the absence of symptoms during life. The second case was that of a dwarfish strumous lad, aged 19, under the care of Dr. Scott Orr. The kidneys were enormous, and only here and there traces of renal tissue could be seen. The cysts averaged the size of a hazel-nut; most of them contained clear fluid, but in some the fluid was dark and syrupy. The two kidneys weighed three pounds thirteen ounces. The cystic condition was evidently congenital. The renal tissue, under the microscope, seemed to be in a state of hypertrophy, *i. e.*, the tubules were large and the epithelium abundant and well defined. The heart was enlarged and dilated.—Dr. SCOTT ORR said the patient had always been delicate. Five years before admission, he had an attack of scarlatina, followed by temporary dropsy. Four weeks before death, the dropsy reappeared. There were lumbar pain, cough, vomiting and diarrhoea, and insomnia. The urine was pale; specific gravity 112; quantity in twenty-four hours, one pint and a half; it contained a small amount of albumen, a few triple phosphates and hyaline casts.—Dr. FINLAYSON referred to the fact that albuminuria was sometimes intermittent; and also that the morning urine was occasionally free from albumen, while that of the afternoon might contain it. He indicated the possibility of there having been an intermission in the albuminuria in the first case, as it was difficult to see how such a degree of kidney-disease could exist without alteration of the urine.

**Pyelonephrosis.**—Dr. JOSEPH COATS demonstrated the parts from a case of unilateral pyelonephrosis, of old date, with secondary amyloid degeneration of many organs, including the other kidney, liver (which weighed six pounds), spleen, alimentary tract, tongue, thyroid gland, and lymphatic glands.—Dr. GAIRDNER gave clinical observations on this case. The patient was a female aged 37. The chief interest of the case, in respect to diagnosis, arose from the difficulty of arriving at a conclusion as to the source of the pain, which was by far the most prominent symptom on admission, and which might have been either of hepatic origin or connected with the urinary organs, the known seats of organic disease. The great enlargement of the liver was easily detected; and, from its passing far into the left hypochondrium, the splenic dulness could not be distinctly separated from it. The hepatic dulness measured nine and three-quarter inches vertically in the line of the right nipple, and eight inches in the line of the left nipple. There was distinct tenderness on pressure (explained by the intimate adhesion between the liver and right ureter); and the descriptions given of the pain made it quite impossible during life to regard this as otherwise than, in part at least, hepatic. On the other hand, no distinct nodulation or irregularity could be made out on the surface of the liver; and had the pain been absent, or more clearly referable to the kidney, the diagnosis would have conformed to that of amyloid enlargement of the liver. There was a peculiar sallow complexion, with great emaciation, diarrhoea, vomiting, and an obscure (perhaps fallacious) statement as to past jaundice, and also as to blood having appeared frequently in the vomited matters and in the stools. The urine was throughout highly albuminous, of specific gravity 1014-18, always alkaline, and containing abundant pus, triple phosphates, and oxalate of lime crystals, but, as far as observed, no tube-casts. Its quantity could not be estimated, owing to the continuous diarrhoea, which, with the vomiting after food, prostrated the patient very rapidly and led to death by exhaustion (without any uræmic symptoms) within a fortnight after admission. The temperatures were never febrile, and varied little if at all from the normal. There was no evidence of tubercular disease, either in the lungs or elsewhere. It was rather remarkable that, although the history of pain was distinctly referred by the patient to so remote a date as ten years, she had married and had three normal deliveries during the first half of



that interval, and had always had regular catamenia since. Viewing the case in the light of the *post mortem* examination, there can be no doubt that all the multiplied types of amyloid degeneration observed in the organs were of secondary origin; and that the original disease, determining all the rest, was the chronic suppuration of the right kidney, which had completely destroyed its secreting structure and thrown the burden of work exclusively on the opposite organ. The only treatment that afforded any relief was the use of milk diet with lime-water, which for a time restrained the diarrhoea.

*Epicanthus*.—Dr. REID showed a case of epicanthus, on which he had operated.

*Eggshell in Rectum*.—Dr. GEORGE BUCHANAN showed a triangular piece of eggshell, which he had removed from the mucous membrane of the rectum, immediately within the sphincter; it was impacted, and had given rise to symptoms like those of piles. Dr. Buchanan thought it was the only case of the kind on record; and alluded to the possible origin of fistula by irritation of fish-bones or similar sharp-pointed bodies impacted in the lining of the rectum.

## PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, FEBRUARY 3RD, 1877.

THOMAS HAYDEN, F.K.Q.C.P., President, in the Chair.

*Hypospadias*.—Mr. F. T. PORTER showed a specimen in a male aged about 45. A pin-hole opening existed one inch behind the glans penis in the inferior wall of the urethra. The testicles were indurated, and their substance was converted into a cheesy mass.

*Fracture of Spine*.—Dr. E. H. BENNETT exhibited the spine of a healthy man aged 29, who fell from a scaffolding last summer. Paralysis of the abdominal and intercostal muscles; complete paralysis of the lower extremities, with retention of urine, priapism, and constipation; partial paralysis of the arms; and anæsthesia, from the mammary regions downwards, were the prominent symptoms at first. There was slight depression of the spines of the vertebrae in the lower cervical region; but, viewed in the light of the subsequent history of the case, it seemed unlikely that any fracture existed in that region. As time went on, neuralgic pains took the place of anæsthesia in the arms, and at last sensation returned. The anæsthesia in the lower limbs also became less. The diagnosis, based on the symptoms and progress of the case, was blood-effusion in the upper dorsal region and a fracture of the spinal column somewhere about the mid-dorsal region. The man lived for two months, then dying from perinephritic abscess, the result of continued cystitis. The necropsy showed the pathological conditions in the spine to be exactly the reverse of those diagnosed as stated above. The bodies of the sixth and seventh cervical vertebrae were fractured, a wedge-shaped piece of bone being forced inwards in the spinal canal, so as to pinch the cord. The cauda equina was occupied by a dense blood-clot, the outside of the theca vertebralis being also covered with blood.

*Mediastinal Cancer*.—The PRESIDENT exhibited the viscera of a tall railway labourer aged 34, of active and temperate habits, who became weakly in October 1876. An obscure pain in the back, some loss of appetite, and slight mara-mus were the chief symptoms. It was found that the loss of appetite was more apparent than real—that he felt hungry, but could not swallow. There was dysphagia, except for semi-fluid food. His pulse was weak. He was dejected and most apathetic. He suffered from a teasing cough, with slight expectoration, which was tinged with blood on one or two occasions. The physical signs were a prominence at the midsternum, with partial dullness on percussion, and tracheal breathing. The radial pulses were equal in volume. The left pupil was markedly contracted. Two hard lymphatic glands were found over the left clavicle. The diagnosis of carcinoma of the anterior mediastinum was made, being based on—1. The presence of the hard glands above the clavicle; 2. The sternal prominence, with tracheal respiration without impulse or morbid cardiac sounds; 3. The profoundly apathetic state of the patient—a point emphatically insisted on by Dr. Stokes; and 4. The gradual marasmus. The patient died on January 31st. About a quart of blood-stained serum lay in each pleura, and about eight ounces of a similar fluid in the pericardium. The liver was greatly enlarged. The spleen and kidney were also large. A mass of scirrhus engaged the pancreas. The surface of the lungs was studded over with nodules of cancer. The heart was fatty on the surface. A large mass of scirrhus lay in the anterior mediastinum and dipped into the posterior mediastinum, where it passed down and embraced the œsophagus. Just above the diaphragm, the lumen of the œsophagus was constricted to the size of a goose-quill.

## SELECTIONS FROM JOURNALS.

### SURGERY.

*INTUSSUSCEPTION—SEPARATION AND EXPULSION OF SEVENTEEN INCHES OF THE SMALL INTESTINE*.—Dr. E. P. Gerry (*Boston Med. Jour.*, Dec. 28th) reports the rare case of a man aged 71, who, after an illness of three weeks, passed seventeen and one-eighth inches of small intestine, and finally recovered. The constitutional symptoms attending the process of invagination and separation of the intestine were comparatively trivial; so much so, that some of the consulting physicians doubted the existence of intussusception.

*TREATMENT OF INTUSSUSCEPTION BY FORCED ENEMATA*.—Dr. Thomas Hawkins, Physician to Bellevue Dispensary, is reported by Dr. F. J. Garbit, in the *Medical and Surgical Reporter*, to have successfully treated three cases of intussusception, or invagination, by means of fluid injections *per rectum*. The patients were placed in the chest-and-knee position, and the instrument used an ordinary Davidson's syringe. Contrary to the injunctions of Flint, "that the injections should not be pushed beyond the point at which they are borne without much suffering", Dr. Hawkins found it necessary to use all the force of which the instrument was capable. He is "convinced that success may be achieved in nine cases out of ten, and the strangulated intestine restored to its normal position by the use of forced enemata; and, unless there be some well-grounded apprehensions of gangrene, in every case of intestinal obstruction, whether suspected, incipient, or developed, the injection of fluids, judiciously and properly directed, need be the only means of cure invoked, except the occasional administration of an anodyne". The three rules essential to success are: 1. The use of the utmost force possible, but with great care and caution; 2. Persistent and continuous repetition of the injection until the passage is effected; 3. The adoption of a suitable position for the patient.

*USE OF CAUSTIC ARROWS IN PRACTICAL SURGERY*.—Dr. J. C. Hutchinson (*Proceedings King's County Medical Society*, Jan. 1877) answers the question as to the use of caustic arrows (Maisonneuve's *flèches*) in surgery, as follows. 1. Zinc arrows should be used when the disease—especially malignant disease—cannot be taken away clean by the knife, more particularly if there be a fetid discharge from an open sore, with hæmorrhage and pain, which is gradually wearing out the patient's strength, as in uterine and other cancers. 2. If the tumour have more width than thickness, involve the integuments, be ulcerated upon its surface, be situated at the bottom of an old wound and fixed, as it were, against the bones; if, in a word, it be not possible to remove the disease without causing considerable loss of integument, then the caustic should be preferred. 3. In those patients who absolutely refuse extirpation by the knife, the use of caustic arrows is admissible, even though the skin be sound, and the tumour movable and capable of being removed by the scalpel so as to leave a wound whose edges can be more or less approximated. 4. When erysipelas, pyæmia, septicæmia, or puerperal fever are prevalent, especially in hospitals, operations should be done with caustic arrows, in preference to the knife, in suitable cases. 5. Cauterisation practised as here described, is entitled to occupy a prominent place among our surgical resources. The arrows have the following composition: chloride of zinc, one part; wheat flour, three parts, and water to make a paste. The paste is made into cakes, and from this arrows of any desired shape are formed. These arrows are introduced into the substance of the tissue to be destroyed.

*TETANUS TREATED BY NERVE-STRETCHING*.—Paul Vogt relates in the *Centralblatt für Chirurgie*, No. 40, 1876, the case of a man aged 63, who received a contused wound in the hand. Healing was going on favourably when, on the fourteenth day, trismus set in; and tetanus appeared two days later. Nine days after the commencement of the tetanus, Dr. Vogt loosened the cicatrix in the hand, laid bare the brachial plexus in the triangle between the trapezius, omohyoid, and scalenus muscles, divided the nerve-sheath, which was very red, and energetically stretched the brachial plexus in both directions. From this time the tetanus ceased, slight twitchings occurring only twice subsequently during exertion. Healing went on favourably.

*ELASTIC COMPRESSION BY SPONGES*.—Professor C. Heine (*Prager Med. Wochenschrift*, 1876, No. 32) has for some time used compression by means of sponge in order to produce absorption in cases of chronic, serous, fungous, and deformative inflammations of joints, sheaths of



tensions, and burst. He usually applies a plaster of Paris bandage, in which an opening is left at the point where pressure is to be applied. A piece of dry sponge, cut to the proper size, is then laid on the part, and compressed by a roller to about one-tenth of its thickness. The plan has, he says, been very successful in the above-mentioned affections; and he has also cured a very large cavernous aneurysm by elastic pressure applied in the same way.

### THERAPEUTICS.

**TREATMENT OF CROUP BY EUCALYPTUS.**—Dr. Walcker (*Gazette Médicale de Strasbourg*, January 1st, 1877) treats pseudo-membranous laryngitis by tincture of eucalyptus globulus. He begins by an emetic of ipecacuanha, of which the dose varies according to age. This emetic is given morning and night once. He no longer employs tartar emetic in these cases, because it produces too much depression and causes diarrhoea more often than ipecacuanha. This emetic relieves at the outset the gastric disturbance which ordinarily accompanies croup, calms the fever a little, and gives immediate relief. It can only act in this way, and is incapable of expelling the false membranes. Two hours after the emetic, he gives every hour a teaspoonful of a syrup composed of 38 parts of simple syrup and 10 parts of tincture of eucalyptus for infants. He has given as many as fifteen to twenty teaspoonfuls in the case of a child six years old. When the patient sleeps at night, he should not be awakened. At the same time Dr. Walcker gives as food milk, coffee, eggs, and sopped bread. This alimentation is necessary; for cases of general diphtheritis or localised croup occur much more often in delicate children, with more or less scrofulous and lymphatic temperament and a feeble and delicate constitution, than in full-blooded, strong, and robust children.

### MEDICINE.

**THE RÂLE MOUILLÉ.**—Dr. Milon alleges that he has ascertained the presence of a special *rôle* in pulmonary affections, which he calls *rôle mouillé*, and which has, in his opinion, the highest importance from the point of view of diagnosis and prognosis. As a diagnostic sign, it denotes the passage of pneumonia to the third stage; that is to say, the transition of red hepatisation to grey softening and to purulent infiltration of the pulmonary tissue. As a prognostic character, this sign is a certain and invariable presage of death within a very short time; in fact, patients succumb within ten or twelve hours after its appearance. The following are the characters of this *rôle*. It is a moist *rôle*, in small bubbles of equal extent. These bubbles are a little larger than those of the fine crepitant *rôle*. They have some points of resemblance to the mucous *rôle* and some cavernous *rôles*, but they differ essentially from them in the following respects. First, the *rôle mouillé* is confined exclusively to inspiration. Secondly, it is much softer and smoother than the mucous and cavernous *rôles*. Thirdly, the opening or rupture of the bubbles occurs isochronously with inspiration, and produces a sensation quite peculiar and quite homogeneous. Fourthly, there are not, as in the mucous *rôle*, large and small bubbles, but all are of the same volume.

**ON TEMPERATURE IN ECLAMPSIA.**—Two theses, recently sustained before the Medical Faculty in Paris by MM. Diendé and Herbart, bring new facts in support of the opinions urged by MM. Bourneville and Budin. Bourneville, while studying the temperature in diseases of the nervous system, has arrived at the conclusion that, in eclampsia, the temperature rises from the beginning to the end. If the disease is to terminate fatally, the temperature continues to rise, and reaches a very high figure. On the other hand, if the attacks disappear, the coma diminishes or ceases, the temperature will abate progressively, and reach its normal grade. The importance of these conclusions, from a diagnostic point of view, is evident, and M. Bourneville has succeeded in clearly distinguishing eclampsia from uræmia, in which latter affection the temperature falls progressively. The new observations by Diendé and Herbart confirm these conclusions. However, two exceptional cases, reported by the former, seem to show that the number of paroxysms is, perhaps, less important in a prognostic point of view. In considering the gravity of the disease, the paroxysm is but trifling compared to the temperature, which is everything. The course of the temperature is of great importance in establishing the prognosis and treatment, as was first pointed out by M. Budin (*Gaz. des Hôp.*, 1872), and the physician who carefully takes the temperature every hour or two will be materially aided in determining these.—*Thèses de Paris*, 1875.

### BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

### BRITISH MEDICAL JOURNAL.

SATURDAY, MARCH 31ST, 1877.

### ON UNCONSCIOUS AND AUTOMATIC ACTIONS AFTER EPILEPTIC FITS.

I.

WHEN any one is killed or is savagely treated, the public naturally thinks, first of all, that the perpetrator ought to be punished, under whatever circumstances the crime may have been committed. The scientific explanations given by medical men of motiveless crimes are heard with impatience. To many, these explanations seem mere curious thinkings from one-sided study; the common sense—that is, the superficial—view of the cases leading to the ready-to-hand explanation that the crimes arise from the innate depravity of the human heart. But, when any one does not accept the obvious explanation of a thing, it is more charitable to suppose that this does not arise because it has never occurred to him. The medical inquirer recognises “innate depravity of the human heart”, although he may not use such an expression. It is because this ready-to-hand explanation does not always suffice, that he goes further a-field; and when it may, when rendered into scientific language, be said to suffice, he can pity the criminal who inherits his depravity. Society, in protecting itself, must do no injustice. Scientific jurists are bound to listen to what careful students of nervous disorders have said on the mental state of certain quasi-criminals. Such researches as those of Nicolson (*The Morbid Psychology of Criminals, Journal of Mental Science*, 1873-4) ought to be conscientiously studied by jurists as well as by doctors; and, as a preparatory study of crime, we should pay great attention to the mental state of actual savages, as well as to that of our own criminal class, “many of whom are survivals in culture”. In this regard, we commend to our readers what Herbert Spencer has written on Primitive Man in the first volume of his *Principles of Sociology*.

A recent case of homicide by an epileptic is the occasion of the above remarks; but, as that case has been settled to the satisfaction of the profession, on the report of Dr. Risdon Bennett and Dr. Crichton Browne, if not to the satisfaction of the public, we shall, in what follows, consider the question of responsibility of epileptics without reference to that, or indeed to any case which has been at any time the subject of legal investigation.

It is well known to all alienist physicians that epileptic patients are often furiously maniacal after their paroxysms; and, according to most authorities, epileptics sometimes become suddenly maniacal, instead of having an ordinary epileptic paroxysm. We believe that the mania and all other suddenly occurring elaborate actions in epileptics are *post-paroxysmal*. There is, we think, a prior paroxysm, however slight. For the practical purposes of this article, either view, with a little change of terms, may be taken. During the mania, the patient may commit some “crime”; if he do, he ought, being unconscious, to be held irresponsible.

At the present, we intend to speak only of the mental state of epileptics just after their paroxysms. Before we do so, let us acknowledge the great debt which not only our profession, but society, owes to Falret for the work, at once highly practical and scientific, which he has done on this subject. To introduce our subject properly, a few prefatory remarks are needed.



In an article entitled "The Comparative Study of Drunkenness" (May 16th and 23rd, 1874), we urged the importance of recognising that, under very different pathological conditions of the nervous system, persons act elaborately and yet unconsciously. The process which occurs during the epileptic paroxysm is only one of several which we there called "reducing" processes. The patient in his seizure is rendered more or less defectively conscious or entirely unconscious, and is thus at the same time reduced to a more or less automatic condition of mind. Using popular but accurate language, he is then not fully himself, and is, therefore, irresponsible for what is done. We will briefly mention our view as to the nature of the process by which the "reduction" of which we speak in epilepsy is effected. It must be premised that Todd and Alexander Robertson of Glasgow have explained the temporary *paralysis* which sometimes occurs after a severe epileptiform convulsion, as being owing to temporary exhaustion of nerve-centres for the parts paralysed by the severe discharge which caused the convulsion. We apply this hypothesis to the cases now under remark. We suppose that there is *in* the paroxysm a severe nervous discharge, beginning in the very highest nervous arrangements; and, *after* the paroxysm, these and connected parts of the brain are temporarily exhausted: hence the post-epileptic loss of consciousness. The positive state, the post-epileptic mental automatism, is the outcome of activity of next lower centres, which (Thompson Dickson's hypothesis) are *healthy except for insubordination from loss of control*. It is of the effects of this epileptic reducing process only that we now speak. We must again insist that, be its nature what it may, it is the most *rapid* of all "reducing" processes. The patient is rendered unconscious, and is necessarily reduced simultaneously to a mere automatic condition of mind in a few seconds. In an exceedingly brief period, the patient, when in the midst of his usual health, is rendered irresponsible for what is done, and under all sorts of circumstances—in bed, at his work, in church, etc. We believe that the busy or furious character of the mental automatism is owing to the rapidity of the reduction. Again, there are all "depths of reduction", and thus all degrees of affection of consciousness, and correspondingly all degrees of elaborateness of the mental automatism. The condition in this temporary insanity, as in all cases of insanity, is duplex. Negatively, there is defect or loss of consciousness, and positively automatic mental action, *the two varying inversely*. The less deep the affection of consciousness, the more elaborate is the mental automatism. As our hypothesis would put it, the less deep the exhaustion from the highest nervous arrangements, the more high are the centres left uncontrolled and over-active.

The post-epileptic condition most often described is deep loss of consciousness, with that low degree of mental automatism which is called mania. It is an unfortunate thing that too exclusive attention is given by most writers to such severe cases, and, in medico-legal inquiries, to cases where the mania issues in "crime". Trousseau, Howden, and some others have, however, handled the subject more widely than this. Dr. Thorne Thorne, in the *St. Bartholomew's Hospital Reports*, has recorded a case of post-epileptic automatism of far greater medico-legal value than a score of cases of ordinary epileptic mania. Perhaps the most valuable of all cases of the kind is one recorded by Weir Mitchell in a paper on the Use of Nitrite of Amyl. Everything this physician writes is of the best; we regret to say that our reprint of his paper does not tell us where it was published.

There are all degrees of "reduction" by the epileptic process, and many very much slighter than in epileptic mania, and therefore with a much more elaborate mental automatism. In slight "reductions", the mental automatism issues very often only in a busy caricature of innocent normal actions, not in a mere vague mass of fury. In order to show clearly the nature of the quasi-criminal cases, we must pay great attention to post-epileptic actions which are only grotesque. Hence it is that in this article we use the term "mental automatism" to cover all sorts of post-epileptic actions and even thoughts. We use it for actions so different as blowing the nose on a piece of paper and furious

mania. What we wish to show is, that *exceedingly elaborate actions may be done by epileptics when unconscious after their fits*. For this general purpose, we consider cases in which the post-epileptic actions are trumpery, because from them we hope to establish the principle without fear of the imputation of emotional bias. In such cases, the doctor's feelings cannot be supposed to prejudice him in favour of his patient, and social feeling is not aroused at all; we can study them calmly.

There are cases in which the mental automatism does not rise into actions of any kind. It is then significantly an exceedingly elaborate, although vague, mental state. It occurs in, or, as we believe, immediately after, a trifling paroxysm; or it may occur at an early part of a severe one. It is often described as being like what is called "remembrance" in healthy people. More than once the writer has heard a patient say that, before the sad significance of this feeling was known to him, it was pleasant, and that he "encouraged it". It is certain that, in some cases of epilepsy, the patient can at the onset of the paroxysm, as he may put it, "shake off the fit", or he may let himself go—"encourage it"; or he may remark, "It gets the better of me". This is important medico-legally, and deserves a passing allusion. Sometimes the mental state is too vague to be approximately explained by the patient. Thus Dr. Joseph Coats, in a paper of great excellence (this JOURNAL, November 18th, 1876), records the case of an intelligent epileptic whose fit was nearly always ushered in by a "thought". "The patient cannot tell what the thought is, but is confident that it is always the same. He always recognises it at once when it occurs; and he tries to fix it in his memory, but he invariably forgets it when the fit is over." Physicians who have seen much of epilepsy can adduce similar instances of "thoughts" premonitory of seizures in educated and intelligent epileptics. Attention to such things is of great practical as well as scientific importance; for sometimes such "thoughts" occur in or after very slight fits, long before the patient has any epileptic seizure which is severe enough to alarm him or his friends.

Let us next speak of more definite mental states, less elaborate (but yet very elaborate) than those comparable with "remembrance". We give two instances from the case of a medical man, whose written permission we have to make use of the facts of his case. He is subject to severe epileptic attacks with tongue-biting, and also to very slight transitory seizures. One day, when going with his wife to see a cathedral, he had suddenly a slight seizure when in the close. For a few seconds, as he expressed it, he did not know what he was about. He asked his wife if they should not inquire for the house-keeper, he having momentarily the idea that they were going to see Buckingham Palace. Now this attack was so slight and transitory, that his wife observed nothing wrong. She thought he was joking, and said, "Nonsense, we need not ask for anybody". On another occasion, when at a midwifery case, he had a very transitory dream-like state, which nearly led him to attempt something which would have involved him in fearful odium: he imagined himself with some woman of the town. No one noticed anything wrong on this occasion. It is not pleasant to mention such facts; but they have a very significant bearing. This instance is, so to speak, the masculine counterpart of the accusations which some women, under chloroform or in other states of "reduction", bring against doctors. No doubt the woman is often quite sincere. What she affirms to have taken place she has vividly "experienced", but ideally, not actually. Similarly, epileptics hurt in falling accuse people of having struck them. No doubt, in their "dreams", they vividly "saw" the injuries inflicted.

We ask the reader to observe that in both of this patient's slight attacks, in each of which the automatism was elaborate, there was some adjustment of the mental state to the then surrounding circumstances; Buckingham Palace being a great national building, and, so to speak, of the same class as the cathedral.

Having given the above illustrations, we shall, before passing on to more definite post-epileptic automatism, make three very general statements. 1. We believe that, when there are marked outward actions,



the patient does not remember anything about his condition. This is a statement from a rather limited inquiry into the matter, and so we do not insist on its accuracy. We may say it is not an inference from the general analogy of "epileptic dreams" and "epileptic somnambulism" with ordinary dreams and somnambulism. 2. The slighter the fit, the more elaborate is the mental automatism. This is the equivalent to the statement previously made, that the affection of consciousness and the mental automatism vary inversely. We say nothing here of the importance of the actions. For an epileptic to suddenly kill a bystander with a poker is a far less elaborate, although a much more important action, than the one to be presently related, which, for identification, we call the cocoa-mixing automatism. In a scientific inquiry, our concern is with the degree of complexity of post-epileptic mental states. Neither the violence of the mental automatism, nor the vagueness of it when it is ideation not rising into action, must make us lose sight of this. There are, from "reminiscence", all degrees of diminishing speciality and complexity down to the general fury and simple although violent action of an epileptic maniac, and lower still to coma. This is repeating by illustration the previous statement that there are all degrees of reduction by the epileptic process. There is still another way of putting it. There are all depths of Dissolution, using the term as the opposite of Evolution. We think the facts of these cases lend strong support to Herbert Spencer's doctrine on nervous evolution. 3. The slighter the fit, the more are the automatic actions in accordance with the patient's (a) then external circumstances, or are (b) developments, in caricature, of what he was about to do before the seizure, or (c) are suggested by what was being done or said shortly before the seizure. Again referring to Spencer's opinions, we may put it that the slighter the fit (the shallower the dissolution it effects), the more nearly exactly is the patient adjusted to his environment. In a word, the slighter the fit, the more elaborate, the more nearly normal, are the actions, and the more they seem purposive to lookers on. This has direct practical bearings. The slighter and more transitory the fit, the more easily is it overlooked, and thus the case may be judged, or the patient may be judged, in another sense of the word, by the suddenly occurring actions only, which are often, as we have said, when the fit is slight, exceedingly complex and purposive-looking. And, unfortunately, even in our own profession there are many who do not attach enough importance to the slight seizures. Yet, as Trousseau has said, the quasi-trifling seizure called epileptic vertigo is more characteristic of epilepsy than are the severe ones with convulsion and tongue-biting. The real relationship of slight paroxysmal vertigo to severe seizures is demonstrated by the facts that the former often for months or years precede the latter, and that very often one patient is subject to both; on one occasion he has epileptic vertigo, on another it may merge into *le grand mal*.

#### THE CHILDREN OF ST. KILDA.

TETANUS, as it attacks new-born children, is a disease of which in England we know little by actual experience. The complaint is, however, a common one in the West Indian islands and in South America, and in the Southern States of America the mortality from this cause was at one time estimated to reach as high as fifty per cent. The recent rescue by Her Majesty's Ship *Jackal* of some unfortunate sailors who had found a refuge from the sea on the island of St. Kilda, in the Hebrides, reminds us that, to study this disease at our leisure, we are not forced to pass into the other hemisphere, nor even to travel beyond the compass of our own shores. St. Kilda, an island which is so healthy that general sickness is there almost unknown, is gradually losing its population, owing to an enormous infant mortality. Babies, born to all appearance strong and healthy, suddenly become ill and rapidly die. On the fourth day, the child seems unable to suck; his jaws get stiff, and soon the gums become clenched tightly together; the rigidity extends from the jaws to the trunk and extremi-

ties; general convulsions supervene, and on the eighth day the child is dead.

The etiology of tetanus in new-born infants has been a source of much speculation, and many theories have been devised to account for its occurrence. The rapidity with which the disease follows the birth of the child—appearing as it usually does on the third, fourth, or fifth day, seldom showing itself later than the tenth—seems to point to some traumatic cause arising either during labour or at a period immediately subsequent to the infant's birth. The cutting and tying of the umbilical cord naturally suggests itself at once as a probable explanation, and hence the appearance of the disease has been ascribed to phlebitis from injury to the umbilical veins. The theory is a plausible one, and has been advocated by many writers of eminence. Unfortunately, facts hardly warrant such a conclusion. Dr. Mildner of Prague has placed upon record forty-six cases of inflammation of the umbilical vessels which ended in death. In only five of these cases were convulsions noted, and in no single case did the convulsions assume the least resemblance to those characteristic of tetanus. Again, although phlebitis of the umbilical veins has been found in cases of tetanus, it is by no means a constant phenomenon, and, indeed, is very often absent. It appears certain, therefore, that phlebitis is not the cause of the disease. It does not, however, follow that tetanus is independent of the condition of the cord. Even in the adult, inflammation of the wound in a case of traumatic lockjaw is not an essential particular, and the complaint has been known to occur in cases where the wound was looking healthy and had even cicatrised. Mechanical causes for the disease, such as blows or accidental injuries, have been suggested by some authors. An eminent American writer has attributed the disorder to pressure on the medulla oblongata and its nerves through displacement inwards of the occipital bone; this displacement occurring either during labour or after birth, from the child being allowed to lie for days together resting with the back of his head upon the pillow.

Without, however, necessarily accepting fanciful theories, we may concede an occasional traumatic origin to the disease. Still there is little reason to doubt that it is to general, as distinguished from local causes, that we must look in most cases for an explanation of the phenomena. The influence of sudden changes of temperature in producing tetanus can scarcely be doubted. In all countries where the complaint is prevalent, a high temperature in the day is often succeeded by a rapid fall of the thermometer in the evening. On this account, interruption to the functions of the skin has been suggested as the immediate cause of the disease. In the same way, exposure of the child to wet and cold has been supposed to constitute an equally serious morbid influence. Of all the causes, however, to which the disease has been attributed, foul air from filth and imperfect ventilation is, perhaps, one of the best established. The often quoted case of the Dublin Lying-in Asylum seems to prove this conclusively. Before 1872, nearly one-sixth of the children born alive in the asylum died, and the cause of death was almost invariably tetanus. In that year, Dr. Joseph Clarke introduced a complete system of ventilation into the hospital. The consequence was, that the mortality immediately fell to one in nineteen. Later, the proportion of deaths was still further reduced; and, of those who died, little more than a ninth died from this disease.

In St. Kilda, the high rate of mortality may with much probability be attributed to a similar absence of fresh air and cleanliness in their homes. That some cause is there in existence which does not obtain in the neighbouring islands is evident, for children born of natives of St. Kilda out of the island escape the disease; and hence the occurrence of the distemper cannot be ascribed to intermarriage or any hereditary influence.

The existence of tetanus in the island is not a new phenomenon. Dr. Holland, writing in 1811, refers to it. In his *Summary of the Diseases of the Icelanders*, this author records the frequency of trismus nascentium in the island of Heimaey, one of a group situated



on the southern coast of Iceland. He states that almost every infant born on the island dies of this complaint, and that consequently the population is supported almost entirely by immigration from the mainland. It appears that there is no vegetable food upon the island, and that the natives live principally upon sea-birds, which are salted and barrelled. Dr. Holland attributes the disease to irritation of the bowels excited by the practice of feeding the infants shortly after birth with a strong and oily animal food. He fortifies his opinion by the fact that at St. Kilda, where the diet and mode of life of the natives resemble those prevailing at Heimaey, the disease is equally prevalent and equally fatal. It can scarcely be doubted that by the introduction of a better system of hygiene, together with the means of furnishing a more appropriate diet to the infants during the first months of life, this fearful scourge might be greatly diminished, if not completely eradicated from the island.

THE death is reported, from anthrax of the hand, of Mr. Chapman, a butcher at Chelmsford, who was engaged in slaughtering some cattle attacked by splenic apoplexy.

DR. J. W. GILLESPIE has been appointed Medical Secretary to St. Thomas's Hospital in the room of Mr. R. G. Whitfield, who has recently died after performing the duties of the office with much ability during many years.

DR. H. A. MARTIN (*Boston Medical Journal*, February 1st, 1877) says that, during the sixteen years in which he supplied humanised vaccine virus, he was continually troubled by the complication of erysipelas. Since he has supplied only the bovine virus, he has had no complaint of erysipelas.

WE hear with great pleasure that the names of three of the Epsom College boys appear in the Cambridge list in the papers of Tuesday as having won scholarships in Natural Science (£60 a year each); viz., Armstrong at Clare, Hoffmeister at Caius, and Shaw at Sidney Sussex College.

It is announced this week that the authorities of the Royal Free Hospital have resolved formally to admit the students of the Ladies' School of Medicine, Henrietta Street, Brunswick Square, to clinical instruction in the wards of the hospital on the usual terms of the metropolitan hospitals. It is stated that the number of beds in use will be increased before the commencement of the next winter session to one hundred and fifty, and that a complete course of clinical instruction will be organised in connection therewith.

MR. C. H. M. MOULLIN, M.B. and M.A. of Pembroke College, Oxford, has just been elected to the Medical Fellowship of his College. Mr. Moullin was placed in the second class by the Moderators *in Literis Græcis et Latinis* in Trinity Term 1870; and in the first class by the Final Examiners in the School of Natural Science in Trinity Term 1872. He also gained the Radcliffe Travelling Fellowship in 1875; and is now pursuing his professional studies at St. Bartholomew's Hospital.

WE deeply regret to have to announce the death of Dr. Carr of Blackheath, one of the most energetic supporters of the Medical Benevolent College, for which he had collected a large sum of money in connection with his scheme of scholarships. Dr. Carr had given many proofs of his ability and public spirit, and was widely and deservedly respected.—The death of Dr. Lawson Cape is also announced in the *Times* this week. For many years he held a prominent position as an obstetrician in large and fashionable practice. Possessed of ample private means, full of social energy and accomplishment, Dr. Cape was a great favourite in London, and early retired from professional pursuits, without losing his interest in professional society. He was hearty, jovial, high-spirited, and tender-hearted, and his death will be widely regretted.

#### ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT a meeting of the Council on March 27th, Dr. George Murray Humphry, F.R.S., of Cambridge, was elected a member of the Court of Examiners, in the vacancy occasioned by the expiration of the term for which Mr. Henry Spencer Smith was elected. Professor Humphry is the first provincial surgeon, as he is the first "M.D.," who has had this honour conferred. St. Bartholomew's Hospital claims him as a former pupil. He was admitted a member of the College November 19th, 1841, and elected one of its Honorary Fellows August 26th, 1844.—The Council was subsequently engaged some time in the consideration of the question, whether effect was to be given to Mr. Russell Gurney's Act, by which women might be admitted to examination for the diploma of member of the College, when a report was received from the President and Vice-Presidents with respect to the certificate of qualification in Midwifery of the College.

#### DEATH DURING ARTIFICIAL ANÆSTHESIA.

AN inquest was held at Westminster on Friday, the 23rd instant, on the body of Caroline Hesketh, late a patient in the Westminster Hospital. From the evidence given by Mr. Bond, assistant-surgeon, Mr. Jaquet, house-surgeon, and Mr. Beer, chloroformist to the hospital, we gather the following particulars. The deceased, aged 21, had suffered last autumn from a slight attack of rheumatic fever, and had since had pain in the knees and legs upon exertion. At the end of January last, she was admitted to the hospital suffering from great pain in the right leg, which was due to commencing gangrene of the foot caused by embolism of the popliteal artery. On February 3rd, a firm tumour could be felt in the popliteal space, as large as a small hen's egg; and pulsation could be detected in the femoral artery just below Poupart's ligament, but not in any other vessel of the thigh, leg, or foot. There was hyperæsthesia of the limb generally, very marked at certain parts. Mr. Macnamara advised amputation at that time, but the patient refused her consent. She was thereupon kept under morphia, subcutaneously injected to the extent of three grains daily. A line of demarcation finally formed close above the ankle, and amputation was to be performed by Mr. Bond on Tuesday, the 20th instant. A very slight mitral *bruit* was described as having been heard on the previous day, but to some auscultators it was inaudible. Chloroform to the extent of two drachms was given on lint, and the patient quietly and quickly became insensible; then ether, poured upon a sponge placed in a felt cone, was substituted for the chloroform. Meanwhile, Esmarch's bandage had been applied to the limb above the gangrenous part, and the band secured at the lower part of the thigh. The patient then became blue in the face and pulseless at the wrist; the lips were white, and the heart's action could not be felt. Artificial respiration was immediately begun, and the bandage and band were removed from the limb. In spite, however, of all attempts at resuscitation, which were continued for fifty minutes, and which included cold affusion, flipping with towels, and the application of the interrupted current to the præcordium, the heart failed to beat again. The pupils were equally contracted throughout these attempts. The amount of ether used was two ounces, and the patient was moribund in about two minutes after the ether was begun. The chloroform was given by itself for about three or four minutes, and ether by itself for about two or three minutes. At the *post mortem* examination, the surface of the heart showed friction-patches, but no signs of pericarditis. The wall of the right ventricle was very thin; that of the left side was thicker than usual, pale in colour, but not unusually soft. The mitral valves were much thickened, the chordæ tendinæ thickened, and the muscoli papillares hypertrophied. At the junction of the anterior cusp of the mitral valve with the wall of the ventricle was an irregular ulcerated patch about as large as a silver sixpenny-piece, to which small masses of lymph were adherent. The aortic valves were thickened, but acted efficiently. Two large decolorised clots were found in the left ventricle. All the viscera were congested, but otherwise healthy, except that in the right kidney were the remains of a small impacted em-



bolus. There was commencing atheroma of the aorta. In the common femoral artery, underneath Poupart's ligament, was a firm clot, adherent to the wall of the vessel. There was a second clot at the lower end of the same popliteal artery, completely obstructing the tibials.

#### H.R.H. THE PRINCE OF WALES.

WE regret to learn that the Prince of Wales has during the last week been suffering from superficial perineal abscess, due to a strain in hunting. The abscess was opened on Monday by Sir James Paget and Mr. Oscar Clayton, Mr. Clover administering nitrous oxide. The Prince is in excellent health, has a good appetite and normal temperature, and sleeps well. There is, therefore, no cause whatever for anxiety; but a fortnight at least must elapse before it is desirable that he should undertake any journey.

#### THE MILK OF SULPHUR QUESTION.

THE *Belfast News Letter* of March 23rd contains an account of the prosecution of the Belfast Drug and Oil Company for selling impure precipitate of sulphur. Professor Hodges, the borough analyst, showed that the sample procured contained forty-six per cent. of sulphate of lime. The defendants' counsel contended that the sulphur was sold as invoiced to the defendants from a merchant of the first respectability; and that it was the article commonly known as milk of sulphur, although not that known as precipitated sulphur. The magistrates convicted, and imposed a fine of £20, mitigated to £2 : 10.

#### SPREAD OF INFECTIOUS DISEASES.

MR. ERNEST TURNER writes to us as follows: "A disgraceful case of want of ordinary sanitary precaution on the part of one of the nursing institutes has just come under my observation. A nurse had been attending to several children of the same family sick with small-pox; and when she left, the neighbours being aware of the existence of the disease in the house, she would not have a cab called to the door, but, coming direct from the sick room, the marks of the pustules being still on the children, walked to the end of the street and obtained a cab to take her back to the institute. When the account was sent in, the sum of one guinea was charged for disinfecting the nurse on her return, the cab being left as a medium for the spread of infection. Surely, steps should be taken to compel these institutions to provide special vehicles."

#### DEATH OF DR. GURDON BUCK.

DR. GURDON BUCK, for many years surgeon to the New York Hospital, died on March 6th, being nearly seventy years of age. He was well known as an able surgeon and a bold and original operator. Surgery is indebted to him for important improvement in the treatment of fractures by means of weights and pulleys. He was also very successful in plastic surgery, and last year published a volume entitled *Contributions to Reparative Surgery*, in which he embodied the results of an extensive experience.

#### THE CARLISLE PLACE ORPHANAGE.

DR. BALLARD reports to the Local Government Board that, of the four infants in the nursery at Carlisle Place Orphanage on the occasion of his last visit, two are dead. Two are still living, and they are said now to be partially fed with rolls and biscuits, and that this food agrees with them. Dr. Ballard reports that they are very puny infants, but with great care perhaps may be reared. He adds, "notwithstanding that the window of the nursery had been put open, my senses were again impressed with the unwholesome condition of the atmosphere of the nursery. No children have been received into the establishment since attention was called to the subject."

#### BABY-FARMING.

A LADYLIKE woman, named Sophia Martha Todd, aged about 35, has been charged before the Liverpool stipendiary magistrate on suspicion having caused the death of a child. About the middle of 1875, the prisoner lodged at the house of a Miss Joliffe, in Prospect Street,

Liverpool, and one evening she was seen with an infant, which, she explained, had been left with her by a Dr. and Mrs. George, who had gone to an evening party and intended to call for it on their return. Next day, she was without the child, and she told Miss Joliffe that the parents had taken it away. The prisoner afterwards took lodgings with a Mrs. Oldham, but went away again in a few days, leaving behind her a box, which remained in Mrs. Oldham's possession. Recently, this box was opened, and at the bottom the body of a child was found tightly wrapped up in clothes and quite mummified. A medical examination showed that the child's head had been crushed. The police, after much difficulty, traced the prisoner to Old Trafford, near Manchester, where she was apprehended while riding along the road in a trap, accompanied by a Mr. Todd, the agent in advance for a circus, and whom she represented to be her husband. She made a long statement to the detective, to the effect that she adopted the child for a premium of £10, and that it died suddenly in her arms the night it came into her possession. Upon the prisoner was found a letter signed "Beta", and offering to pay £30 premium for the adoption of a child. With respect to this letter, the police had discovered that a little boy had been sent to the prisoner from Whitehaven; that she took him out with her one day; and that he had never afterwards been seen or heard of. It was also ascertained that five other children were sent to her at different times, and, when questioned about them on her arrest, she said they had all died natural deaths. The prisoner is stated to be the daughter of a civil engineer named Wilson, belonging to the Isle of Wight, and her mother was an East Indian. She was for four years governess in a Polish nobleman's family in Russia, and afterwards became governess to the children of a nobleman. Some years subsequently, she taught music and languages at Lancaster, and in that town met a farmer, named Jackson, whom she married and brought to Liverpool. They soon separated, and she then went as book-keeper at an hotel, and soon after this she appeared to have commenced the "farming" of children. Her mode of operation was that which we long since exposed, to insert an advertisement in the newspapers in this form:—"Wanted by a respectable married couple, a baby to adopt; a premium expected"; and, upon receiving a reply addressed to the newspaper office, she would disclose her name and address. It was stated that the prisoner was thoroughly accomplished in the fine arts, and could speak five languages. She was remanded for a week.

#### AN AMERICAN REPORT ON BRITISH SCHOOLS AND HOSPITALS.

WE mentioned a few months since that Dr. Billings of the United States Army, whose special accomplishments for the purpose are well known, was entrusted with a mission to visit and report on the hospitals and medical schools of Great Britain and Western Europe, for the information of those entrusted with carrying out the munificent endowments of Johns Hopkins (upwards of £250,000) for the hospital and university which are to bear his name at Baltimore, in order to put any final touches to the accepted plans before the final decision was adopted. A lecture given before the medical profession at Baltimore on February 5th by Dr. Billings, in which he expresses his sense of the great kindness and hospitality with which he was received, and the facilities afforded to him for examining the various hospitals and medical schools, and conferring with those most interested in such matters. Some of his conclusions are particularly interesting at this time; they are stated by him as follows.

"Of buildings devoted to medical schools, I was much pleased with those at Manchester and Liverpool. Those at the latter place are all of one storey, giving fine facilities for light and ventilation. The arrangements of those at the Owens College in Manchester are also good, but they are too far from the hospital, and, when there is space available, it seems to me that laboratories and lecture-rooms had better be in one-storey buildings. With regard to the vexed question of hospital construction, it seems that the majority of those who have given especial attention to this subject prefer wards of one storey, especially for surgical and obstetrical cases, and favour isolation and separation of the several buildings. I have not found it possible to obtain positive reliable data as to the effects of various plans of exist-



ing hospitals upon the health of the inmates, except in a few special and aggravated cases. As a rule, each person thinks the system with which he is most familiar is the best; one may try to go behind the dogmatic assertions and find out upon what they are founded, but the result is negative. Mortality statistics are of little use for this purpose, since the character of cases received varies so much. I tried at first to get the statistics of certain classes of cases, such as compound fractures and dislocations, and outbreaks of erysipelas and septicæmia—or of diseases arising among the hospital employees; but I was soon convinced that these depend far more on methods of management and treatment, on the preservation of cleanliness, and on care in the use of antiseptics and disinfectants, than on the plan of the hospital; and, that where what is known as 'Lister's method', is regularly and methodically employed in the hospital, its healthfulness cannot be estimated by the statistics of the surgical wards. I was acquainted with Mr. Lister's teachings before visiting Europe, and assented to them in a theoretical sort of a way; but, at the same time, I looked upon the antiseptic method as being the latest fashion, and, therefore, probably overpraised. But, after learning the results of its employment in the hospitals at Bonn, Leipzig, Berlin, and in certain wards in London, and especially after an examination of Mr. Lister's wards in the Royal Infirmary at Edinburgh; and, seeing the cases dressed in all stages after operations—operations such as opening the knee-joint, or upon abscess of spinal origin—I came to the conclusion that this method is the most important contribution to our resources in surgery which has been made since the discovery of anæsthesia. Not that the details of the method are perfected, for probably much may yet be done to simplify it, and we may, perhaps, discover a better material for the purpose than carbolic acid. But we now may be said to know positively, instead of merely conjecturing, that the process of putrefaction is due to minute solid or semisolid particles floating in the air, and that Mr. Lister has devised a method by which these particles can either be kept out of a wound made by the surgeon, or by which they will have their power of producing the putrefactive change destroyed, is, I think, beyond doubt."

#### F.R.C.S. BY EXAMINATION.

WE can assure our correspondent, whose letter we print in another column, that we are quite as desirous as he can be to maintain the character and status of the Fellowship of the College of Surgeons; but it would seem that the real nature of the proposal which is objected to has not been quite fully understood by him and many others. There has not been, so far as we are aware, any idea of making the Fellowship a qualifying diploma more than it now is, or of, in any way, altering the regular professional examinations for it. They would remain precisely as at present, except that the range of the first examination would be extended by the addition of comparative anatomy as one of the subjects. The character of the examination would therefore be, to this extent, raised rather than lowered; and it is clear that the members of Council who had considered and made these proposals, had no intention of lowering the standard of the Fellowship. But, and that may be the ground of Mr. Woodman's objections, as it is of the Fellows who have so largely signed the petition, it is feared that the admission to the Fellowship of members of not less than ten years' standing after an examination which was to consist of regional anatomy and surgery might have the effect which was apprehended. This, of course, as in all similar instances, must have depended upon the character of the examination; and the result might, we think, have been safely left in the hands of the Examiners of the College, who cannot be accused of any undue leniency in their conduct of the Fellowship Examinations. It may then be asked, Would the character of the Fellowship have been lowered by the admission to it of members of ten years' standing who would pass a thorough and searching examination, such as we have a right to assume this would have been, in regional anatomy and surgery? Would they not have done as much credit to the Fellowship, and been as worthy of the honour, as any others? Would not, moreover, the prospect of obtaining the Fellowship in this way have proved an invaluable stimulus to the younger members of the College, to keep up and increase their knowledge of that kind of anatomy which is of the greatest practical value, and to go on cultivating in a systematic and careful manner their knowledge of surgery? Would it not have been an incentive to them

to attend hospital, dispensary, and union practice when they had the opportunity to do so, and to observe closely, and reflect upon and record the cases which, there and elsewhere, might fall under their notice; and in this, and other ways, to keep themselves *au courant* with the advancing tide of surgical knowledge? Is not some such stimulus to reading and careful observation greatly needed among the younger members of our profession? It was to no small extent, from this feeling on behalf of the younger members of the College, in the interests, that is, of English surgery in the widest sense, and from the conviction that no real loss but rather gain to the status of the Fellowship and of the College of Surgeons would accrue from such an influence, that we hesitated to join in the voice which was raised against the proposal in question. That voice was, however, so general on the part of the Fellows, and the feeling against the proposal was so strong, that the Council of the College could scarcely do otherwise than withdraw it, which, we understand, was done at their meeting on the 22nd. The grievance has, therefore, ceased to exist, or, indeed, to be any longer under contemplation.

#### THE HEALTH OF LONDON.

THE number of deaths in London from small-pox last week was fewer than in either of the three preceding weeks. In those weeks, the deaths were 84, 96, and 100 respectively; but last week they declined to 76. Of these, 33 were certified as unvaccinated, 19 as vaccinated, and 24 were "not stated" as to vaccination. Of the 33 unvaccinated cases, 19 were of persons under twenty years of age; whereas only 5 of the 19 certified to be vaccinated were aged under twenty years. The total number of deaths registered during the week was 1,802, and there were 2,532 births. The annual death-rate from all causes, which in the three preceding weeks had been equal to 22.6, 26.3, and 26.6, was again 26.6 during last week. The 1,802 deaths included, in addition to the 76 from small-pox, 32 from measles, 17 from scarlet fever, 3 from diphtheria, 37 from whooping-cough, 25 from different forms of fever, and 11 from diarrhoea. Thus to the seven principal diseases of the zymotic class 201 deaths were referred, against numbers increasing steadily from 187 to 231 in the five preceding weeks. These 201 deaths were 29 below the corrected average number from the same diseases in the corresponding week of the last ten years, and were equal to an annual rate of 3.0 per 1,000. The deaths referred to diseases of the respiratory organs, which in the four previous weeks had increased from 303 to 493, further rose last week to 575, and exceeded the corrected average by 164.

#### A SOLVENT FOR QUININE.

DR. W. E. FORREST, Resident Physician to the Presbyterian Hospital, New York, writes to the *New York Medical Record* to state that he desires especially to endorse the recommendation which Dr. J. Milner Fothergill has published of hydrobromic acid as a solvent for quinine, and a preventive of the head-symptoms resulting from the use of that drug. Dr. Forrest says:

"We had a patient in the hospital with chronic malaria, who could not take quinine for any length of time without being 'almost crazy from it', as she expressed herself; and, at the suggestion of Dr. Burral, the visiting physician, we tested the acid on this case. It was given in half-drachm doses, with quinine in capsules, and with the happiest result. The roaring in the ears and the dizziness disappeared, and the patient no longer objected to being cured by quinine. Since then, I have tested the medicine in many cases, and it has never failed. Dr. H., of Washington, entered the hospital suffering from malarial poisoning and from large doses of quinine, and was much pleased at being relieved from the cinchonism by the acid. The tinnitus aurium following the administration of quinine seems to be due to an active congestion of at least some parts, if not the whole of the brain, as Dr. D. B. St. J. Roosa has observed that, after taking ten or fifteen grains of quinine, the membrana tympani and malleolus are markedly injected. It had before been noticed that the administration of quinine aggravated the symptoms of otitis media and other aural affections. It may be that hydrobromic acid, being analogous to bromide of potassium, may, like bromide of potassium, cause contraction of the blood-vessels



and thus prevent the bad effects of quinine. However this may be, it acts in the happiest manner.

"In giving quinine in solution, I use the following formula: R Quinæ sulph. ʒj; acidī hydrobromicī aquæ, aa ʒiiss. M. Sig.—Two teaspoonfuls contain five grains of quinine.

"The formula for making the acid, according to Fothergill, is: Dissolve ʒx, ʒvj, grs. xxvij of bromide of potassium in water Oiv; add ʒxiiij, ʒi, grs. xxxvij of tartaric acid. The acid remains in solution.

## SCOTLAND.

MR. R. H. PATERSON has been appointed to the Chair of Botany in the Andersonian University of Glasgow.

THE Professors in the Faculty of Medicine in the University of Glasgow gave, says the *Glasgow News*, a chamber-concert the other night, in the lower museum hall of the College, to the students attending their classes.

THE mortality-returns of Glasgow for the last quarter of 1876 give a death-rate for that quarter of 23 per 1,000, while the average death-rate for the past decade has been 30 per 1,000. Compared with the same period of 1875, there were 286 fewer deaths, a diminution due to the lower fatality of infectious diseases; the deaths under five years amount to 45 per cent. of the total mortality.

At a meeting of the contributors to the Edinburgh Maternity Hospital, the annual report stated that, during the past year, there had been delivered in all 469 women in connection with the hospital, 300 at their own homes and the remainder within the institution, and that of this whole number only one had died. The most important point mentioned in the report was the announcement that the directors have at length found a site on which to build a suitable hospital, in place of the very unsuitable building at present occupied. The site lies at the corner of Lauriston Place and Lauriston Park. It is estimated that £10,500 will be required for this purpose. The funds at present in hand amount to about £7,000, so that between £3,000 and £4,000 is still required. An earnest appeal was made by several of the speakers for support and help in the matter.

### A FIGHTING COCK.

In the Sheriff Court, Glasgow, last week, a father sued the owner of a cock for damages in respect of the death of his child, who had received such injuries from the cock as caused his death. Judgment was given for the defendant, as the cock was not proved to have been of a vicious disposition.

### THE AYR HOSPITAL.

THE subscribers to the Ayr Hospital and Dispensary have resolved to take steps towards the erection of a new hospital on a more suitable site than that of the present building.

### MORISONIAN LECTURES ON INSANITY.

LAST week were delivered the fifth and sixth lectures, in the Hall of the College of Physicians, Edinburgh, thus completing the series for the present year. The subject of the fifth lecture was the relation between insanity and responsibility for crime; but on this occasion little more was done than to relate the more important details of the chief cases in which the question has come before the Courts. The history of the question in this country could scarcely be said to have been begun until within the last hundred years. The first case alluded to was that of Earl Ferrers, who was hanged in the middle of the last century, though, long before he committed the act of which he was accused, he had been generally regarded as insane. Attention was next directed to the trial of Hadfield, who was acquitted in 1800, on the ground of insanity, of an attempt to shoot the king. The case of McNaughton, who was acquitted on the ground of insanity, of the murder of Mr. Drummond, whom he shot in mistake for Sir Robert Peel, created such alarm in the public mind, that the fifteen judges

were called upon to formulate the conditions on which, in future, insanity should be held to imply irresponsibility. In the document then drawn up, it was substantially laid down that irresponsibility could only be admitted when the perpetrator of the act was "unconscious of right or wrong", or was labouring under such an insane delusion as would, if true, have justified the act. It was shown, by subsequent cases, that very considerable modifications of this doctrine have been introduced by judges of late years, and some of the most important of these by Scotch judges. In the concluding lecture, Dr. Sibbald showed the unsatisfactory character of all criteria hitherto employed for determining the limits of responsibility, and pointed out that the problem we have to solve is to determine the relation of responsibility to insanity in regard to a particular act, punishment for which is being considered in a court of justice; and, if we keep steadily before our minds that it is in regard to a particular act done that the court has to deal with the matter, we ought to be justified, as well as safe, in saying that, if the act be the direct result of disease, irresponsibility for that act ought to follow. Such a principle, if admitted by the courts, does not seem easily open to abuse. But we must, above everything, preserve what are real guarantees for the public safety. The chief difficulty in the principle recommended is, that there are cases where the act really did result from disease, but where it will be impossible to show it. As an illustration was given the case in which an act of purposeless violence is committed in the furor which sometimes attends attacks of epilepsy. In conclusion, the position which the medical expert should occupy in court was considered, and it was laid down that the duty of a physician is to deal with disease, not with responsibility. The questions which a physician ought to be able to answer are such as these. Do you believe the prisoner to have laboured under any known disease at the time the act was committed? and—Is the act an instance of such abnormal conduct as is recognised to be a natural and direct outcome or manifestation of the disease under which you believe the accused to labour? The attention of the medical expert should be confined to the disease and its nature, and he should on no account deal with questions which are legal and abstract.

### THE REPORTING OF INFECTIOUS DISEASE.

DR. WALLACE, the Medical Officer of Health for Greenock, mentions, in his monthly report for March, three cases of typhus which he discovered in a sleeping-apartment in connection with a small huckster's shop; and he observes that, but for his accidental discovery of the cases, and having them promptly removed to the infirmary, while the unaffected were taken to the reception-house, a serious dissemination of the disease might have been effected, and a corresponding further burden upon the rates. Had the first case been reported early enough, the subsequent cases might have been saved, and the expense to the ratepayers very materially reduced. He adds, cases of this description, from a pecuniary point of view alone, show the imperative necessity of measures being taken to secure early intimation of the occurrence of infectious disease in households. Unless this be done, the ratepayers cannot expect the charges connected with the working of the Public Health Act to be anything but heavy. From the same want of power as to compulsory reporting, he adds that, though there was an increase in the cases of diphtheria and croup, the officials were unable to be of any service till death had occurred, intimation in every case having come to the department only through the district registrars.

## IRELAND.

### INFECTED CLOTHING.

At a meeting of the Executive Committee of the Dublin Sanitary Association, held last week, the following resolution was adopted: "That the Executive Committee, having been informed that the Public Health Committee are disposed not to carry into effect in future Section 50 of the Public Health Act, 1874, with reference to the giving of compensation for the destruction of infected clothing,



desire to reiterate their opinion that, in the case of so dangerous and terrible a disease as small-pox, nothing short of destruction of infected clothing will ensure the safety of the community." The expense which would be necessary for compensating parties among the lower classes for the value of their infected clothes would be so trifling compared with the advantages obtained by the procedure, that we trust the Public Health Committee of the Corporation of Dublin will not adhere to their injudicious determination.

#### MEATH HOSPITAL: A SOUVENIR.

At a meeting of the Board of this institution held last Monday, a letter was received from the Secretary of the Coombe Lying-in Hospital, presenting, in the name of the directors, the stone formerly placed over the entrance of the old Meath, now the Coombe, Hospital, and which bears the inscription—"Meath Hospital, 1771".

#### LEDWICH SCHOOL OF MEDICINE.

We understand that the matter between this institution and the Board of Trinity College, to which we referred a short time ago, will probably be brought next week under the notice of the Council of the Royal College of Surgeons in Ireland.

#### SANITARY CONDITION OF NAAS.

FROM the inquiry lately held by the Chairman of the Towns Commission Government Inquiry, it appears that the sanitary state of this town is very bad. It was proved that the sewage from the closets is permitted to flow through the street-gutters, percolating through the sandy soil into the wells which supply the inhabitants. The dwellings of the labouring classes are also, in their sanitary arrangements, very defective, about one-tenth only being supplied with ash-pits or proper conveniences. It is expected that a proper system of sewerage will shortly be adopted, as the guardians have caused the county surveyor to report upon a desirable plan.

#### STATUE TO DR. GRAVES, F.R.S.

WE learn that the statue in memory of this distinguished Dublin physician is rapidly approaching completion, and, when finished, will reflect great credit on the artist to whom the work has been entrusted—viz., Mr. Albert Joy of London, the well-known sculptor. The statue will be life size, composed of white Carrara marble, and will be placed in the Hall of the College of Physicians, in Kildare Street. As Dr. Graves died in 1853, but tardy justice is being done to his great reputation and eminent services to medicine.

#### THE PUBLIC HEALTH BILL (IRELAND).

THIS Bill, which has been introduced by Sir Michael Hicks Beach, is intended, as our readers are doubtless aware, to consolidate into one Act the various provisions with respect to sanitary matters, and to amend the several Acts now in force in Ireland—some twenty in number—where alteration is required. Suggestions to remove some defects in the Bill have been made by a Committee, formed by representatives from the Colleges of Surgeons and Physicians, and the Irish Medical and Dublin Sanitary Associations, who recommend, among others, the following alterations. That urban sanitary districts should consist only of towns whose population exceeds 20,000, as in small places the Act cannot efficiently be carried out; that the whole of Ireland should be divided into districts, for the purpose of sanitary inspection, each district being subject to the supervision of an inspecting medical officer of health, such inspecting officers being registered physicians and surgeons appointed by the Local Government Board; that the title of medical officer of health should be substituted for sanitary officer, the executive sanitary officer to be called "clerk to the sanitary authority", and that the subsanitary officer should be styled "inspector of nuisances"; the insertion of a new clause, prohibiting the keeping of any cattle in any urban sanitary district without special licence; and a clause providing for a weekly return, by the registrar, of every burial-ground, of the names, causes of death, etc., of persons interred, to the

registrar of births and deaths of the district in which such person died. They also point out that the Bill does not make any provision for hospital accommodation, and therefore suggest a clause similar to section xxxvii, 29 and 30 Vic., cap. 90.

#### THE CONJOINT SCHEME FOR ENGLAND.

WITH conciliatory and intelligent appreciation of the facts which does it infinite honour, the Council of the Royal College of Surgeons of England has accepted all the modifications in the conjoint scheme proposed by the University of Cambridge, with one exception. The proposition of the University that the nominations shall not be so strictly limited in kind is one which has much to recommend it; and the College of Surgeons has very wisely adopted it. The point which was not adopted is the modification of the last clause, by which the University of Cambridge suggests that the scheme should in any case come to a termination at the end of ten years. Such a modification is in itself, as we pointed out at the time, unnecessary, inasmuch as any one of the bodies has a right to withdraw at the end of five years, and, if the scheme be not successful, it will naturally not be carried on after ten years, or even after five years. If, on the other hand, it be successful, there can be no reason for abruptly and beforehand decreeing for it a violent death, to be followed only by a renewal of life. The scheme contains in itself ample means for bringing it to an end by the withdrawal, at the end of five years, of any of the bodies concerned; and it seems quite unnecessary to inscribe on its front from the beginning the anticipation of probable failure. Nothing is so likely to bring about failure as an official record of distrust at the outset. This particular point is evidently a matter which the University of Cambridge cannot consider essential to the scheme, and we trust—in fact, we can hardly doubt—now that the College of Surgeons has shown so very conciliatory a disposition and so great an anxiety to consider the wishes of the University of Cambridge in the matter, that that body will in its turn not insist on this one slight modification.

#### ROYAL COLLEGE OF PHYSICIANS OF LONDON.

At a meeting of the College, on March 26th, Sir Thomas Watson presented, in the name of the Rev. Francis Holland, a volume of papers on scientific subjects; and a vote of thanks was passed.

The President, on resigning, addressed the College, recounting the principal events of the past year. A vote of thanks was passed, with a request that the address might be printed. Dr. James Risdon Bennett was unanimously re-elected President.

A communication was read from Trinity College, Toronto, requesting to be recognised under the new name. This was agreed to.

The following report on Leprosy in Norway was read and adopted, and ordered to be sent to the Colonial Office and India Office. "The Committee have received the memorandum containing certain statistics of the Leper establishments in Norway, prepared by Dr. Hansen, the acting director of those asylums, and forwarded through the Colonial Office to the College, with Dr. Vandyke Carter's comments thereon; and upon which the Earl of Carnarvon has requested the opinion of the College, more especially with reference to the segregation of lepers. These statistical data, extending over a series of years, indicate a remarkable diminution in the prevalence of leprosy in Norway during the period in which the practice of segregation has been carried out. The Committee, in their report of February 9th, recommended segregation upon sanitary and therapeutic grounds, and they consider that the statistics of Dr. Hansen furnish an additional argument in favour of that recommendation. At the same time, the Committee are of opinion that there is no sufficient evidence to warrant them in accepting Dr. Hansen's explanation as to the way in which segregation operates in diminishing the amount of leprosy in Norway. It must be borne in mind that, according to Dr. Vandyke Carter's report to the Secretary of State for India, in 1873, segregation in Norway is entirely voluntary. The lepers are allowed to receive visits from their friends, to go out of the hospital at stated intervals, and to leave it altogether whenever they choose. The term, therefore, means nothing more than that special hospitals are provided for such patients. It is well known that Dr. Vandyke Carter and Dr. Hansen have had very extensive ex-



perience of leprosy, and have devoted much attention to its study for many years. Therefore, the observations of these gentlemen are entitled to great consideration."

The resignation of the Senior Censor on account of illness and of the Junior Censor were received and accepted.

The following by-law was enacted for the first time.

"Any candidate for the College Licence who shall have obtained a degree in medicine or surgery at either a British, Colonial, or Foreign University recognised by the College after a course of study and an examination satisfactory to the College shall be exempt from re-examination on such subjects as the Censors' Board shall in each case consider unnecessary."

The Roll Committee reported that they had taken the necessary steps for securing possession of the copyright, and for printing a new and enlarged edition of the *College Roll*, to be edited by Dr. Munk.

### KING'S COLLEGE HOSPITAL.

THE following memorial was last week presented to the Council of King's College by the members of the Medical Board of the College.

*To the Council of King's College, London.*

We, the undersigned members of the Medical Board of King's College, desire very respectfully to express to the Council our conviction that the appointment of Professor Lister on the staff of King's College Hospital is certain to prove of immense advantage to the School, and that it would go far to re-establish it in its former state of prosperity.

We therefore beg most earnestly to express our hope that the Council will use their utmost endeavours to secure so desirable a result.

(Signed)—George Johnson, Lionel S. Beale, I. Burney Yeo, A. H. Garrod, David Ferrier, Soelberg Wells, S. Hamilton Cartwright, Gerald F. Yeo, William A. Guy, C. L. Bloxam, Alfred B. Duffin, E. Buchanan Baxter, W. S. Playfair, Urban Pritchard, John Curnow, Thomas C. Hayes, Robert Bentley.

The Council of the College, fully sympathising with this request, had invited Professor Lister to accept the office of Surgeon to the Hospital, together with the Professorship of Systematic Surgery. Mr. Lister, however, as we last week stated, declined the post, intimating his intention to devote himself solely in the future to the teaching of clinical surgery, and being unwilling to accept a Professorship of Systematic Surgery. Some of the most eminent members of the Council entertained the hope that it might be possible to make such arrangements at King's College Hospital as would possibly meet the views and would enable them to afford to Mr. Lister complete facilities for the practical demonstration, in wards set apart for him, of his method of antiseptic surgery and for clinical teaching on the system on which he carries it out at the University of Edinburgh; and communications were accordingly addressed to him, on behalf of the senior members of the medical staff and of the Council, requesting him to suspend his decision, with the view to enable the Council to carry out suitable arrangements. That hope has, however, we understand, been defeated, in consequence of the opposition raised to the proposed arrangements by a member of the surgical staff, and consequently it is understood that Mr. Lister definitely declines the offer made to him. King's College thus suffers an irreparable loss; and the loss is hardly less to the surgical school of London generally, since it could not but have been of the highest interest and value to the metropolitan school of surgery to have had the antiseptic system of surgery carried out in its midst by the distinguished surgeon with whose name that system is identified throughout the world, and under whose auspices its greatest triumphs have been achieved.

The surgeoncy of the hospital and Professorship of Systematic Surgery will, we believe, be now announced as open to general competition, and an effort will be made to secure for the College the services of a distinguished surgeon for these posts. More than one name is mentioned, and it is probable that there will be many eminent competitors in the field.

### PROFESSOR ALLEN THOMSON.

WE see with pleasure the proposition to set on foot a subscription for the purpose of paying a tribute of respect and affection to Dr. Allen Thomson, the well known Professor of Anatomy in the University of Glasgow, the first President of the Glasgow Branch of the British Medical Association, and President-elect of the British Association. It is intended that Professor Thomson should be asked to sit for his portrait to Sir Daniel Macnee, P.R.S.A. The portrait will be presented to the University in which he has held office with great advantage to the institution and to science generally for thirty years; and a replicate

will be presented to Mrs. Thomson. Dr. Allen Thomson is as much beloved as esteemed, and there are a large number of members of the profession who will be glad to have an opportunity of testifying their affection and respect for him. The Committee includes the names of the Lord Provost Bailey and the Very Rev. Principal Caird. The Honorary Secretary is Professor J. B. Cowan, 106, Ingram Street, Glasgow.

### THE MEDICAL DEPARTMENT OF THE CONVICT SERVICE.

NOW that the Prisons' Bill of the Government is in Parliament, and is engaging a large share of public attention, we gladly take advantage of the occasion to recur to the subject of the relative rank and pay of the medical officers of the convict service. An article on this question appeared in the *BRITISH MEDICAL JOURNAL* for January 13th, 1877, in which it was conclusively shown that the pay of the members of the medical staff is quite inadequate as a recompense for the very varied and laborious services required of them. We are pleased to know that that article has met with the heartiest approval amongst those who espouse the cause of those valuable public officers. It is not our intention on the present occasion to occupy the ground covered by the previous article; but we propose to detail a few of the reasons which appear to us to render it advisable, for the good of the officers themselves and of the service in general, that their case should be carefully examined, and complaints, where well founded, redressed: and we do this the more readily, since they appear to have represented their hardships again and again at head-quarters without avail, whilst they are forbidden to combine in order to concert measures for ameliorating their position.

The pay of the assistant-surgeons begins at from £150 to £200 a year, the sum depending upon the class of prison; and it increases at the rate of £5 a year up to £200 or £250. The medical officers' pay never exceeds £400 a year; and even if they stay all their lives in the service, they can never obtain a larger amount. Of course, it is needless to say that a gentleman can scarcely bring up a family or maintain a proper position upon this small sum. Formerly, the senior appointments were given to half-pay navy and army men, for whom the income, as an addition to the half-pay, was sufficient. The assistant-surgeons in those days were only temporarily employed, and were therefore never promoted. This plan was altered by the present chairman, and now men are promoted from the assistant to the full surgeoncy. But, without any half-pay, the salary attached to the latter post is quite inadequate.

It is not surprising, therefore, under these circumstances to learn that there has lately been great difficulty in obtaining assistant-surgeons. Two or three senior men have left the service, having obtained more lucrative appointments; and the hospitals have been searched for young surgeons who might be willing to engage in the service, but the emoluments offered are not sufficient to procure candidates. Within the last two or three years, as we learn, there have been many assistant-surgeons engaged, but they have been chiefly "waifs and strays," who have in many instances been soon in trouble and compelled to leave the service. Of course, if good men are required, the pay must be sufficiently large in order to attract them.

The responsibility of the medical department of the convict service is immense: not a single thing can be done in the way of punishment, or in the selection of prisoners for particular work, etc., without the sanction of the doctor, who also has to attend the wives and families of all the officers gratuitously. Without the doctor, even for one day, the whole machinery of the prison would stop, for the great aim of most of the prisoners is to escape work by malingering and other devices; consequently, unless the surgeon be present to certify them as fit for work, nothing can be done. The surgeon often has to see to more than a hundred men complaining of illness, and to visit the infirmary, in which there are generally sixty or seventy patients. Then the amount of official work required of the medical staff is very great, including the examination of all candidates applying for vacant warders' appointments in the service, and amounting to about two hundred a year. Last, but not least, it should be remembered that the medical staff incur the constant danger of being assaulted by the unruly folk with whom they have to deal.

When to the above details is added the fact, that the medical officers of the convict service are not allowed to undertake any private practice, and that after they have been some time in the service they are likely to be unfitted for other appointments, it will be seen that their grievances are of no light description. We heartily commend their case to the earnest consideration of her Majesty's Government.



## REPORT FROM COMMITTEE OF INQUIRY ON BROADMOOR CRIMINAL LUNATIC ASYLUM.

THE Committee, whose report we have before us, was granted by Mr. Cross last July, on account of "having had my attention drawn to the large amount of expenditure required for the maintenance of the Broadmoor Criminal Lunatic Asylum, and for putting the structure of it in a proper condition". The object of the Committee was economical, and its proceedings have, with few exceptions, kept to the financial track.

Sir William Hayter, Mr. Walter, and Mr. Everest, the majority of the Committee of five, present the Report to which they agreed, the gist of which is an emphatic approval of the institution and of its work. They point out that no satisfactory comparison can be instituted between Broadmoor and any other establishment for lunatics, and they therefore claim the right to discuss the elements of its expenditure without submission to the comparison of similar items of expenditure in other institutions. In this, we think, they are perfectly right. The administration of Broadmoor is admitted by every member of the Committee to be liberal and efficient. To compare the items of its expenditure with those of Dundrum or of the lunatic prison-ward at Perth, the administration of which is not known to be either liberal or efficient, will give no information beyond the fact that a criminal lunatic may be kept more cheaply in Ireland or Scotland than in England.

Last year, Broadmoor contained an average number of 503 patients, at a net cost *per annum* of £57 17s. 3d. for each patient. Of this sum, £19 10s. 5d. was expended in salaries and wages. The proportion of the attendants is about 20 per cent. to the number of patients. Their wages are somewhat under those of the warders in convict prisons; and the Committee, on this head, feel themselves justified in recommending both an increase of the number and of the wages, rather than any reduction.

The dietary, including food both for patients and attendants, is £21 10s. for each patient *per annum*. It was adopted from that of Bethlehem when the criminal lunatics were transferred thence; and Dr. Orange is "firmly of opinion that no material alteration or reduction could be made, except at the expense of incurring a mortality increasing in proportion to the reduction".

The annual repairs of the building appear to have been the battleground between the Council and the Board of Works, and indeed to have been the real origin and motive for the appointment of this Committee of Inquiry. Up to 1872, the repairs were done under the orders of the Council, but from that time they have been transferred to the Board of Works, and now the Council urges that they should be retransferred. To this the Board of Works replies, through the mouth of its Secretary, a dissentient member of the Committee, by the proposal that Broadmoor should be destroyed and another institution rebuilt at a cheap rate, on Dartmoor or some other remote and desolate spot, where land can be had for nothing, and the immured existence of the criminals be rendered sufficiently undesirable to themselves to put out of question the need of a generous dietary with the aim of a low mortality.

The Committee conclude their Report thus. "Having regard to the various combined advantages derivable from the present site, that it is satisfactory to the health and comfort and safe custody of the inmates, that any removal to any other locality would involve greatly increased expenditure, without any adequate result, and that no economy in its working would be obtained, we strongly recommend that it should remain unchanged." To this Report, Mr. Milford, the Secretary to the Board of Works, appends a minute of dissent, founded upon the startling discovery that the criminal lunatics at Broadmoor cost more for their custody and maintenance than the criminals in the convict prisons, or than the lunatics in the pauper asylums.

*Delenda est Carthago.* She costs too much. We, Board of Works, will build you a better Broadmoor, in the morasses of Dartmoor, for £150 per patient. Seeing that a criminal lunatic needs the security of a prison and the space of a hospital, that the asylum for his detention and treatment must have solid walls and no dormitories, we fear that Mr. Milford's notion of cost is little more than a good intention, which may do for paving, but not for building, purposes. Dr. Mouat, formerly Inspector-General of Prisons in Bengal, adds another minute of dissent, which is further from Mr. Milford's minute than that is from the Report. In Dr. Mouat, the prejudices of country combine with those of office to make it clear to his mental vision that the lunatic department of the General Prison at Perth is the proper thing, and that "lunacy associated with crime" ought to be "an integral branch of the general prison administration of the country, and not a special branch of insanity needing exceptional treatment in separate institu-

tions". Dr. Mouat, therefore, recommends that criminal lunatics shall be treated in lunatic wards attached to prisons. Of Broadmoor, he acknowledges that "the site is excellent, the standard of health abnormally high, the death-rate exceptionally low, the chance of recovery of reason fair, and the whole management, general and professional, such as to deserve high commendation, and to reflect great credit on all concerned". Surely, this is the reverse of reasoning rightly from wrong premises, and may possibly, therefore, be considered as far removed from Broadmoor practices. Dr. Mouat tells us that he has inspected lunatic asylums in Bengal for quite a length of time. It is a pity that he does not know something about lunatic asylums in England, or at least it is greatly to be regretted that Mr. Cross, in the formation of his Committee on Broadmoor, did not put upon it just the men who were somewhat conversant with the real matter at issue, namely, the scientific treatment of the insane.

## THE RETURNS OF THE REGISTRAR-GENERAL FOR THE YEAR 1876.

In the United Kingdom, 1,154,627 births and 676,928 deaths were registered during the year 1876, equal to a birth-rate of 34.8, and a death-rate of 20.4, per 1,000 of the estimated population. The natural increase of population, by excess of births over deaths, was therefore 477,699, and 91,715 more than in the previous year. The number of emigrants of British origin who, during the year, left the kingdom was 102,601; of whom 53,881 left for the United States, 31,764 for the Australian colonies, 9,372 for British North America, and 7,584 for all other places. No complete record of immigration into the United Kingdom exists.

In England and Wales, the birth-rate during the year was 36.5, and the death-rate 21.0; the former being 1.1 above, the latter 1.2 below, the average. The death-rate was lower than in any year since 1856. In Lancashire, the rate of mortality was equal to 26.0 per 1,000, in the West Riding of Yorkshire it was 23.1, and in London 22.3. In the whole of England and Wales, excluding Lancashire, the death-rate was but 20.3; therefore, in equal numbers living, 128 persons died in Lancashire, in 1876, to 100 in all other parts of England and Wales. Upon the 159 urban and rural sanitary authorities of Lancashire rests the responsibility for this terrible waste of life. The rate of infant mortality in England and Wales, measured by the proportion of deaths under one year to births, was 146 per 1,000, against 149, 151, and 158 in the three preceding years. The rate of mortality among persons aged upwards of sixty years was 68.3 per 1,000 persons estimated to be living at those ages, against 72.0 and 77.5 in 1874 and 1875.

In England and Wales, 73,217 of the deaths registered during the year were referred to the seven principal zymotic diseases, showing a decline of 6,042 from those referred to the same causes in 1875. These 73,217 deaths included 2,418 from small-pox, 9,551 from measles, 16,643 from scarlet fever, 2,822 from diphtheria, 9,884 from whooping-cough, 10,372 from fever, and 21,527 from diarrhoea. The rate of mortality from these seven diseases was equal to 3.0 per 1,000, against 3.8, 2.9, 3.6, and 3.3 in the four preceding years. The fatal cases of small-pox and measles were more numerous in 1876 than in 1875, whereas those of each of the five other diseases had declined. The steady decline in the fatal prevalence of fever (including typhus, enteric, and simple fevers) affords the most satisfactory evidence of sanitary progress. The annual death-rate from fever, which in the six years 1870 to 1875 had steadily decreased from 79 to 52 per 100,000 persons living, further declined last year to 43.

**BRIDPORT.**—Mr. Evans reports that during the preceding six months there had not been any death from zymotic disease except one from typhoid fever; that there was an epidemic of mild scarlet fever then prevalent, which was spreading rather extensively, as, from its mildness, those in charge of the sick would not use due precautions, but sent the children to school before the desquamative stage was over. He enters at some length on the right use of disinfectants, and points out the little benefit to be derived from attempting to disinfect the air with carbolic acid or chloride of lime whilst the patient is in the room; but strongly advocates the employment of either of the agents for the disinfection of the urine and feces. He also recommends washing the hands and mouth in a solution of Condy's fluid before leaving the room, as well as at other times; steeping infected clothes in a solution of Condy's fluid before their removal for washing or disinfection. There are no statistics given, as it was a special statement on zymotic diseases.



## SPECIAL CORRESPONDENCE.

## PARIS.

[FROM OUR OWN CORRESPONDENT.]

*Removal of Naso-Pharyngeal Polypus: Hemorrhage: M. Verneuil on Syncope attending Operations.—Are the Salts of Copper Poisonous?—M. Sée on the Therapeutic Use of Salicylic Acid and Salicylates.—Fistulous Opening into Stomach: Observations on Digestion.*

M. VERNEUIL, of La Pitie Hospital, lately removed from a boy aged eight years a large naso-pharyngeal polypus. The operation was attended with considerable hæmorrhage; and, in consequence, symptoms of acute anæmia set in; and in the evening of the day of the operation, about four hours afterwards, the boy was so low—the temperature of the body having fallen to  $33\frac{1}{2}$  deg. Cent. ( $92.3$  Fahr.)—that the *interne* on duty summoned M. Verneuil to see the patient. M. Verneuil not being at home, it was determined to keep the patient up by administering stimulants, such as brandy and water, pure claret, etc., which had the effect of producing a slight rise of the temperature. At 8 P.M., M. Verneuil, finding the patient still extremely low, at once injected hypodermically ten drops of sulphuric ether, and in about half an hour afterwards repeated the injection. From this time forward, the temperature gradually rose, and about forty hours after the operation was found to be a little above the normal standard. This case elicited some instructive remarks in a clinical lecture from M. Verneuil. In referring to syncope in connection with great operations, he said that this state may occur before, during, or after an operation. In the first case, it may be brought on by simple fright, as in the celebrated case of lithotomy related by Desault, in which, whilst he was describing the operation to his audience, and delineating on the patient the different steps of the operation, the latter suddenly died on the operating-table before any incision was made. Syncope during and after an operation may arise from nervous shock or from profuse hæmorrhage. It sometimes happens that instead of taking place during or immediately after an operation, it may supervene some hours afterwards, which fact would point to the necessity of constant watching and nursing of the patient until he is considered out of danger. Among the remedial agents for this grave condition of syncope, transfusion has been somewhat extensively employed; but M. Verneuil is not at all partial to it under any circumstances. Indeed, he looks upon it as a most dangerous remedy, as the blood, whether of man or of animals, being of a highly putrescible character, would, even when immediate transfusion is practised, be liable to produce septicæmia, or even pyæmia. He took occasion to say that, whenever transfusion is indicated, as in syncope or excessive hæmorrhage, the hypodermic injection of ether or ammonia would be preferable to transfusion of blood or any other liquid, even in puerperal or *post partum* hæmorrhage.

A rather animated discussion lately took place at the Academy of Sciences as to whether the salts of copper were poisonous or not. Arguments were ably maintained on both sides, the principal adversaries being MM. Pasteur and Vulpian. The discussion arose *à propos* of the beautiful green colour which preserved peas generally presented, and which, it was admitted by both parties, was due to the presence of the sulphate of copper employed to give to ripe peas, which are of a yellowish tint, the colour of young or green peas. This, M. Vulpian stated, was harmless in its effects, as proved by the numberless consumers of this favourite dish. He did not know of a single case of poisoning in this way, and yet the quantity daily consumed is enormous. The copper contained in preserved peas and other vegetables, added M. Vulpian, is in an insoluble state, or nearly so. A portion of it is, in course of time, absorbed by the liquid portion of the contents of the tin box in which they are sold; when required for the kitchen, this liquid is poured off, and the vegetables themselves are washed in boiling water before being cooked; so that when the dish comes upon the table the quantity of copper is absolutely insignificant. M. Pasteur, on the other hand, maintained that, however infinitesimal the dose of the copper may be, its repeated absorption at short intervals, and extending over a lengthened period, must in the end prove deleterious to the human organism. Some of the speakers, and M. Vulpian amongst them, went so far as to say that it has yet to be proved that the salts of copper are poisonous in the ordinary sense of the term; that accidental or criminal poisoning by these salts is simply impossible, as, when taken in large quantities, they are immediately rejected by the stomach. This property has been taken advantage of, and the sulphate of copper is generally administered in cases where an energetic emetic is required. Moreover, soluble salts of copper have a peculiar taste, which is so intensely disagreeable, that it would be

impossible to administer them to a person in his proper senses without his immediately ejecting them from his mouth. As for the insoluble salts, they have little or no taste, and their emetic virtue entirely depends on their finding a solvent in the stomach. Hence it has been concluded that the poisonous qualities of copper are a mere tradition, without any foundation in fact. This assertion brought forth a strong protest from Dr. Georges Bergeron, who, it will be remembered, was the expert employed in the celebrated case of Moreau, a herbalist, who was accused and condemned to death, about two years ago, for having poisoned his two wives with the sulphate of copper. Experiments on animals with the salts of copper have produced negative results; and this has led to the conclusion that the herbalist was either not guilty, or that the real poison was not discovered.

In my letter which appeared in the JOURNAL on February 10th, I mentioned, with reference to Professor Sée, that he had promised to give the result of his further experience as to the efficacy or otherwise of salicylic acid in well-marked febrile articular rheumatism. M. Sée has redeemed his promise; and, in a recent clinical lecture, he stated that in this affection the curative power of salicylic acid, or rather of the salicylate of soda, which he has adopted as a more convenient preparation, is simply marvellous. He has also found it very efficacious in the chronic or non-febrile forms of rheumatism; and this would seem to be the limit of its therapeutic properties, at least as an internal remedy. He is not prepared to explain its *modus operandi*; but he is certain that it does not deserve the name of antipyretic in the proper sense of the term. That it reduces abnormal temperature there can be no question; but he has never noticed a fall of more than one degree or a degree and a half, and even then this fall was not persistent or regular, as after a time, whether the medicine were continued or not, the temperature rose to the same height as when the medicine was first administered. This would seem to accord with the experience of other observers; and M. Sée is of opinion that salicylic acid and its preparations cure rheumatism, not by their antipyretic properties, but by some specific action on the morbid agent which generates the affection; for in these cases, besides their sedative and anodyne action, they seem to have some special influence on the morbid tissues, which they modify in an amazingly short space of time. He noticed, in more than one case of acute articular rheumatism, that the swelling, heat, and pain of the joints had disappeared as if by magic in less than forty-eight hours after the first dose of the salicylate of soda, and that without the aid of other adjuvants, beyond keeping the patient and the joints enveloped in cotton-wool. He warns physicians against employing salicylic acid or its preparations in typhoid fever; for, according to his experience, they are not only useless, but he would consider them dangerous in this affection. In some cases that came under his observation, he noticed that all the patients, without exception, became delirious; and in order to ascertain whether the delirium was due to the malady or to the medicine, he suspended the latter, and the delirium immediately ceased; when the medicine was resumed, the delirium came back. This experiment was repeated several times and always with the same result, which, to my mind, is conclusive enough to induce other practitioners to be on their guard during the employment of the drug in question. Moreover, M. Sée foresees another danger in its administration in typhoid fever: owing to its corrosive properties, he would be afraid of perforation of the bowels, to which there is always a tendency in this affection, and the medicine would perhaps accomplish what the malady failed to effect.

The opportunities for direct observations on the phenomena of digestion are extremely rare, and indeed, besides the works of Beaumont and Schroeder, little has been written on the subject, at least of an original character. Your readers may recall to mind the operation of gastrostomy, performed last year by M. Verneuil on a lad aged seventeen, and which has been fully described in the JOURNAL of January 13th. This case has afforded M. Charles Richet, a young and promising *savant* and son of the eminent Professor of Clinical Surgery at the Hotel Dieu, an opportunity for studying, through the fistulous opening into the stomach, the intimate properties of the gastric juice. According to the conclusions of a paper submitted by him to the Academy of Sciences, the mean acidity of the gastric juice, whether pure or mixed with the food, equals about 1.7 grammes of hydrochloric acid per 1,000 grammes of the liquid. He has never found the acidity inferior to 0.5 grammes, nor superior to 3.2 grammes. The quantity of the liquid in the stomach has no influence on its acidity; and, whether the stomach be empty or full of alimentary substances, the acidity is almost invariable in strength. Wine and alcohol increase the acidity of the stomach; cane-sugar diminishes it. If liquids, acid or alkaline, be injected into the stomach, the gastric fluid always tends to resume its normal degree of acidity; so that, an hour after the injection, the stomach has resumed its mean degree, or nearly so, of acidity. When



the digestive function is not in action, the gastric juice is less acid than during digestion. The acidity increases near the end of digestion. The sensations of hunger and of thirst do not depend either on the degree of acidity or on the state of the emptiness of the stomach.

## VIENNA.

[FROM AN OCCASIONAL CORRESPONDENT.]

*Professor Billroth's Clinic.—Antiseptic Surgery.—Amputations.—Subperiosteal Excision of Joints.—Epispadias with Extrophy of Bladder.—Ovariectomy.—Rebriking of Badly United Fractures.—Paquelin's Thermo-cautère.—Excision of the Spleen.*

PROFESSOR BILLROTH'S clinic is large in point of numbers. Here is collected the foreign surgical element, to listen to and see the practice of one who has in so short a time earned a name which is sufficient in itself to attract them to Austria. A separate list of attending graduates is kept; and, at each operation where it is thought advisable not to bring the patient into the theatre, a select number of these, in turn, receive invitations to be present.

The number of beds under Dr. Billroth's care is about a hundred, each of which is provided with a brass spring-mattress, and these add much to the comfort and cleanliness of the occupants. At the head of the bed hangs a black board, with places ready allotted for the insertion of temperatures, pulses, diets, etc., for about a month; all the beds have been well filled during the present session. The patients themselves are well looked after, and the records of the cases carefully kept by the assistants. The clinic lasts from ten to twelve in the morning five days weekly; the first hour on three days out of these is devoted to the demonstration of the most interesting cases amongst the out-patients, the students being called down in turn and asked to diagnose, to give reasons for the opinion expressed, etc., before the class; the remainder of the time is spent in operating. Upon the other two days, the first hour is occupied by the delivery of a systematic lecture; and a visit to the wards absorbs attention for the hour following.

Professor Billroth is fully alive to the principles laid down by Lister, but his method of carrying antiseptic surgery into practice is not quite so earnest as that adopted in the clinical surgery wards in Edinburgh. The steam spray producer has not at the present time travelled so far south as Vienna; and the mode of using that worked by hand is not exactly what one imagines is requisite for the slaughter of lively germs, as often the jet of spray is seen suddenly to become very small, or to cease altogether, the assistant being affected with either finger-cramp or drowsiness. This, however, does not seem to be thought anything very serious, neither is it considered requisite by some of those assisting the operator, that they should render aid with antiseptically clean hands. During an operation, catgut ligatures are used for tying vessels, except in the case of very large arteries, where silk is substituted; drainage-tubes are largely used. The dressing itself is not quite the orthodox one, as only four layers of actual carbolised gauze are deemed necessary; between two of these folds two thin ones of cotton-wadding are laid. To prevent the discharge from saturating the dressing, a piece of waxed paper takes the place of mackintosh; in many cases, above the dressing a large quantity of cotton-wool is placed, the whole being secured by a gauze-bandage. Some of the patients eventually do perfectly well, but the majority of the cases are not so free from smell as it is possible for a purely antiseptic wound to be. However, there has been scarcely any pyæmia or erysipelas in the wards during the present session. The anæsthetic used for all operational purposes in this and the other clinics is chloroform; it is generally administered on the "drop" system, but the vapour is not sparingly given, the patient being always kept well narcotised.

Cases requiring amputation are not so frequently seen as might be expected. It is a rare thing to see Billroth himself amputate a limb, the task being generally committed to the assistant who has the care of the ward in which the patient lies, the Professor standing by and giving any directions that may be necessary. In every situation where it is possible to perform it, the circular method of amputating is found to be preferred to that by flap; in fact, in the practical surgery courses where the various operations are performed on the dead body, only one out of all the teachers ever demonstrates the various ways of making flaps, the remainder seeming quite satisfied with the circular incision. An operation which is seen often performed for caries or injury of the foot, is that of Pirogoff; in all cases, it seems to be thought superior to that of Syme.

Joints are always excised according to the subperiosteal method. In those cases in which it has fallen to my lot to witness the operation performed upon elbow-joints, the results, as regards after-motion, have

not been so good as those it is customary to see, in which the less complicated plan has been adopted. Cases of tumours, examples of every description, have been exceedingly plentiful; and epispadias has been by no means uncommon. In one case, this was complicated by extrophy of the bladder in a lad seventeen years of age, the patient having gone about all his life with a specimen of a tin saucer fastened round his waist to catch the urine as it dribbled away. To remedy this, two longitudinal flaps of skin retaining their attachments superiorly and inferiorly were dissected up from the abdominal wall on each side, and brought towards the middle line to cover in the bladder. When adhesion had pretty far advanced, two pieces of strapping with common hooks, such as may be found in a toilet-basket, sewn on, were applied to each flap, and a piece of string passed over the hooks, as if lacing a boot; by these means, the parts were brought nearer together, and in time the two flaps met in the middle line, and slowly but surely union took place; the bladder was thus covered in, much to the delight of the patient.

It is under Professor Billroth's care also that the women requiring ovariectomy are sent. At the time of the operation, the patient is not brought into the theatre, but the ovarian cyst is removed in the small ward which she occupies alone, and in which she afterwards remains till convalescence is so far advanced that she can be moved with safety into one of the larger ones. As a rule, only about twelve spectators are admitted in addition to the necessary assistants. The carbolic spray is used during the operation until the abdominal cavity is opened; it is then stopped until the time arrives for the insertion of the drainage-tubes and stitches, when it is recommenced. The dressing employed is that used in ordinary antiseptically treated cases. In one patient, where the origin of the disease was doubtful, an exploratory incision was made under the spray; and, on examination, the cyst proved to be a hydro-nephrotic one, filling up a great part of the abdominal cavity. After having been tapped, the cyst was laid freely open, and its edges secured by means of sutures to the sides of the wound in the linea alba. This case terminated fatally in a fortnight; but the true ovariectomies have been fairly successful.

The members of the clinic have also had opportunities of seeing badly united fractures rebroken by means of an osteoclast. The one employed was manufactured by Lollini brothers of Bologna, and consisted of an horizontal steel bar, at the ends of which are two rings, large enough to contain an ordinary sized limb, each being joined to the bar by means of a screw; both these rings are well padded with velvet. Through the centre of the horizontal bar passes a powerful screw, worked superiorly by a handle; inferiorly it is in connection with a somewhat horse-shoe shaped piece of metal, concave, and thickly lined with velvet. When the instrument is used, the limb is passed through the rings until the horse-shoe shaped part is high enough to be opposite the point where it is wished to fracture the bone, and, by turning the handle, enough force is exerted to accomplish what is required; it is afterwards seen that the surrounding tissues have been more or less contused. The instrument itself is smaller and more elegant than that devised for a similar purpose by Mr. Butcher of Dublin, a diagram of which is shown in the second edition of Spence's *Lectures on Surgery*. The favourite plan for treating fractured bones is by the immediate application of a plaster of Paris bandage.

Professor Billroth has, during the present session, tried the new *thermo-cautère* of Paquelin, made by Charrière, Collin, and Co., of Paris. The novelty of this instrument is that, after heating the cautery in a spirit-lamp, it can be maintained at a point of red heat for any length of time by means of the ordinary apparatus used for producing spray which is in connection with the cautery, the glass through which the air passes containing naphtha. The cases on which this has been tried so far have been considered satisfactory; the instrument is, however, very dear, and in Vienna costs a sum equal to £6.

An operation of great interest, but extreme rarity, was performed on January 28th, namely, excision of the spleen. The line of incision for extracting the organ was that used in ovariectomy, in the linea alba, and the usual antiseptic precautions were taken. After the operation, on examination, it was found that the spleen was immensely hypertrophied, and weighed six pounds. The patient, who was a woman, survived four hours. At the *post mortem* examination, on the following day, a large amount of clotted blood was found in the abdomen; and, by injecting water, it was discovered that a small artery had not been securely enough ligatured, and so death had followed from hæmorrhage. After the necropsy, Professor Billroth gave a short account of the recorded cases in which the operation had been performed, and stated that, if ever he were called upon to do the same again, he should take the precaution of including part of the pancreas in a ligature.



## ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:  
NOTICE OF MEETING.

## ALTERATION OF DATE.

A MEETING of the Committee of Council will be held at the Office of the Association, 36, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 18th day of April next, at Two o'clock in the afternoon.

FRANCIS FOWKE,  
*General Secretary.*

36, Great Queen Street, London, W.C., March 28th, 1877.

## WEST SOMERSET BRANCH.

THE spring meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, April 5th, at 5 P.M.

The following question has been settled by the Council as the one on which members should be invited to express their opinion at the said meeting after dinner:—"What in your opinion is the best mode of feeding infants artificially, both as regards food and method?"

Dinner 5s. a head, exclusive of wine.

Papers as follows are expected.

1. On a Case of Poisoning by Carbolic Acid.

2. On a Case of Hydrophobia.

3. On the advantages of Minehead as a Winter Residence.

W. M. KELLY, M.D., *Honorary Secretary.*

Taunton, March 5th, 1877.

## SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE next ordinary meeting will be held at the Stepney Arms, Llanelly, on Thursday, April 5th: President, ANDREW DAVIES, M.D.

The following papers, etc., are promised.

Mr. J. Hancocke Wathen: 1. A New Form of Splint; 2. Notes of a Case of Extra-uterine Fœtation: Operation.

Dr. Sheen: Counter-Practice.

Mr. B. Thomas: Prevention of Contagious Diseases.

Further particulars will appear in the circular.

ANDREW DAVIES, M.D. } *Honorary Secretaries.*  
ALFRED SHEEN, M.D. }

March 14th, 1877.

*Medical Defence.*—A meeting of those members who approve of and support the Medical Defence movement will be held prior to the Council meeting, and members are earnestly requested to attend.

J. HANCOCKE WATHEN, *Honorary Secretary (pro tem.)*

## BATH AND BRISTOL BRANCH.

THE fifth ordinary meeting of this Branch will be held at the College Green Hotel, Bristol, on Thursday, April 12th, at 7.30 P.M.: H. F. A. GOODRIDGE, M.D., President, in the Chair.

EDMUND C. BOARD, *Honorary Secretary.*

Clifton, March 28th, 1877.

## MIDLAND BRANCH.

THE sixth and last monthly meeting of this Branch will be held at the house of the President, on Friday, April 20th.

Coffee at 7.30 P.M.

A paper on the Progress of Surgery during the last Thirty Years, by Joseph White, F.R.C.S. Edin., President of the Branch.

L. W. MARSHALL, M.D., *Hon. Local Secretary.*

Nottingham, March 26th, 1877.

## NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch will be held at South Shields, on Wednesday, April 25th.

Dr. Eastwood will propose, "That it is the duty of the General Medical Council to prosecute unqualified medical practitioners".

Dr. Eastwood will present a petition to be signed in favour of the Habitual Drunkards Bill, 1877.

The following papers have been promised.

1. Dr. E. C. Anderson: Objection to the use of the term "Typho-Malarial Fever". That it is not a hybrid of the enteric and malarial

forms of fever, but a manifestation of two separate concurrent diseases, one of which may cease to exist in the system and the other pursue its course.

2. Dr. E. C. Anderson: Notes upon a Case of Rheumatic Fever, in which, after apparent complete recovery, the patient suffered from a relapse. Former attack treated with large doses of bicarbonate of soda, the latter with the salicylate of soda.

3. Dr. C. J. Reid: Milk, as a Therapeutic Agent.

Gentlemen who are desirous of reading papers, introducing patients, exhibiting pathological specimens, or making other communications, are requested to give notice to the Secretary.

G. H. PHILIPSON, M.D., *Honorary Secretary.*

Newcastle-upon-Tyne, March 27th, 1877.

## CORRESPONDENCE.

## F.R.C.S. (BY EXAMINATION).

SIR,—I am surprised to find you siding with those who wish to lower the examination for the F.R.C.S. diploma.

At present, this (the F.R.C.S. by examination) is to the Surgeon what the M.R.C.P. is to the Physician: the mark to the profession that he is specially qualified in that branch of his profession.

The Fellowship should never be looked upon as a qualifying diploma, but as a diploma of honour, showing an especial knowledge of surgery.

The standard for the M.R.C.S. has been greatly raised of late years; why, therefore, should the standard for the higher degree be lowered? The fact of so much more being required for the Membership should rather have called for an increase in the requirements for the Fellowship.

The present regulations, allowing students to pass the first or anatomical examination, are even of doubtful advantage, as many pass them and do not go in for the second or final examination until they have forgotten the greater part of their anatomy.

The Fellowship, unlike the M.D., gives no title for the public, and is only of use in giving the holders a certain status amongst their professional brethren; and if the standard be lowered, as proposed, it will be necessary to add after F.R.C.S. not only "by exam.", but "before 1877".

Hoping that you will yet use your powerful pen to prevent this degradation of this (at present) the highest qualification in surgery.

I am, yours sincerely,  
Exeter, March 25th, 1877.

JOHN WOODMAN, F.R.C.S.

## PUBLIC SUPPORT OF HOSPITALS.

SIR,—Nearly every old-established general hospital in London, mainly supported by voluntary contributions, had a large excess of expenditure over income at the end of the year 1876, or, in other words, the public support accorded to these hospitals has seriously fallen off of late years. It is not difficult to find causes to account for this state of affairs; and to-day I propose, with your permission, to confine myself to one main reason which will, in a measure, account for the lamentable financial deficiency at our general hospitals, and to propose a remedy. It cannot be doubted that "the diversion of charitable donations into wrong channels" lies at the root of the evil. To say nothing of "famine funds" for the far east, "atrocities funds" for Bulgaria, and "relief funds" for Turkey, all of which have attracted attention from the need of the sick poor at home, an overwhelming number of small special hospitals has been established during the last twenty years, which, as has been justly declared, "have diverted a small share of the charity designed for general hospitals". I know that many are loth to believe that such is the case, but I am convinced that these smaller institutions are gradually paralysing the enterprise and curtailing the usefulness of the old-established general hospitals. Under these circumstances, the time has surely arrived when the public should be aroused to the exact position of affairs. They must be asked to choose between one of two alternatives: either to decide to inquire into the requirements of the old-established hospitals, and to materially add to their charitable expenditure by contributing the income they at the present time so sadly need, to enable the managers to successfully cope with the mass of sickness it is their duty to relieve; or, if it be felt that they already give as much to hospitals as they can conscientiously devote to the purpose, then, clearly they ought to consider the claims of the general hospital with its special departments, before giving of their abundance to the small and often practically useless "special". Do not let me be misunderstood. I am fully conscious



of the great good some of the *legitimate* special hospitals do; but I fear that, in the majority of instances, the necessity for a special hospital, and the distinctly felt wants of such an institution, are becoming almost the *last* considerations which engage the attention of the well-intentioned people who, during the last few years, have shown so much energy in establishing, with needless frequency and almost endless repetition, new institutions for almost every disease to which flesh is heir. Will it be believed that, in the year 1875, the income supplied by the public to thirty-six special hospitals, having amongst them 1,113 beds, amounted to £106,385; whereas the income of the eight chief Metropolitan hospitals, which are mainly supported by voluntary contributions, to all of which medical schools are attached, having amongst them 2,268 beds, only amounted to £110,199? Nor is this all; for, whereas the proportion of management expenses to maintenance at the former averaged upwards of 20 per cent. during the three years ending 1875, at the latter the average cost of management during the same period and on the same basis only amounted to 7½ per cent. Did space permit, I would give the names of the special hospitals in detail; but, as this is impossible, I merely summarise them under their special heads. I may, however, state that I shall be happy to show the figures to any one who is connected with the management of any of the hospitals who may be interested in the subject. The special hospitals to which I refer are made up as follows: Three for diseases of the skin; five ophthalmic hospitals; one ear hospital; two dental hospitals; two throat hospitals; three women's hospitals; four women and children's hospitals; six children's hospitals; one cancer hospital; three orthopaedic hospitals; two for diseases of the nervous system; one for diseases of the legs; one for diseases of the heart; one for fistula; one for stone; total, thirty-six.

I believe if the public were aware that the average cost of management, at all but the best managed of these special hospitals, is three times as great as it is at the general hospitals having special departments, they would very soon discontinue their present practice of contributing to almost every special institution which is brought directly under their notice. Again, is it not a humiliating reflection, that so little discrimination was shown by the benevolent, in 1875, that they actually contributed almost as much to support 1,100 beds in thirty-six special hospitals as the whole income available to maintain more than double the number, or 2,278 beds, in the eight large Metropolitan hospitals, mainly supported by voluntary contributions, viz., Charing Cross, King's College, the London, the Middlesex, St. George's, St. Mary's, University College, and the Westminster Hospital? I am fully aware that the managers of special hospitals maintain that the general hospitals do not make adequate provision for the treatment of the class of cases they desire to treat. But what are the facts? At the present time, if we include St. Thomas's, St. Bartholomew's, and Guy's, with the eight hospitals just enumerated, I find that they collectively provide the following special departments: Nine for diseases of the skin; ten for diseases of the eye; eight for diseases of the ear; four for diseases of the throat; eleven for diseases of women and children; one for cancer; and three for orthopaedic surgery; or ten more than the whole of the special hospitals provide, including those institutions for diseases of the nervous system, of the heart, and of the legs, together with fistula and stone, all of which diseases can be seen by the sceptical within the walls of a general hospital, on any day, and probably all the year round. I think that the facts I have adduced prove—

a. That, as compared with general hospitals, special hospitals are maintained at a needlessly ruinous expenditure for management.

b. That the existence of many of them is, as the *Lancet* declares, "needless and useless", for every necessary provision is made at the general hospitals.

c. That the philanthropic public have good reason to pause before they desert the general in favour of the special hospitals.

But, apart from the point I have just been considering, I am convinced that the managers of the general hospitals will be wise to remodel their arrangements for procuring income. At the present time, the system adopted by the majority of the large general hospitals is to rely too much upon the spontaneous generosity of the public which has so long stood them in good stead. Unfortunately, however, the days have gone by when a standing advertisement in the hospital column of the *Times*, with such other advertisements in other papers from time to time as seemed desirable, is all that is necessary to procure the needful income. Some other means must be devised for arousing public attention to the urgent necessities of our great London hospitals. My own opinion is that an attempt should be made to directly localise each institution; that is to say, the managers should endeavour in season and out of season to arouse the inhabitants of the district in which a hospital is situated to a sense of its necessities. Surely, what has been done in Edinburgh and in the country and manufacturing towns can be

done in London. Thus, at Edinburgh, the managers of the Royal Infirmary organise a systematic house to house collection once each year. Everybody is asked to contribute; every sum, however small, is entered in the collector's book; and in this way £1,200 is raised annually in a few weeks. In the large provincial towns, where there are two or more hospitals, it is noticeable that each institution finds its chief supporters in the district immediately adjoining, and from which, of course, the patients are mostly received. To successfully carry out such a system as this, small subscriptions should be encouraged. The London and the Westminster Hospitals have in part successfully adopted some such plan as I suggest. To those who think this plan impracticable, I would say, try it on Hospital Sunday in June next. The arrangements will be inexpensive and simple; and at Birmingham it has produced each year a not inconsiderable increase in the subscription lists of the different hospitals. Let each hospital, or all those of a given district, combine for the purpose, and form a Committee to work the district in which their institutions are situated. With the consent of the clergy and ministers of religion generally, let them prepare pew forms and place them, with a short description of each of the institutions co-operating in the movement, in every pew and in all the places of worship on Hospital Sunday. Every minister will thus be enabled to direct especial attention to the need of the institutions with which both he and his congregation are especially familiar, much larger sympathies will be excited, and an opportunity will be afforded the liberal portion of the public everywhere to give annual subscriptions and donations. Thanks to the Rev. Canon Miller, D.D., I tried this plan with success last year on Hospital Sunday; and I believe its universal adoption would materially add to the total sum subscribed throughout the metropolis. By all means, let us continue to bring the claims of our old established hospitals before the wealthy members of the community everywhere, but do not let us longer neglect to urge our claims upon neighbours who have too long remained unasked and uncanvassed. In ten years, one hundred cottage hospitals in different parts of the country have managed to raise an income from their immediate neighbours of upwards of £40,000 a-year. Shall it be said that, in our anxiety to persuade the wealthy outsider to contribute, we have ignored the well-to-do and thrifty members of the working and middle classes who have lived in our midst from the very commencement, and by whom the hospitals in the provinces are mainly supported? I fear I have already occupied too much of your space; but I hope on a future occasion, with your permission, to return to the subject, which is too complex to be fully treated in a single letter.—I am, etc.,

Greenwich, March 28th, 1877.

HENRY C. BURDETT.

#### THE CASE OF GUNNER CHARLTON.

SIR,—Having had charge of the case of Gunner Charlton, under Dr. Webster, while it was at the Woolwich Union Infirmary, I am able to give the following facts relating to it, which may be read with interest.

When admitted, he was insensible and completely collapsed. The policeman who brought him spoke positively to the smell of alcohol detected when he took him from the street, where he had fallen insensible; but there was none to be observed on him when seen by me. I, however, ordered him to a bed at once and used the stomach-pump. A large quantity of badly masticated food was abstracted from the stomach, but nothing smelling of alcohol. There was at this time no congestion of surface, and the breathing was stertorous. I ordered a stimulant mixture containing spirit of chloroform and carbonate of ammonia, with hot-water bottles to the feet. I was called to him two hours subsequently, and found him dying.

*Post Mortem Examination*, twelve hours after death.—The body was well nourished. The toes were gone. On opening the chest, a large deposit of fat was found on the pericardium—about two ounces. There was also much fat on the heart, on lifting the apex of which the pulmonary vessels ruptured. The lungs were healthy; but, on opening the trachea, it was found full of food, a piece of potato being lodged in it at the bifurcation of the bronchi. Pellets were found also in the larynx, so as completely to obstruct the respiratory passage. Some large pellets of food still remained in the stomach. There was no odour of alcohol. There was considerable thickening of the membranes of the brain at the vertex, showing old standing inflammation, but not sufficient to account for insensibility; otherwise the organ was normal.

The deposit of fat on and about the heart was judged capable of considerably embarrassing the circulation. It was supposed that the stomach, having been relieved of as much of its contents as would pass through the tube of the stomach-pump, had recovered its sensibility



sufficiently to bring about vomiting; and that the food had been drawn into the larynx and trachea when efforts were made to inspire.—I am yours, etc.,

GEORGE BATE.

Cerne Abbas, Dorset, March 23rd, 1877.

#### ADMINISTRATION OF CHLOROFORM.

SIR,—I beg to direct the attention of the profession to a very dangerous abuse which has lately sprung up in most of our cities; viz., the administration of anæsthetics by dentists who possess no medical or surgical qualification. Through the incompetence of one of this class, a patient of mine almost lost her life lately. On recovering consciousness, it was found that her tongue had been all but divided into two by the teeth. What is the remedy?—Yours, etc.,

March 20th, 1877.

A COUNTRY SURGEON.

#### ALCOHOL IN MEDICINE.

SIR,—With your permission, and if I am not occupying too much space in the columns of your valuable JOURNAL, I should like to offer a few observations in reply to your fair and reasonable criticisms on my letter of February 24th.

As you very justly remark, free ventilation of different opinions, and I might add of the results of those opinions as exemplified in practice, is of material assistance in arriving at the truth.

In the first place, we seem to differ as to the action of alcohol as a food. That it is not a necessary food in health is absolutely certain; but, on the other hand, that it is a most valuable food or life-sustaining material in some cases of disease, I think there can be no reasonable doubt. You think it impossible to maintain this opinion, because "fat belongs to the carbonaceous group of materials, etc." May not alcohol fitly take its place in this group? Does not ordinary vinic alcohol ( $C^2H^6O$ ) belong to the same group as melissin or melissylic alcohol ( $C^3H^6O$ ), which is a solid fat at ordinary temperatures?

We know, from the researches of the most eminent chemists, that members of the same group undergo various similar changes when acted on by particular reagents, as, for instance, the action of strong sulphuric acid on the monatomic alcohols, etc. Is it not, therefore, reasonable to suppose that alcohol may behave within the body somewhat in the same manner as some of its most intimate allies?

But, if alcohol be a fat food, why does it lower, or at least not elevate, the temperature? I do not think it is proved that the assimilation of ordinary fat elevates, but that it merely maintains, the temperature. We are not aware within ourselves of any indication of elevation of temperature, nor has it been demonstrated by the thermometer; and, indeed, the reduction of temperature, etc., following the administration of alcohol during the height of acute disease is, as it appears to me, a very small fraction of its actual therapeutic value. In my letter of February 13th, please notice this passage: "It is consumed as a fat within the body, and as such is valuable," etc.

Small quantities of alcohol have no effect upon the bodily temperature. It is only when given in very large doses that it lowers the temperature to a notable extent, say 2 deg. to 4 deg. This has been proved by the late Dr. Parkes, Dr. Ringer, and others.

It is matter of constant observation that the natural stores of fat in certain forms of acute disease are exhausted with great rapidity. This, in all probability, is followed by consumption of the nutritive fat of the muscles, and, as a natural result, their action becomes weaker, less efficient, and at last extinguished.

Now, I venture to believe that the timely and judicious administration of alcohol may possibly prevent this rapid waste of nutritive material, and thus counteract the tendency to death.

The following are a few arguments which appear to strengthen the idea that alcohol acts as a fat food.

1. When alcohol is burnt in the air, it yields carbonic acid and water; and when it undergoes combustion at a very low temperature, such as might be expected to take place within the body, aldehyd is formed, which quickly takes up oxygen, and is converted into acetic acid. The odour which pervades the atmosphere in the immediate vicinity of a great drinker is certainly not one of pure spirit. It is not unlikely that this odour, which is *sui generis*, may be a combination of emanations arising from spirit, aldehyd, and acetic acid. One observer (I forget who) states that he has found aldehyd in the blood.

11. In acute disease, when it had been considered advisable to give alcohol in doses far larger than sufficient to produce genuine narcosis in a state of health, Dr. Anstie found that the alcoholic odour was not

apparent in the exhalations from the lungs, skin, or motions, neither were there the usual signs of intoxication.

111. Although unchanged alcohol may be found in considerable quantity when there has been great ingestion of it, the amount found in all cases is, comparatively speaking, so very small that we are almost compelled to come to the conclusion that the rest is oxidised within the body.

1v. The late Dr. Anstie relates some very remarkable cases of pericarditis, pneumonia, and pleurisy, in which the patients took absolutely no kind of nourishment but wine and brandy and water for a whole week (in one instance, twelve days), the recoveries being more than usually rapid in all the cases.

In the same chapter, instances of individuals in a comparatively healthy condition are cited, who have practically lived on stimulants for years. This surely proves that alcohol may, at any rate under certain circumstances, be taken and assimilated like ordinary food.

In the second place, when I doubt the paralysing action of alcohol on the vaso-motor system in acute disease, you believe I am falling into a common error. The condition, or set of conditions, of the organism in health certainly appear to me to differ very considerably from the condition, or set of conditions, of the organism in certain forms of disease. Whether there be anything superadded or not, is of no great importance on this question. Is it not, at any rate, quite obvious that the action of many agents on the organism in a state of health is very different from their action on the same organism in a state of disease? If, as you say, alcohol acts chiefly by paralysing the vaso-motor system, is it not possible that the set of conditions which we call disease may, in some instances, modify the ordinary state of the vaso-motor centres or system, one or both, and thus produce an entire change of action?

But, thirdly, you appear to think I am under some misapprehension concerning your conclusion that "alcohol will do harm in the early febrile stages of the pyretic disorders, but it will prove useful in the subsequent spanæmic and depressed stages". Of course, I presume you are speaking generally as regards the early stages and subsequent ones, always allowing for variation of circumstances. I interpreted the sentence as follows: "That alcohol will usually do harm in the early febrile stages of the pyretic disorders, but it will generally prove useful in the, etc." If I am right in putting this construction upon it, you will at once perceive in what consists our difference of opinion.

Upon the next and last point, I have ventured to reply; I should wish to be very distinctly understood. It does seem to me very important, always supposing the presence of good appetite, digestion, and efficient power of assimilation, not to use alcohol generally during convalescence from acute disease. The relish for food and drink of a stimulating character is frequently very intense at this period, and this has been with me a powerful reason for discontinuing the use of alcohol as soon as I thought my patient was on the high road to recovery. Formerly, I prescribed port wine, etc., during convalescence; but I fear I can call to mind one or two patients who, from that time forth for the remainder of their lives, became addicted to systematic drinking. These patients were advised to discontinue the alcohol when their health was restored; but, as in too many similar instances, the advice was altogether disregarded.

I am afraid I have trespassed too much upon your valuable columns, but I was anxious to inform you exactly in what, and why, I differed from the views so ably and forcibly expressed in your article of February 10th. I may say that I am not prejudiced in favour of my own views, and am still open to conviction.

Apologising for the length of this epistle, I am, sir, yours faithfully,  
EDWARD T. TIBBITS, M.D.Lond.

Bradford, February 28th, 1877.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE Preston Guardians and Rural Sanitary Authority have increased the salary of their Clerk from £200 to £300 per annum.

THE Skipton Rural Sanitary Authority have passed a resolution to abandon the proposed joint appointment of a Medical Officer of Health, and to appoint separately.

VACCINATION.—Mr. Edward Marshall of Mitcham has received from the Local Government Board a vaccination grant of £19: 14, making the fifth grant which he has received.



## MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, March 22nd, 1877.

**Vaccination.**—In reply to Mr. Forsyth, Mr. SCLATER-BOOTH said: So far as is known, none of the lymph at present in use at the National Vaccine Establishment is of artificial production by inoculation of the cow with the virus of small-pox, the lymph distributed being either from Jenner's source or from sources of the natural disease in the cow which have since been met with. The securities for the perfect condition of the lymph distributed by the National Vaccine Establishment are—first, the careful choice of the vaccinators by whom it is collected; second, the inspection to which they and their stations are subjected; and, thirdly, the independent microscopical examination, without which no tube of lymph is ever sent out.

**Medical Examination.**—Mr. ERRINGTON asked the Vice-President of the Council what progress had been made by the various medical bodies towards carrying out the "conjoint scheme" of examination.—Viscount SANDON: We have been informed by the President of the Medical Council that negotiations have been carried on at various meetings of a conference held in London, under the presidency of Sir James Paget, between the Universities of Oxford, Cambridge, London, and Durham, and the Corporations of the Royal Colleges of Physicians and Surgeons, and the Apothecaries' Company—for the purpose of forming one Examining Board for England under Clause 19 of the Medical Act. Conditions have been agreed to by the representatives of all the bodies, and they await the consideration and consent of the bodies themselves. There is every reasonable ground for hoping that this consent will shortly be obtained. In Ireland, also, a demand has been made within the last year to form an united Examining Board, but this demand has hitherto failed. From Scotland we have no evidence that the formation of a General Board is contemplated. In the circumstances mentioned above, I think the honourable gentleman will see that it would be premature for me on the part of the Government to express an opinion as to the necessity for undertaking the reform of the whole system of licensing for medical degrees.

Monday, March 26th.

**Coroners.**—In answer to Mr. Puleston, Mr. CROSS said that once or twice legal difficulties had arisen in consequence of a vacancy in the office of coroner. The moment a coroner died, the functions of the deputy ceased; and no coroner for an outside district could possibly hold an inquest in the district for which the coroner was dead. The point was one deserving of consideration; and in any Bill to consolidate the law relating to coroners, that point would certainly not be omitted.

Tuesday, March 27th.

**Irish Coroners.**—Sir M. HICKS BEACH, replying to Mr. Errington, said: I am not aware that there is any immediate prospect of legislation with regard to the office of coroner in Ireland; but I have no power to interfere in the elections of coroners, and it is not my duty to give any directions with regard to them. If a vacancy in the office of coroner be duly reported to the Lord Chancellor, a fresh election is mandatory, and I am informed that the warrant for a fresh election to a vacancy which recently occurred in the honourable member's county was signed by the Commissioners of the Great Seal some time ago, in the temporary absence of the Lord Chancellor in London.

### NOTICES OF MOTION.

**Friday, April 6th.**—Mr. MACDONALD: To ask the President of the Local Government Board if his attention has been called to the report of Dr. Thorne Thorne, which appeared on the 17th ultimo in the *Hampshire Telegraph* and *Sussex Chronicle*, in respect to the sanitary condition of Portsmouth, and more especially to the two following cases, viz.:—"In the overcrowded house of a tailor and dealer in second-hand clothing, a child was attacked with scarlet fever. Isolation was impossible, and a second child was attacked, one case terminating fatally." "At the house of another tailor, where several cases occurred, I ascertained that, at the date of the outbreak, the mother divided her time between nursing her sick children and the manufacture of articles of clothing." And whether, considering the representations that have already been made to the Government in respect to cases of this kind, it will order an inquiry to be made into the danger that exists of the spread of contagious diseases by allowing tailors to manufacture clothing in their private dwellings.

**Monday, April 9th.**—Dr. LYON PLAYFAIR: To ask the Secretary of State for War when paragraph 25 of the British Medical Department Code (India)—viz., "In order to be qualified for holding an adminis-

tration appointment in this country" (India) "it is required that an executive medical officer should have served as a surgeon for three years with an European regiment in India"—was made general in its application, and in what manner this conversion of a rule believed to be local into a general rule, was made known to the officers affected by it in the general medical service of this country. Whether there are any medical administration officers now holding appointments who have not complied with the condition of paragraph 25. And, whether this local rule now made general has been published in England with the authority of the Secretary of State for War; and, if so, whether that publication legally sets aside the condition of the Royal Warrant 1876, paragraph 16.

**Wednesday, April 11th.**—Earl PERCY: On second reading of Vaccination Law (Penalties) Bill, to move: That it be read a second time upon this day six months.

**Vivisection.**—A Bill has been printed, which has been introduced by Mr. Holt, Mr. Hardcastle, and Mr. C. H. Wilson, to make more effectual provision for the prevention of cruelty to animals. It proposes to enact that "it shall not be lawful to perform any experiment causing, or being in itself of a nature to cause, pain or disease in any vertebrate animal, except for the purpose of alleviating or curing any disease from which such animal is suffering; and any person, except as aforesaid, performing or taking part in any such experiment, or permitting such experiment to be performed upon any premises over which he has control, shall be deemed guilty of an offence against this Act." Infirmarys for animals or physiological laboratories are to be registered and subject to an inspection; and the Bill provides that premises may be entered by warrant of a justice of the peace if there is reasonable ground to believe that an offence against the Act has been, or is about to be, committed. The Bill also proposes the repeal of the Vivisection Act of last session.

## MILITARY AND NAVAL MEDICAL SERVICES.

### AVERAGE MORTALITY AMONGST ARMY MEDICAL OFFICERS AS COMPARED WITH OTHER CLASSES CIVIL AND MILITARY.

	Per 1,000.
Average Annual Death-rate of Adult Males in England.....	9 to 10
Army Officers, exclusive of Medical Officers .....	15
Army Medical Officers from 1839 to 1854 .....	34
a. During Crimean War.....	67
b. Since Crimean War .....	20
Average Death-rate of Army Medical Officers during the last 30 years .....	30

This increased death-rate does not take place among the older men, as in civil life, but the chief mortality is amongst the younger men of the department. The actual death-rate of the department is 44 per cent. greater than that of the males in civil life of all classes, and 75 per cent. greater than that of males of his own class (including medical men) in civil life. (For these data, vide article by Dr. De Chaumont, now Professor of Hygiene at Netley, in the *Edinburgh Medical Journal* for November 1874, page 405.)

### A BARE ENUMERATION OF CERTAIN GRIEVANCES OF THE OFFICERS OF THE ARMY MEDICAL DEPARTMENT.

1. Abrogation, by Royal Warrant of April 1st, 1873, of the double organisation—staff and regimental—guaranteed by Royal Warrant of October 1st, 1858; and of its Clauses 1, 3, 4, 7, 17, and 21, upon the faith of which many medical officers were induced to enter the department.
2. Sudden and totally uncompensated deprivation, by Royal Warrant of April 1st, 1873, of regimental appointments, whereby many medical officers were caused considerable pecuniary and other losses.
3. Abrogation of Paragraph 1, Section 5 of the Army Medical Regulations of 1859 (relating to service on the West Coast of Africa), by Royal Warrants of 1866 and 1867, whereby serious damage has resulted in the case of at least one medical officer accepting these Regulations, as regards pay, promotion, and retirement.
4. Continued refusal of such terms of exchange as are freely allowed to all other officers.
5. Continued refusal of such leave as is fully enjoyed by all other officers who, like the medical, are obliged\* to serve in all parts of the world.

\* British army chaplains, commissariat officers, and storekeepers, are not so obliged.



- a. For due attention to private affairs.
- b. For professional study and improvement.
- c. For the recovery of lost health.

One consequence of this latter deprivation is, that the death-rate amongst army-surgeons is *twice* that of other officers.

6. Lowering the position of the senior executive medical officers by placing them on *one common duty roster with the youngest juniors*, and compelling them to perform such subordinate duties as hitherto have always been performed by the *subalterns* of the department.

7. Enforcing the due preparation, accuracy, and punctuality of multitudinous statistical returns and reports, at the same time *totally depriving medical officers, some actually in sole charge of several entire corps, of all clerical assistance or means of compliance.*

8. Abrogation of the Royal Warrant of April 1st, 1873, by Regulations of 1876, depriving senior executive medical officers of the *five years' tenure of regimental appointments guaranteed them by that Warrant.*

9. Wholesale supercession of senior executive medical officers by rules issued *after their entry into the department*, and which have been made to act against them *retrospectively.*

10. Want of proper representation, protection, and sympathy towards the executive ranks by the *administrative ranks* of the department.

11. Recent introduction into the department of a class which, whether as regards *general education, professional abilities, or social qualities*, is not likely to improve either its position or its efficiency, *but the contrary.*

12. The worrying uncertainties of the position and prospects of army medical officers, caused by the *many breaches of agreement* with them, by the Government or its representatives, *during the last nineteen years.*

### THE NAVAL MEDICAL DEPARTMENT.

DEPUTY INSPECTOR-GENERAL THOMAS RUSSEL PICKTHORN has been appointed to fill the vacancy caused by the lamented death of Dr. A. E. Mackay, R.N. Mr. Pickthorn's services in the Royal Navy, extending over a period of thirty-five years, include upwards of twenty-five years of foreign service, during which he was for four years in charge of Jamaica Hospital, prior to his transfer to Haslar Hospital in 1874, where he has since remained. In 1850, Mr. Pickthorn was appointed to the *Pioneer*, one of the vessels engaged in the Arctic Expedition of that year; and he has also acted as Visiting Surgeon at Plymouth under the Contagious Diseases Acts.

### THE ARMY MEDICAL DEPARTMENT AND ITS SCHEMES.

SIR,—You may well designate Mr. Hardy's speech, in moving the army estimates, as "unhappy," for either he has been very wrongly advised, or if he knew the unadorned condition of the department and the requirements of the service, he made statements which he must shortly very seriously regret. Whether he meant "unification" or the "ten years' scheme" when he said "it" had not had a sufficient trial, is not quite clear. I should have thought that from March 1873 to date, everything that had been tried had failed. It is really time that something should be attempted to re-establish the damaged and discredited department. If "schemes" cannot do it, a change of administration might effect success. The latest "scheme" will, I think, prove a more lamentable failure than its predecessors, for its leading characteristic is "a vast reduction of medical officers"; but whether this is the result of design or necessity, its progenitors have not thought fit or prudent to divulge. Certainly, novelty commends it; and, on trial, it may be found to possess advantages which doubtlessly commended it to the minds of its experienced framers, and prove a boon to a very discontented branch of the public service, which for a very long time past has been on the verge of a catastrophe.—I am, sir, your obedient servant,  
March 11th, 1877.

OPAQUE.

## OBITUARY.

### DEPUTY INSPECTOR-GENERAL PETER SUTHER, M.D.

DR. SUTHER died at Dunkeld, Southsea, on Wednesday, March 14th, aged ninety-two years. Entering the naval service in 1803, he served as assistant-surgeon of the *Dreadnought* in the Mediterranean, until promoted in 1805 to surgeon of H.M.S. *Swiftness*, in which he was present at the Battle of Trafalgar. He belonged to the *Eurydice* at that ship and the *Aeolus* until 1813, when he retired temporarily on half-pay and resided in Nova Scotia, until he was appointed in 1829 to the *Hyperion*, for service in the Coast Blockade, in charge of a district on the Kentish coast. Here he remained until appointed in 1831 to the *Stag*, in which he served on the coast of Portugal during the disturbances which ended in the dethronement of Don Miguel. After a short time spent at Haulbowline Hospital, during which he had to

contend with a serious outbreak of cholera, he proceeded in 1835 to Van Diemen's Land as superintending surgeon of the convict-ship *Mangles*, visiting China on the return voyage. He served subsequently in H.M.S. *Victory*, in Portsmouth Dockyard (as assisting surgeon), and in the *William and Mary* yacht, at Woolwich, until appointed in 1841 to the Dockyard at the latter place, where, and at Chatham, he continued to serve until he retired with a step of honorary rank in 1855. He has since resided at Jersey, Southampton, and Southsea.

His whole life was marked by extreme abstemiousness, smoking very occasionally, and, for the last thirty years, not at all; while, until his being afflicted with blindness in 1864, he was of most active habits, accustomed to taking daily long walks.

Dr. Suther possessed up to the last a most retentive memory, and could both recall the smallest detail of the incidents of his youth and the commencement of his career, and at the same time take the liveliest interest in the current topics of the day. He had for many years been the recipient of a Greenwich Hospital pension, and wore the medal for war services, with clasps for Trafalgar and Martinique.

## MEDICAL NEWS.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examination meetings of the College, held on Tuesday, Wednesday, and Thursday, March 13th, 14th, and 15th, the following candidates were successful.—For the First Professional Examination.

Jeffries, Henry M.

For the Licences to Practise Medicine and Midwifery.

Atkinson, Joseph

Bray, Francis Thomas

Costello, Hubert Kelly

Finegan, Arthur Daniel O'Connell

Heslop, William John

Maquire, Stanislaus

Nesbitt, Robert

O'Connor, Maurice John

O'Meara, William Henry

For the Licence to Practise Medicine.

Hamilton, Edward Palmer

### MEDICAL VACANCIES.

THE following vacancies are announced:—

BUCKS GENERAL INFIRMARY—Resident Surgeon and Apothecary. Salary to commence at £80 per annum, with board, lodging, coals, and candles. Applications to be sent in on or before April 3rd.

COUNTY AND COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY—House-Surgeon. Salary, £125 per annum, with lodging, fire, and lights. Applications to be sent in on or before May 2nd.

DOVER UNION—Medical Officer for the Second Division of St. James's District. Salary, £40 per annum, and fees. Applications to be sent in on or before April 12th.

HULL AND SCULCOATES DISPENSARY—Resident House-Surgeon. Salary, £150 per annum, with furnished house, coals, and gas. Applications to be sent in on or before the 31st instant.

LUDLOW UNION—Medical Officer for the Stokesay.

ORMSKIRK UNION—Medical Officer for the First District and Workhouse.

STAMFORD UNION—Medical Officer for the Hadleigh District.

WYLAND UNION—Medical Officer for the Walton District.

WESTERN GENERAL DISPENSARY, Marylebone Road—House-Physician. Applications to be sent in on or before April 9th.

WEST HAMPTON UNION, Sussex—Medical Officer and Public Vaccinator for the Singleton District. Salary, £70 per annum, and fees. Applications to be made on or before April 9th.

### MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BULLIN, Beresford R. M.R.C.S., appointed Third Assistant Medical Officer to the Third Middlesex Asylum, Banstead Downs, Surrey.

LAWSON, Robert, M.B., C.M., appointed Senior Assistant Medical Officer to the Third Middlesex Asylum, Banstead Downs, Surrey.

MURCHISON, Finlay, M.B., C.M., M.A., appointed Second Assistant Medical Officer to the Third Middlesex Asylum, Banstead Downs, Surrey.

\*WILSON, John S., M.R.C.S. Eng., L.R.C.P. Ed., appointed Medical Officer to the J-rehab Tea Company, Assam, India.

### BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

#### DEATHS.

BARNES, John William, senior, late of Bath, at 125, Gower Street, Bedford Square, aged 85, on March 12th.

\*CARR, William, M.D., F.R.C.S., aged 63, much beloved and deeply lamented, at Lee Grove, Blackheath, on March 22nd.—Friends will kindly accept this intimation.

MR. JOSHUA CALDON, aged thirty-two, died on Monday at Maidmoreton, near Buckingham, from tetanus, caused by an injury to the thumb through falling from a bicycle.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.—Charing Cross, 2 P.M.
FRIDAY.....	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- TUESDAY.—Pathological Society of London, 8.30 P.M. Mr. Godlee: Granulation Material from White Swelling of the Knee-joint. Dr. Burney Yeo: Aneurism of the Superior Mesenteric Artery compressing the Renal Arteries. Dr. Fagge: Contraction of the Larynx after Tracheotomy. Dr. Fagge: Hypertrophied Bladder in Diabetes. Dr. Coupland: Lymphoma of the Stomach. Dr. Coupland: Lymphoma of the Prostate. Dr. A. Morison: Organs from a Case of Hodgkin's Disease. Dr. Greenfield: Lympho-sarcoma of Abdominal Gland. Dr. Greenfield: Case of Lymphadenoma. Dr. Irvine: Aneurism of the Coronary Arteries. Dr. F. Robinson: Case of Abdominal Cyst. Mr. Barker: Vesical Calculi.
- WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens. Dr. Ashburton Thompson, "A Case of Deformity (living subject)"; Dr. Playfair, "On Fibroid Tumour complicating Delivery"; Dr. James Braithwaite, "On a Mode of Treatment of Retroflexion"; and other communications.—Royal Microscopical Society, 8 P.M. Mr. Thomas Palmer, "On the Various Changes caused in the Spectrum by different Vegetable Colouring Matter".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

- CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.
- AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.
- PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.
- CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.
- WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.
- COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## THE MEDICAL DIRECTORY.

SIR,—It has often occurred to me that, however useful the *Medical Directory* may be, there is no guarantee for the accuracy of the information contained therein. For instance, a person in the usual paper sent to him, may subscribe himself M.D.Lond., F.R.C.S., or any other degree, and may inform the public that his studies were prosecuted at Guy's, Paris, and Vienna, when in reality his only school may have been a provincial one. Can any one inform me if there is any reliance to be placed on the degrees, etc., contained therein?—Yours, etc.,  
London, March 23rd, 1877.

STURGEON.

\*. As a rule, with but few if any exceptions, complete reliance may be placed on the information as to degrees, etc., given in the *Medical Directory*. If our correspondent have doubt as to the accuracy of any statement on this point, he has ample opportunity of testing it, by referring to the official *Medical Register*, and by applying to the authorities of the institution from which the degree or diploma is said to be derived. Our own observation leads us to believe the statements regarding the medical schools to be correct; and we believe that an investigation of any cases that he chooses to select will show our correspondent that he has little or no ground for what many will regard as an ungenerous insinuation against the honour of his professional brethren.

We are requested to state that Mr. Richardson, whose marriage was advertised in the *Times* of Friday last, is neither a member or Fellow of the London College of Surgeons.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

## ULCERS OF THE LEGS AND THEIR TREATMENT: AN IMPROVED METHOD OF BANDAGING.

SIR,—I am glad to see, by letters in the *JOURNAL*, that the successful treatment of chronic ulcerations of the leg is engaging the attention of several members of the Association. With your permission, I will gladly add my small stock of experience to that of Drs. Cochrane, Mackenna, and Eaton. The cases related by them were doubtless severe, but I venture to say that such cases come within the knowledge of every practitioner in the kingdom, and are to be met with by the score at every large hospital. I do not say they are all cured, by no means, but they ought to be.

What was the essential nature of the means adopted by Drs. Cochrane and Eaton, and the "blacksmith" in Dr. Mackenna's interesting account? Simply, *continued rest and support* for the overcharged blood-vessels, which allowed the natural process of regeneration to take place. Neglect and bad treatment had brought things to an extreme pass, as they often do in hundreds of other cases; but, as soon as these poor men were properly attended to, all went well with them, and so it may be with all such sufferers. Is it not possible to obtain the requisite *rest and support* for the diseased limb without at the same time imprisoning the body? Men and women, who have need to work for their daily bread, will not, and moreover cannot, be expected to lie in bed or on the couch for weeks and months together, when they are not otherwise sick. I have intimated the importance of rest in the successful treatment of ulcers in the lower extremity; and this is generally perceived and admitted by all surgeons; but, to think that rest in the recumbent posture is alone sufficient to effect the cure, is a very great error; and shows how little some of us are able to profit by the lessons of experience.

It is my opinion, and not mine only, that such an enforced resting of the entire body from all active exertion is not only wholly unnecessary, but is positively injurious to the patient and his already weakened limb. It is of the utmost importance that a moderate use of the diseased leg should be permitted while the process of healing is going on to enable the parts to take on an entirely healthy action, which cannot possibly be the case in the bed or on the couch. We want to give the weakened structures a perfect support and a *surgical and physiological rest* while the patient is going about his or her usual work; and this it is which constitutes the chief difficulty. The end cannot always be attained in the same way, or by exactly the same means, for every case must be treated by itself; but, in all the commoner kinds of ulcer and other disorders affecting the leg, efficient support may be given by adhesive straps and a roller bandage carefully applied. Too much attention cannot be bestowed on this point; for, if the application of the plaster and bandage be not done with thoughtfulness and care, and completed in every stage of the process with due exactness, the operation will be useless and the result *nil*. An imperfectly adjusted bandage must of necessity be worse than useless; it can only add to the discomfort of the patient by increasing the evils already in existence. The slightest constriction of strap or bandage at any point above that of any part below it, must necessarily interfere with the proper course of the blood in the vessels, and thus evil would result instead of good. It will be at once perceived that skill in the art of bandaging is above all the one thing needful.

I must here state my unqualified disapproval of the usual mode of applying a bandage to the leg adopted by surgeons in this country, with very few, if any, exceptions. It cannot be satisfactorily performed in the ordinary way by commencing at the foot and passing upwards to the knee. When thus done, every turn of the roller is likely to be made somewhat tighter than the preceding one; consequently, by the time the operator has finished, the constriction is general on all the parts above. I am aware that I shall be met by the statement that every care will have been taken to prevent this result on the part of the dresser; but it is an effect which he can scarcely avoid, however careful he may be. Bandaging, to be effective, should always be performed from *above downwards*; it possesses many and great advantages over the old method; it can be applied more easily, more certainly, and with greater precision: it is the only way in which perfection can be attained; and is, in fact, the only truly scientific method. A bandage thus put on will keep its place for any required period without becoming materially slackened.

When plasters of any kind are deemed requisite for the support of any weak part, these should be applied in the same manner from above downwards. The plaster, cut into strips an inch wide, should be carefully adjusted around the circumference of the leg, beginning above the seat of injury, and gradually coming down the leg, each strap being made to overlap by a third of its width the preceding one.

I have laid stress on this mode of bandaging, for, by its means, a cure is so much more speedily effected; it is, in fact, next to impossible for the surgeon to succeed without it. He should always bandage the leg himself; for, if he entrust the operation to the patient himself or other incompetent person, failure will certainly ensue.

I could cite scores of cases cured in this simple way, many of which were of long standing; in some instances, of twenty and even thirty years' duration, yielding in every case a permanent cure, and without any ulterior results of an evil character; and this latter fact cannot be too widely known in contradiction to a very common, but very erroneous, notion that it is "dangerous to heal an old wound".

Apologising for the length of my note.—I remain, yours faithfully,  
Cambridge, February 19th, 1877. WILLIAM PROWSE.

## ADULTERATION IN DUBLIN.

The report of the city analyst for Dublin (Dr. Cameron) for 1876, shows that 1,000 samples of food, water, etc., were tested during the past year. Of those relating to food and drink, 95 were adulterated. During the year, 229,111 lbs. of meat, fruit, etc., were condemned and destroyed as being unfit for human food. Four parties were imprisoned for periods varying from one to two months for selling unsound food, sixty-eight were fined, the fines amounting to £271. There are some defects connected with the Adulteration Act, which we trust the executive will shortly remove; one being, as the law exists at present, that if a shopkeeper refuse to sell an article of food or drink to an inspector he can be punished, but if his servant refuse, no fine can be inflicted. The absurdity of this arrangement is manifest; and besides this, should a party buy food for his own use and find it bad, he cannot prosecute the vendor for having sold the unsound food, but only for exposing the food for sale.



CORONER'S MEDICAL WITNESSES IN DUBLIN.

Of course, this person has no legal diplomas to sell; and we think it high time that the authorities in Jersey should interfere to stop the disreputable traffic in American bogus diplomas, of which they have too long allowed their island to be made a centre.



## WATER ANALYSED.

SIR,—In September last I was called to see a patient, whom I shall call Mr. Z., suffering from some colic, and during the night the symptoms increased so much that I was led to suspect lead-poisoning. Next morning, I tested some of the ordinary pump-water, acidified with hydrochloric acid, with sulphuret of ammonium, which gave distinct indications of lead. The symptoms, after some days, were relieved by the ordinary treatment of lead-poisoning. There were symptoms in another member of the family which pointed to the same disease. I do not intend to say more of the medical aspect of the case, as it is with reference to the collection of water for analysis that I wish to ask the opinion of the profession.

Two or three days after the first suspicion, I forwarded a sample of the water first drawn from the pump to Professor Voelcker for analysis, and also for qualitative testing to Professor McLeod, R. I. Engineering College, asking the former that the water should be analysed, and that lead should be tested for. The analysis was made, and lead, by oversight, was not tested for; but, on drawing Professor Voelcker's attention to my letter, he at once expressed regret, and examined for lead, finding the proportion .84 grain, I think, per gallon. He also tested a second sample, drawn in the same way, with the same result. Professor McLeod's report was the same.

Mr. Z. was dissatisfied at the primary omission of lead from the analysis; wrote to Professor Tuson about an analysis of water without saying in what it was supposed to be hurtful, and was directed to draw a sample from the pump after pumping away a considerable quantity of water. Professor Tuson made the analysis, and said he suspected lead, but wanted a further supply of water, which was drawn in the same way. No lead was found on the second analysis.

The points on which I should like to hear the opinion of health-officers and analysts are the following: 1. Was I right in submitting to the analyst a sample of the water drawn the first thing in the morning, when I suspected that lead was the cause of my patient's illness? 2. Was Professor Tuson right in omitting to give fresh instructions for drawing water suspected by him to contain lead when he had before directed that a considerable quantity of water should be first pumped away before the sample for analysis was collected? These points being settled, it may as a corollary be affirmed that before an analyst gives instructions for collecting samples of water for analysis, he should be told for what purpose the analysis is required.—Yours faithfully,  
T. M. LOWNDS, M.D.  
Egham Hill, Surrey, March 1877.

## CLIMATE IN DISEASE.

SIR,—I should be glad if you could give me the names of the best monographs, and their publishers, on climate for the treatment of disease.—I am, etc.,

VIR TARDUS.

\* \* Althaus (Longman), Macpherson (Macmillan), or Braue (Smith, Elder, and Co.), on *Baths and Health-Resorts*; a recent work by Dr. More Madden on *Climate*; Dr. Henry Bennet on the *Southern Health-Resorts* (Churchill); Dr. C. T. Williams on *Climate in Pulmonary Consumption* (Smith, Elder, and Co.)

## ANAGRAM: IN MEMORIAM.

WILLIAM FERGUSSON, Bart., LL.D., F.R.S., Sergeant-Surgeon to Her Majesty, etc.; born March 20th, 1808; died February 10th, 1877.

Naill from W., I guess.

"De mortuis nil nisi bonum"  
Has oft been said of those departed.  
He whom we mourn, in dulce domum  
Was genial, true, and tender hearted;  
Nothing but good could surely come  
From one so fondly lov'd at home.

March 20th, 1877.

E. L.

## CONSTRUCTION OF HOSPITAL WARDS.

SIR,—A public body with which I am connected contemplate increasing their accommodation for patients by the erection of four wards, each to contain forty beds. The beds would be disposed in a double row of ten up the middle and a row of ten along each side of the ward. Will any of your readers who may have experience in wards of that size inform me—

1. Whether there is any great objection to the erection of wards of that capacity?
2. Is the above arrangement of beds the best, or would it be preferable to run a wall down the centre of the ward between the middle row of beds?
3. How should a ward of the proposed dimensions—sixty feet by forty-eight—be best warmed, and how ventilated?
4. Any information or suggestions in connection with these points will be thankfully received by yours truly,  
THOMAS PATTERSON, M.D.  
Oldham, March 21st, 1877.

## ANTIPODEAN ETHICS.

THE following hand-bill has been freely distributed in Sydney. "Dr. Foucart, F.R.C.S., formerly Resident Physician to the Glasgow Fever Hospital, and on the Staff of the Glasgow Royal Infirmary, Commissioned Army Surgeon (late of the Sydney Infirmary, the Government Asylums, *pro tem.*), the Odd-fellows' Medical Institute, etc., Physician to the late Sir Robert Peel, Bart., Lord Premier of England, the Tutors of the Royal Family, the American Ambassador, etc., having returned from a prolonged professional tour through the principal hospitals and medical schools of Europe, studied and consulted with the most eminent professors of science attached thereto, thereby obtained a practical knowledge of the most advanced modes of practice for the cure of disease, and supplied himself with newly invented and greatly improved French instruments and medicaments not yet known in Sydney, has resumed practice at his former residence, No. 249, Macquarie Street North, opposite the Mint. Hours at home for consultation: 8 to 11 A.M., 2 to 4 P.M., 7 to 9 P.M. Dr. Foucart had the honour of being specially consulted, and his professional services effectually rendered to his Royal Highness the Duke of Edinburgh."

Dr. Foucart's connection with the late Sir Robert Peel was, we understand, limited to the fact that, being house-surgeon at St. George's Hospital at the time when Sir Robert Peel fell from his horse on Constitution Hill, he was fetched across the road by the police to give assistance at the moment. What the "Tutors of the Royal Family" may be, we cannot say. Dr. Foucart was in Europe two years ago, but we did not encounter him in the London hospitals. What Dr. Foucart's professional services to the Duke of Edinburgh were, is not known.

## FATTY DEJECTIONS.

SIR,—Up to the age of sixty, I was, as long as I can remember, of a costive habit. However, my health and activity seemed in no way to suffer; but sixteen or seventeen years ago, after superintending some sewerage works being done on my own premises, implying the opening of a fetid cesspool, I for some days had

diarrhoea, and I then for the first time observed that so much oily matter passed with the dejections that the paper used was rendered as transparent as if it had been smeared with oil. This tendency continued, I think, for some weeks; and even after it had ceased there was a peculiar whiteness in the colour and a peculiarity in the factor of the evacuations difficult to describe, but sufficient to indicate by whom the closet had been last visited. Occasionally the oily dejection would show itself; but my general health, my appetite, and my bodily activity continued excellent. To my medical brethren as well as to myself I was something of a puzzle. I once had an opportunity of asking Dr. Budd whether the pancreas might not be in fault; but, feeling my arms well fleshed for my age, he said, "Had the pancreas been at all in fault for so long a time you must have become emaciated, and could not have an arm like this."

Such was my condition up to the middle of last November, when, without any warning, I was struck down by an attack of pneumonia, with violent constitutional disturbance, delirium, rapid emaciation, complete prostration, and total anorexia. The case seemed hopeless, but, thanks to the care and the judgment of my doctors and of all around me, I struggled through, and am now in the third month of my convalescence, able to stand and to walk, and with a fair appetite; but again I am suffering from these oily evacuations. A sudden *nismus defecandi* is felt, which must be at once obeyed, or else an immediate escape takes place of yellowish oil, with little odour, and that not at all feculent in character, and rendering paper at once translucent. Sometimes it is accompanied by faecal matters, and often by discharge of foetid flatus, but the oil is inodorous.

Now, as I cannot find in books any light thrown on my case, and as all my medical friends have equally failed to help me to a clear *rationale*, I have been thus prolix in my report of my own case, in the hope that I may find some light thrown upon it by some of your correspondents.—I am, etc.,

March 8th, 1877.

OCTOGENARIUS, M.D.

P.S.—I ought not to call the oil inodorous; it has a heavy unpleasant smell, like a dirty oil cask, but certainly no distinctly faecal odour. My legs and feet are oedematous, but less so than they were three weeks ago. My nights are extremely restless—three hours' sleep in all, being about the average. From irritability of bladder, I am habitually awakened to micturate every two hours, or a little over, during the night.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Scarborough Daily Post; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; The Hull Criterion; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The High Peak News; The Metropolitan; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Middlesex Advertiser; The Rock; The St. Andrew's Gazette; The West Cork Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Warrington Express; The Croydon Chronicle; The Northampton Herald; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Richmond and Twickenham Times; The Western Morning News; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; etc.

\* \* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

## COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. George Johnson, London; Dr. James Russell, Birmingham; Dr. T. Lauder Brunton, London; Mr. Bushell Annington, Cambridge; M.B., Clifton; Dr. J. Braxton Hicks, London; Dr. Braidwood, Birkenhead; Dr. Gillespie, London; Mr. Browning, Oughtibridge; Dr. J. Hughlings Jackson, London; A. M. D.; Mr. Poole, London; Mr. Nelson Hardy, London; Mr. G. Knapton, London; Mr. F. M. Harricks, Corowa, New South Wales; Dr. Goldie, Leeds; Our Paris Correspondent; Dr. Mackey, Birmingham; The Secretary of the Obstetrical Society; Dr. J. Milner Fothergill, London; Dr. Bucknill, London; Mr. T. M. Stone, London; The Registrar-General of England; Dr. W. Bathurst Woodman, London; The Secretary of the Clinical Society; M.D. Edin.; The Registrar-General of Ireland; Dr. J. W. Moore, Dublin; The Secretary of Apothecaries' Hall; Mr. Joseph Bell, Edinburgh; Mr. Wanklyn, London; The Secretary of the Royal Medical and Chirurgical Society; Mr. Christopher Heath, London; A Country Surgeon; Dr. Campbell, Torquay; Surgeon-Major Black, Edinburgh; Dr. Grabham, Earlswood; Fell. Med. Soc. Lond.; A Physician; Mr. George Bate, Cerne Abbas; Dr. Goodchild, Leamington; Dr. A. Jacob, Dublin; Dr. G. de Gorrequer Griffith, London; Mr. John Woodman, Exeter; M.W. J. H. Wood, Boston; Our Indian Correspondent; Dr. T. S. Cobbold, London; Mr. J. S. Muriel, Ipswich; M.D. Lond.; Dr. Byrom Bramwell, Newcastle-upon-Tyne; Dr. Tripe, London; Dr. Edis, London; Mr. Lawrence, London; Dr. Batten, Gloucester; L.R.C.P.E., etc.; Dr. Marshall, Nottingham; Mr. Albert Speedy, Dublin; Dr. Egan, Dublin; A Staff-Surgeon, Retired; Our Edinburgh Correspondent; A Member; Mr. Annandale, Edinburgh; W. I. M. R.; Mr. Hyde Houghton, Dudley; A Country Doctor; Dr. West Symes, Skipton; Mr. Lloyd, London; Dr. H. J. Iltot, Bromley; Dr. J. Matthews Duncan, Edinburgh; Medicus; Mr. E. C. Board, Clifton; Dr. G. H. Savage, London; Mr. W. Spencer Watson, London; Mr. Eastes, London; Dr. Churton, Leeds; Dr. Bruce, Dingwall; Dr. Page, Newcastle-upon-Tyne; Dr. Thomson, Dalkeith; Dr. F. Simms, London; Mr. Marshall, Mitcham; Mr. Wilson, Gourock; Dr. Goodchild, Leamington; A Member of the British Medical Association; Dr. Henry Simpson, Manchester; Another Physician; M. C.; J. L. P.; Messrs. Salt and Son, Birmingham; A Member; Dr. Franklin Parsons, Goole; Old Practitioner; Dr. Russell, Glasgow; Dr. Humphry, Cambridge; etc.



# THE CROONIAN LECTURES

ON

## THE DIFFERENCE BETWEEN THE SEXES IN REGARD TO THE ASPECT AND TREATMENT OF DISEASE.

*Delivered at the Royal College of Physicians of London.*

By J. BRAXTON HICKS, M.D., F.R.S.,

Physician-Accoucheur and Lecturer on Midwifery and Diseases of Women and Children at Guy's Hospital, etc.

### LECTURE II.—*Concluded.*

No doubt, the rapidity with which these symptoms appear depends much on the original temperament and education. Thus, in the Celtic races we find it supervene very early, in the Teutonic but slowly. This peculiarity of race is paralleled in the hereditary character of hyperæsthesia and the hysterical temperament, frequently to be observed. Also, the sex makes a considerable and well recognised difference, the symptoms being slower to appear in the male; so much less marked are they, and so much longer in arriving at the intensity necessary to develop "hysteria", that formerly this disease was considered a disease peculiar to females. But later observations, and more care in carrying them out, has led to the acknowledgment of the occurrence of attacks of hysteria, even with the convulsiform paroxysm, in the male. I think I am right in assuming that you will join your assent to this.

In support of it, my own assent was early given; because, long before I entered this profession, I saw a well marked instance of this. My father was giving a lecture in my native town on electricity. Before he had finished, a most severe thunderstorm occurred, which was easily seen through the large windows of the room. The organist of the town, a tall, somewhat feminine man, was seized with one of the most violent paroxysms of hysteria possible; screaming, sobbing, and crying, with convulsiform movements; which, with the thunderstorm, soon brought the lecture to an end. I may mention that this person afterwards married and had a family. My colleague Dr. Wilks mentioned to me a case he had witnessed in a man of different type; with a very large head, in which the emotional form was strongly shown. Doubtless, you will be able to call to mind many such cases.

I have seen a medical man within a few days, who tells me his wife's brother suffers from most violent hysteria, and this generally when thwarted in his wishes. And, to show the connection with the other allied conditions, the sister, who is the wife of my informant, suffers from hyperæsthesia generally, and specially high reflex sympathy between the uterus and stomach, so that slight disturbances of the uterus bring on nausea and vomiting. She has very peculiar notions, and approaches a state of mania occasionally. Her father is very peculiar in his ways, and her sister is in a lunatic asylum.

Notwithstanding these instances of hysteria in men under the influence of mental excitement, I am anxious to impress upon you that in general we ought to view the hysterical symptoms rather as a sequel of these irritations, depressants, and perturbations, than that these latter are a part of hysteria or produced by it. My own observations lead me to the belief I have already expressed, that hysteria *per se* is very rarely a primary disorder. It is true that in women it occurs very rapidly, so as to appear as if it were a cause rather than an effect; but, upon close investigation, there will be found, very nearly always, that there has been a preparation for it. In man, the attack generally results from mental trouble, shock, or anxiety. In woman, these causes also act powerfully; but, as they are more open to the conditions already alluded to, we find that in them bodily ailments are potent factors in bringing on hysteria.

In women, the emotions are more powerful and less under command than in man. Emotional excitement and shock act much more violently on their ganglionic system, producing, if severe, complete, though perhaps temporary, sedation or paralysis: witness sudden death from abrupt news in a few, and amenorrhœa not infrequently. If not severe enough for this result, then it excites the ganglia and their corresponding organs, and we find overaction often as the result. All this is well known to every practitioner of medicine, and nothing is more marked than the rapid sympathy of the uterus with emotional excitement. Yet, we cannot rightly call this hysterical in its first

effect; only when it has continued, and there is, with the various disturbances, the tendency to emotional ecstasy and convulsiform paroxysms, should it be called by that name. At first, it is a normal physiological effect, a part of the human, but more frequently of the feminine, constitution; the more marked but still normal exemplar of the emotional influence.

It is not difficult to understand also how women are much more obnoxious than men to sources of irritation. Besides the general non-sexual causes, she has added to her an organ, the uterus, which, as I have before said, a few minutes' consideration will show to be very different from a simple mass of contractile fibre. For, first, it is almost entirely supplied by the sympathetic system. It is not by pain, but by its reflex irritations that it exemplifies its disturbances. It is, as we all know by everyday practice, in active sympathy with the central ganglionic system. It is liable to frequent periodic congestion, denuding itself of its mucous membrane each time, more or less. By this means, its nerves are more exposed to irritation, being deprived of their ordinary protection. As a matter of fact, it is liable to abrasions at its lower portion which, by friction against the posterior vaginal wall in walking, etc., and by the disturbance during coitus, permit a reflex excitement to be thrown back to the centres, which in its turn produces disturbance in the vaso-motor nerves, and thereby engorgements in the whole organ. The organ is, besides its other functions, an erectile one; one of its essential functions, namely, the maturation of the ovum, cannot be carried on without a high sensitiveness to nervous excitement, and, as a result, a readiness rapidly to develop embryonic cells. Although, for this to be effected in the completest manner, it requires the stimulus of the impregnated ovum, there can be little doubt that all excitants act in the same way in a minor degree. This quickness to respond, this nervous vitality it is which makes its errors so impressive on the general sympathetic system. But when conception has occurred and the growth of the uterus has proceeded, it is more than probable that its nervous structures and ganglia also grow; at any rate, we find its susceptibility increased and reflex phenomena more marked.

An organ having these qualities must necessarily render its possessor more liable to disturbances of the sympathetic system; and, when it is considered how closely the organ is mixed up with the moral nature, the influence of its diseases and derangements cannot be difficult to value; and, as a matter of everyday experience, we find that these troubles ensue more quickly in affections of the uterus and its appendages than in those of any other organ.

I apologise for somewhat repeating previous remarks. I take it that this is the chain of events in the causation of hysteria. An irritation exists, for example, on the surface of the os uteri. The first effect is to produce an enlarged and hyperæmic condition of the organ, uterine tenesmus; with an increased flow of secretion, a kind of catarrh. After a certain time, the ganglia become irritable beyond the normal action, which increases the effect of the original cause; and, after a time, the influence extends up to the centres, and then we have other organs, notably the digestive, affected and disturbed in action. Then, the heart is annoyed; and thus we have palpitations, easily accelerated action, etc. In other words, all the organs supplied by the sympathetic are sooner or later influenced; and, in consequence of the disarrangement of the organs of assimilation, we early find a failure of the health, independently of the neuroses; and generally a condition of anæmia, from the menorrhagia common to this reflexly engorged womb.

The reflex phenomena and their effects are somewhat apt to be overlooked in the male, although evident enough. Take an ulcer of the lower rectum, watch the tenesmus, the secretion of mucus, which first occurs. Then, the intestines above being irritated, a diarrhœa comes on, which is a natural result of any irritation of the lower bowel. After a time, backache ensues, and then the bladder sympathises. Sooner or later, dyspeptic symptoms show themselves, with loss of bodily strength and health. When the system has arrived at this point, we find then a liability to an excitable condition of the emotional system; and perhaps, though but rarely, paroxysms of a convulsiform kind, which we then call hysteria.

But sometimes the ganglionic system is primarily wrong, or becomes so in consequence of derangements of the cerebro-spinal centres. We probably shall all agree as to the practical importance of distinguishing this difference of origin; because, if we admit that eccentric irritations produce this miserable train of symptoms, then it must also be admitted that it is our duty to try to cure them as early as possible before these effects arise, particularly in men and women of sensitive type; while, in cases of centric origin, we have rather to contend with the error of the general system, the disturbance of the mind or cerebro-spinal organ. But, as I have stated before, these are the rarer cases.

But besides this, woman is doubtless endued with a more mobile nervous system; and this, with less power of regulating its motions.



This is not specially because of the uterus, neither specially in consequence of her ovaries; but because she is, in possessing these organs, so made.

Yet men vary much among themselves in regard to their mental sensitiveness and response to irritations; nearly, if not quite, as much as men differ from women. But their mode of bringing up, their more invigorating pursuits, their rougher contact with the world, acting on each, besides the influence of a similar kind derived by descent, tend to render their nervous system more under control. Yet, sooner or later, ill health, overwork, watching, anxieties, long-continued pain, failure in his pursuit, and many other things, singly or in combination, will bring man into a state so similar to that of woman under the same circumstances, that it must be acknowledged that it is only in degree that the sexes differ.

And this being admitted, must we not come to the conclusion that we should, in studying these phenomena, rather take the more marked instance first, and then apply the knowledge thus gained to the minor? In other words, we must argue from the woman to the man, rather than in the opposite direction; not considering these nervous and emotional aberrations as a thing added to the woman, and not a natural part of her constitution, with which man had nothing in common.

I alluded before to the term "hysterical vomiting" as an evidence that it was a refuge for ignorance or indolence. Why should we call it "hysterical" in the way in which this term is generally understood? If "hysterical" mean uterine, then, in a large number of cases where we have sympathetic vomiting, I should be disposed to agree with the term; because we actually do find it to depend on some prior disturbance of the uterus and appendages in the majority of cases. But this would not be the whole case; irritations of other organs may readily give rise to reflex vomiting; and if with this there be already oversensitiveness to reflex irritation, and some disturbance of the emotions, many, may I not say most of us, would be apt to make use of the word "hysterical"; and, when that word is pronounced, the patient is plied with all antihysterical remedies, instead of the cause being sought out and the cure applied to it. The stomachs of some women are peculiarly sensitive to uterine irritation; even the ordinary digital examination, examination with sound, coitus, simple menstruation, retroflexion, and many other circumstances, imitate in their effects the well-known influence of the uterine excitement resulting from pregnancy. Why should we call these vomitings "hysterical"? Irritations and congestions of the ovary will also set up vomitings. In these, as in many cases, the cause may be slight; and many are apt to think them not worth notice, and then cloud their indolence under indefinite and vague terms, which still further influence their mind against searching for the cause.

I am aware that some who have not watched the effect of these disturbances in uterus and ovaries, nor the effects of proper treatment, still go about to deny the possibility of the effects attributed to them. Perhaps too much attention to local conditions led some of the pioneers of modern obstetrics to overlook the more general state of the health, and to attribute defects in the constitution of the patient to the local disease, whereas the patient was suffering from both; or the general health, by the long standing of the local complaint, was so affected as to cause the greater ailment; but yet this does not alter facts, which are as patent as possible to an unbiassed observer; at any rate, quite as clear as the facts about other diseases concerning which no doubt arises. I mean, that if a woman vomit incessantly for weeks with a retroflexed uterus, and the moment it is replaced, the vomiting ceases; and then, should it again fall back, vomiting again begins, to cease on replacement—what can be more positive? Again, if a woman complain of great distress in walking, an intense backache, so that she can walk only a few yards; and, with severe menorrhagia and leucorrhœa, have an engorged womb, with large patent os uteri abraded all over; with vomiting every day; and, after the abraded surface has been covered over with a light touch of nitrate of silver or other similar styptic, twice or three times, the patient be able to walk with but slight distress half a mile or so, and the vomiting cease, the uterus at the same time becoming more healthy,—I say we have here as clear a thing as anything in medicine. But this is not special to the uterus only. I have seen a small crack on the tongue cause the whole tongue to swell, every papilla to be injected on the affected side, saliva to flow freely from that side also. Here was a reflex engorgement of the tongue, with hypersecretion natural and useful enough to carry off any movable irritant, supposing that it, instead of a fissure, were the cause. When the fissure was touched with nitrate of silver, in half an hour the pain, swelling, and secretion had gone down. But I need scarcely multiply instances; irritation of the fauces, larynx, conjunctiva, afford familiar examples. Only, in the case of the uterus, we do not have so much of pain in the parts principally supplied with spinal sensitive

nerves, but rather engorgements, excessive secretion, tenesmus, and reflex irritations to the vital organs. Is it necessary for me again to ask whether we are not likely to treat our patients better by viewing these cases as most probably of eccentric origin, than of centric; because, in the former supposition, we seek for and find the cause; whereas, by giving a name, say "hysteria", "fancy", "mania", "madwomb", we may wholly pass by the palpable and remediable cause.

The remarks I have made regarding functional reflex disturbances I would also apply to the reflex pains found in oversentient persons, male and female. A pain cannot exist without a cause, either in the part primarily, or by reflex irritation, or from centric disturbance. To call it "hysterical", when we fail to find the cause, is self-blinding. That man or woman can conjure up a pain I cannot as yet believe; but, no doubt, when a slight pain gives rise to constant distress, fear, and apprehensions—then, if the patient be also depressed and sensitive, the mind, constantly noticing it, becomes morbidly sensitive to its presence; but the pain is an entity notwithstanding.

From a consideration of the quickness with which irritations excite all the reflex sensibilities in woman, we derive a lesson of much importance in practice, applicable in principle to both sexes, but specially so to woman; namely, that we must not carry out our otherwise proper endeavours to cure, too frequently, nor employ remedies so severe as that we may set up more irritation than we are endeavouring to relieve.

It is easy to overtreat women; many of the older obstetricians fell into this error, which some have since acknowledged. Neither should we unnecessarily increase their apprehensions regarding themselves by our remarks nor actions, lest we find that, whilst curing the local trouble, we call up another spirit, not so easily put to rest. Our rule should be "the minimum of treatment consistent with efficiency".

It is not my intention to enter into any explanation of the peculiar exhibitions of emotional perturbation which have been classed under the head of "hysteria". If I may be permitted to give references to any work to such an assemblage as is here before me, I would mention an article in the form of a review in the *Medico-Chirurgical Review*, vol. 1, 1872, on the Pathology of Hysteria; and to Dr. Russell Reynolds's article Hysteria in his *System of Medicine*. With the latter author I am in accordance, when he says that hysteria is not necessarily associated with disease of the generative organs of either sex. At the same time, I hold that in by far the larger number of cases it is derived from irritation of the female sexual organs, for the reasons I have endeavoured to point out just now.

It is not my intention to discuss the diseases which belong to the sexual organs of either sex, except so far as the condition of one bore upon general principles of pathology. But there is one condition, having no exact parallel in the male, yet having a very interesting bearing on pathology, and in close connection with the subject of reflex irritation. I allude to the *effusions of serum* generally, but blood sometimes, more or less pure, which occur into the cellular tissue about the uterus, and notably in the broad ligaments. Like many of the ailments of women, they are to be observed seldom otherwise than clinically. It is true that in some cases, where a large amount of effusion has been poured out, this has caused death at once, or has softened down, and the patient becomes worn out by suppuration; but generally the cases have recovered. But the evidence from clinical observation is clear enough. Many conditions give rise to it: cold applied to the lower parts, notably effective at the menstrual epoch; coitus; passing the sound, though but rarely; and other irritations applied to the uterus. Generally it is attended with marked derangement of the abdominal viscera; and this is so prominent in some cases, that the attention is first called to the liver and præcordium. A case I saw recently was attended three or four days for a "bilious" attack, the patient being quite yellow; and it was not till three or four days had elapsed, that attention was directed to a swelling above the pubes. The young lady had sat on a cold stone at the time she was menstruating, which function was suddenly arrested. In the course of three or four days more the swelling had arrived as high as the umbilicus, and then subsided without suppuration. Now, the origin of these swellings is not difficult to explain, if we consider their causation. A sound touches the os uteri and canal; it merely passes in and out without abrading. It can but be by mechanical contact. This, we conclude, irritates the nerves; engorgement ensues, a blood-stasis, then exudation through the walls of serum; and, if too intense, rupture and effusion of blood. The act of coitus does the same; so cold acts through the nerves of the feet or lower body.

Can we find anything similar in other parts of the body? any kind of reflex engorgement caused by cold externally, or nerve-irritation at a distance? May we not surmise that some forms of congestion of lung



are thus produced? However, these questions I leave to you, who are so much more capable of answering these questions.

I am afraid you may think that I have occupied too much time on these subjects; but so much of every-day practice is made up of attending to affections of this kind, such a large amount of distress is dependent on them, that this must be my apology. My concluding lecture will note the other sexual differences of disease.

## THE GOULSTONIAN LECTURES ON PHARMACOLOGY AND ITS RELATION TO THERAPEUTICS.

*Delivered at the Royal College of Physicians, London.*

By T. LAUDER BRUNTON, M.D., D.Sc., F.R.S.,

Fellow of the Royal College of Physicians; Assistant-Physician and Lecturer on Materia Medica and Therapeutics at St. Bartholomew's Hospital.

### LECTURE III.—*Concluded.*

EXPERIMENT has taught us that the food begins to be digested in the mouth, and its starchy constituents are even then partially converted into sugar. In the stomach it meets with the gastric juice, which converts the albuminous matters partly into syntonin and partly into peptones. In the duodenum it is mixed with the bile, which emulsionises the fats, and with the pancreatic juice, which combines the properties of all the three others, digesting the starch, albumen, and fats. Lastly, the intestinal juice probably finishes the solution of albumen and starch, as well as converts cane into grape-sugar. In each secretion, we find its ferment: ptyalin in the saliva, pepsin in the gastric, and trypsin in the pancreatic juice. But these ferments do not exist ready-formed in the glands. They are stored up in the form of a mother-substance or zymogen in the secreting cells, and, when these are called into activity by the nerves of the gland, the zymogen yields up the free ferment ready for its work. But something more is required than the nervous impulse, or, as Mayow would probably have called it, the vital spirit. Unless the glands have a free supply of blood to yield them oxygen and nutriment, they cannot secrete much, however strong the nervous stimulus may be. The secretory nerves of a gland are, therefore, accompanied by other filaments, which cause the vessels of the gland to dilate, so that a copious stream of blood pours through them, making the veins pulsate and jet like arteries. But, though these nerves may often run together, yet their functions are quite distinct. Stimulation of the secretory nerves alone will only cause the gland to yield a few drops of juice and then cease, if the vaso-dilator nerves do not quicken the blood-stream at the same time; and no action of the vaso-dilator nerves, no rapidity of the circulation, however great, will produce a single drop unless the secreting nerves act also. Usually, they are both excited simultaneously, and in the

part to which it was applied, and the secretion is poured out. Each gland seems to have its own favourite stimulus—for the salivary glands acids and sapid substances, for the stomach alkalies, for the liver acids applied to its duct, for the pancreas food in the stomach and duodenum, and for the intestine the presence of food. When savoury substances or acids are taken into the mouth, the stimulus they apply

is conveyed up the fifth nerve to the encephalon, and is thence reflected down the seventh to the vessels and secreting cells of the salivary glands (Fig. 2). When the secretion is insufficient, it can be increased by applying a stronger stimulus to the mouth, and it is in this way that pellitory and such other sialogogues act. But sometimes there may be a strong and permanent stimulus in the mouth, such as the loose teeth or sore gums produced by the action of mercury, or a stimulus in the stomach, such as acidity or gas, which causes salivation excessive in quantity, and not merely useless, but annoying to the patient. This may be checked by opium, which acts on the nerve-centre, lessening its irritability; so that the strong stimulus only excites the same reflex action that a weak one would do under normal conditions, and the excessive flow is arrested. But, supposing the opium fails or cannot be given in sufficient doses to produce the desired result, without affecting other organs in an undesirable manner, is there

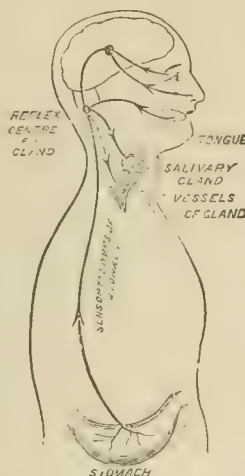


Fig. 2.

any other drug which we can use? It is not very long since we would have been obliged to reply in the negative; but pharmacological research, besides explaining the *modus operandi* of opium, has given us another remedy more powerful still. This is atropia, which Heidenhain (*Pflüger's Archiv*, v, p. 40) found to paralyse the ends of the secreting nerves in the submaxillary gland, so that no irritation would excite the slightest flow of saliva. At the same time, it leaves the vascular nerves unaffected, and, on the application of the stimulus, the vessels dilate as usual. The paralysis may be removed by Calabar bean, and secretion again will occur. The bean alone has a curious effect, for it excites the secreting nerves, but at the same time causes contraction of the vessels. The gland, therefore, begins to secrete, but soon stops from want of blood. The profuse flow of saliva occasioned by smoking is known to everyone, and examination of the action of nicotine shows that this is just what we might expect; for the drug has a double action on the gland, and does not merely stimulate the sensory nerves of the mouth as pellitory would do, but stimulates the ends of the secreting nerves within the gland itself. In larger doses it paralyses these nerves and arrests the secretion; but, as the poison is quickly excreted, the stoppage only continues for a short time. Thus we can understand how moderate smoking may increase the flow of saliva, and excessive indulgence in it may cause temporary dryness of the mouth, especially if the tobacco be strong.

A great part of our knowledge regarding secretion in the stomach has been obtained from the observations made by Dr. Beaumont, through a fistulous opening accidentally made by a charge of duck-shot in the stomach of a Canadian voyageur. But this information would have been very imperfect, had it not been supplemented and extended by observations on the stomachs of animals, through circular openings, made by a much less tedious and painful process. From both classes of observation, we learn that the healthy stomach during fasting has a pale colour and velvety appearance, and is covered with a thin coating of transparent mucus. When a moderate stimulus is applied, such as gentle friction with a glass rod, the introduction of food, or a weak alkaline liquid, it begins to secrete, the gastric juice oozes out from the follicles, and collects in drops on the surface of the mucous membrane. At the same time the circulation is increased, as in the salivary gland, and the colour becomes rosy. The stimulus has been conveyed by efferent nerves to nerve-centres, and then through efferent nerves to the vessels and cells, as indicated by the letters A, B, C, D in the diagram (Fig. 3). But if the stimulus be stronger—if, for example, the stomach be violently rubbed with a rod introduced through a fistulous opening, the rosy colour at once disappears, the vessels contract, the membrane becomes pale, and secretion of gastric juice stops, a flow of mucus is produced, and nausea comes on. The stimulus has now awakened a different nervous mechanism (A, E, F, G, in the diagram), and the results are different. If the irritation be still increased, the muscles of the abdominal wall are called into action, and vomiting occurs (A, H, K, K).

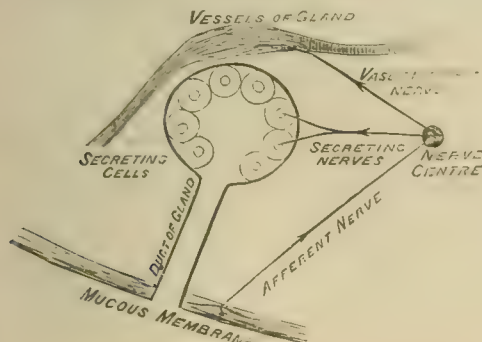


Fig. 1.

following manner. A stimulus applied to the mucous membrane lining a part of the alimentary canal, mouth, stomach, duodenum, or ileum, is conveyed by afferent nerves to a nervous centre (Fig. 1). Thence the stimulus is reflected down efferent nerves, as in the adjoining diagram, both to the cells and vessels of the glands connected with the



Weak alkaline solutions, such as saliva, are amongst the most powerful stimulants to the gastric secretion, while acids diminish it. Thus vinegar will thus interfere with digestion, and will lessen the quantity of juice, and

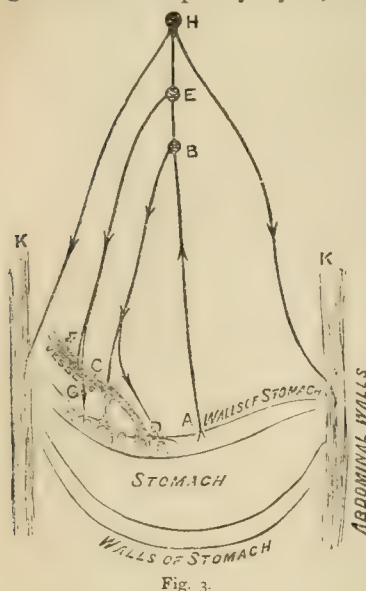


Fig. 3.

should dilute the gastric juice, and should take especial care to avoid alkalies, which would neutralise its normal acidity, and prevent its dissolving the iron. The same reasoning may be, and has been, applied to the ordinary process of digestion; for pepsin will not act except in acid solutions, and one might imagine that fluids at meal times, and especially alkalies, such as soda-water, would prove very injurious. But Bernard's experiments show that, although a weak alkali will saturate a little of the acid contained in the gastric juice, yet it will so stimulate secretion that very quickly it will become completely neutralised, leaving a large excess of acid fluid ready to digest any albuminous food that may be presented to it.

Thus it is that weak alkalies, such as bicarbonate of soda, given before meals, are so useful in the treatment of atonic dyspepsia. When the food is taken into the stomach, the organ only responds slowly to the stimulus; too little gastric juice is secreted; the food lies heavy at the epigastrium; and, decomposition of an abnormal kind occurring, gas is formed and eructations annoy the patient. But, when a small quantity of alkali is given shortly before the meal, it stimulates secretion; a quantity of gastric juice is poured forth before the food is actually swallowed, and is ready to attack it so soon as it reaches the stomach; the food is quickly digested, and the unpleasant symptoms disappear. If given with or immediately after a meal, the alkali may have a similar action, but will not be so effectual, for the stomach will already contain some gastric juice secreted under the stimulus of the food. This will immediately neutralise part of the alkali, so that little or none may remain to stimulate the stomach. It is possible that a pipe of tobacco, smoked after dinner, may act by stimulating a flow of saliva, and thus acting upon the stomach; but it is not impossible that it may have an action upon the gastric follicles similar to that which it exerts upon the salivary glands. That it has some action upon the stomach is rendered probable by its power to allay hunger when no food can be obtained.

The question, What is the cause of hunger? is one which cannot be regarded as definitely answered. It is, no doubt, immediately dependent on some condition of the nervous centres in the cranium, and may be present when the blood circulating in these centres is impoverished, although the stomach be full, as in children suffering from tabes mesenterica; yet the stomach is the part in which it is apparently felt, and it may be produced by local conditions of the stomach which do not affect the nutrition. For the stomach has little power to discriminate sensations; and the bitterness which quassia or quinine causes in the mouth, and the heat caused by mustard or cayenne, are both felt by the stomach as appetite; and so is the slight irritation caused by small doses of tartar emetic or arsenic, which on this account are said to act as gastric tonics. The usual appetite felt by the healthy stomach after a short period of abstinence seems to depend upon slight irritation of the nerves in the stomach, caused by some

condition either of the gastric follicles or blood-vessels. Increased irritation causes violent appetite, and such an appetite may be induced by the stimulus of a bitter taken before meals or an irritable condition of the stomach itself. This craving appetite may be observed in some forms of dyspepsia, and not unfrequently precedes a so-called bilious attack with vomiting. When the irritation is increased still farther, the appetite, as shown by Bernard's experiments and by Beaumont's observations (*vide* Beaumont, *Physiology of Digestion*, 2nd ed., Burlington, 1847, p. 251), disappears and is succeeded by nausea or even by vomiting. From these observations we learn how to treat anorexia due to different conditions of the stomach. When the stomach is languid and lacks its normal sensibility, there will be want of appetite, because the condition of its walls does not afford sufficient stimulus to its nerves. But, when this is supplemented by the additional stimulus of food, appetite is felt. Thus such persons have no appetite before a repast, but, after they begin to eat, acquire a relish for their food and make an excellent meal. When the appetite is due, on the other hand, to excessive irritability of the stomach, the persons feel beforehand as if they could eat a great deal, but, as soon as they have swallowed a morsel or two, the additional stimulus of the food acts like the excessive friction of the rod in Bernard's experiments, appetite disappears, and nausea or even vomiting succeeds. The treatment is evident from the pathology. If the anorexia be due to deficient sensibility, we must give an extra stimulus, such as bitters before meals, or a little more spice and seasoning with the food. Many a time, however, I have been disappointed with the result, when I have ordered quinine or quassia before meals as an appetiser, without considering the pathology of the particular case I was treating, it being one, not of deficient sensibility, but of excessive irritation. The proper treatment was to soothe the mucous membrane instead of stimulating; and on adopting this, and giving bismuth and magnesia instead of bitters, the appetite returned. Sometimes one meets with persons who complain that, after a full meal, they feel as empty as if they had not had anything to eat. Normally, hunger is appeased by eating, probably because the condition of the gastric walls which causes appetite, whatever it may be, is relieved by secretion; but, in the cases I have just mentioned, the food does not produce its ordinary effect. The reason which suggests itself to explain this is, that the stomach does not react so readily as it ought. We have no experiments, so far as I know, to show what drug will affect the reflex action of the gastric nerves; but we know that strychnia increases other reflex actions, and why not this? Strychnia appeared theoretically to be the most likely remedy for such cases; and, on trying it experimentally, I found it successful. Theoretically, also, it ought to be useful in those cases of atonic dyspepsia in which we give alkaline solutions; and its utility in such cases is practically well known. But, supposing the stomach to be too debilitated, either from old age or from exhaustion by disease, to respond to such stimuli as bitters, alkalies, or alcohol, even when aided by strychnia, what is to be done? The organ is then a passive vessel, and as such we must treat it. It possesses a temperature of 99 deg. Fahr.; and we know that, under such circumstances, weak hydrochloric acid with pepsin will digest meat actively when mixed with it in a glass vessel. By introducing pepsin and acid into the stomach, we shall supply the gastric juice which it cannot secrete; and the products of digestion, by strengthening the body, will gradually enable the stomach to do its own work and dispense with extrinsic acid. Bernard's experiment shows us that great irritation of the stomach will cause vomiting; and we know, from other researches, that it is because the irritation is transmitted by sensory nerves, and especially by the vagus, up to a centre in the encephalon\* and probably in the medulla oblongata, whence it is reflected to the muscles of the abdominal walls. It is by irritation of the nerves in the stomach that vomiting is usually occasioned; but it may also be produced by irritation of other nerves, such as those of the intestine† or ovaries.‡ It is a reflex act, and is to be arrested either by removing the irritant or diminishing the sensibility of the nerve-centre through which it acts. If the irritant be undigested food or acid fluids in the stomach, a little mustard and water will remove it; if it be an inflamed condition of the stomach itself, we must use bismuth and hydrocyanic acid to soothe it and deaden the sensibility of the nerves within it; but if it be an irritant which cannot be removed, like a calculus in the gall-duct or a fetus in the uterus, we must employ opium or bromide of potassium to act on the nervous centre within the cranium and prevent it from transmitting any reflex impulses.

In the intestine we can no longer watch so readily as in the stomach what our drugs are doing, but still experiments are teaching us some-

\* Gianuzzi, *Centralblatt für die Med. Wiss.*, 1865, pp. 1 and 129.

† Schiff, *Moleschott's Untersuchungen*, Bd. x, p. 399.

‡ Cyon, *Plüger's Archiv*, Bd. viii, p. 351.



thing about their action there. It has shown that acids applied to the mouth of the bile-duct stimulate the discharge of bile from the gall-bladder, so that the acid chyme from the stomach causes a flow of bile as it passes along the duodenum; but we do not yet know whether the utility of nitrohydrochloric acid in bilious disorders is due in any measure to its increasing the stimulus afforded by the chyme. Rutherford has shown that podophyllin, rhubarb, aloes, and colchicum increase the secretion of bile; but he, as well as the Edinburgh Committee of which he formed a member, found that calomel does not. The benefit which follows a dose of calomel or blue pill in biliousness is so marked that the discrepancy between clinical observation and the results of experiment led many to believe that the latter was worthless and misleading. But facts never contradict one another, although they may run counter to our opinions. The apparent contradiction in this case may be explained by the farther experiments of Lussana, Schiff, and Heidenhain. These physiologists have found that the liver does not only form new bile; it again secretes old bile which has been absorbed from the intestine. Thus all purgatives which sweep out old bile and food from the intestine (and thus prevent its absorption) lessen the quantity circulating in the blood, whether they increase the activity of the liver or not. The effect of any purgative to clear away bile in this manner will depend on the part of the intestine on which it acts. If it hurry on the contents of the duodenum before they have time to be absorbed, it will clear away the bile; but, if it only act on the large intestine, it will have comparatively little effect. We still want experiments on the part of the intestine affected by different purgatives; but it is probable that it is to an action on the duodenum that calomel owes the cholagogue properties which aloes wants.

The digestion of food in the intestinal canal is, we know, carried on by ferments, which decompose and prepare it for absorption. It would appear that each ferment must do its own work, but must not overdo it; for there seems to be a provision for stopping the action of each after it has acted for a while. The ptyalin will not act in an acid fluid; and the gastric juice lessens, if it do not destroy, its activity. Pepsin is precipitated by bile, and is rendered inert by the pancreatic juice, so that its digestive power is destroyed when the food reaches the duodenum. It has not yet been ascertained whether the action of the pancreatic juice is altered by the intestinal juice, but it will not act except in an alkaline fluid; and thus, if the chyme be very acid, pancreatic digestion will be retarded. The various processes of digestion depend upon one another; and, if one be disturbed, the whole will suffer more or less with it. Hence the satisfaction with which we hail such experiments as those of Bernard and Rutherford on the action of our remedies, and the interest with which we look for farther information regarding the digestive process to Brücke and Kühne, who have already taught us so much regarding it.

But it is not in the intestine only that ferments, or, as they are better called, enzymes, play a part. After the food has been absorbed and actually forms a part of the liver in the form of glycogen, it is still subject to their influence, and they convert it partly into sugar. Here, too, our drugs seem to influence these enzymes, and bicarbonate of soda will lessen their activity and retard the formation of sugar.

Some ferments seem to possess the power of building up compounds, instead of breaking them down; and it appears to be a ferment which causes fibrinogen and fibrinoplastin to unite to form fibrin, while pepsin would decompose fibrin into other substances. Facts all seem to point to ferments or enzymes as the agents by which the tissues are built up and again pulled down in that constant change which continues during life, and the action of drugs upon these enzymes is becoming one of the most interesting questions in pharmacology. Their action can be increased or diminished by the action of alkaloids, such as morphia and veratria, and by various salts, such as nitrates, sulphates, and chlorides. But the results differ with the dose as well as with the ferment and the salt used. The same salt in different quantities may at one time quicken and at another retard the action of the ferment. A muscle cut out of the body becomes acid through the action of a ferment it contains. The same muscle in the body becomes acid in a similar way when it contracts. The process of fermentation and of contraction are thus seen to be closely connected, and the question naturally suggests itself, Does the nerve directly act on the muscular substance, or does it act on it through a ferment which it liberates from zymogen in the muscle in much the same way as it does in the cells of a gland? Is it possible, too, for the nerves to liberate this ferment and decompose the muscles without causing them to contract? These questions are of great practical interest, because one product of muscular decomposition is lactic acid, and this acid is generally regarded as an important agent in the production of rheumatic fever, that disease which so frequently leaves behind it the organic diseases of the heart, the treatment of which we have already considered. It

is possible that rheumatic fever is not caused by acid in the blood and secretions, but that the acid and the disease are consequences of one common cause, which may have its seat in the nervous system. But, however this may be, can we arrest the decomposition in the muscles, can we stop the formation of acid by any drug? It would appear that, to some extent, we can; for salicylic acid or its soda-salt not only reduces the temperature in rheumatic fever, but lessens the urea, showing that lessened decomposition of albuminous tissues is taking place. This useful drug we owe entirely to pharmacological research, and, although it is not all we desire, yet the beneficial power it does possess encourages us to hope that we shall ere long discover some other remedy which will satisfy our wants.

We now know that decomposition of the tissues composing the body, whether it be effected by the agency of ferments or not, goes on independently of oxidation, and that it may be increased while oxidation is diminished. According to Voit, albuminous substances, such as those which compose the muscles, liver, and kidneys, do not undergo combustion by direct union with the oxygen supplied to them by the blood, but split up so as to yield urea and fat. The fat should usually undergo farther combustion into carbonic acid and water; but, if the supply of oxygen be lessened or the decomposition be quickened, combustion becomes insufficient and the fat accumulates in the tissues as fatty infiltration and fatty degeneration. Thus it is that, when a limb is disused and the supply of arterial blood to it consequently lessened, fatty degeneration of the muscles takes place. When the coronary arteries can no longer meet the increased calls of a hypertrophied heart for arterial blood, or when they become abnormally contracted, fatty degeneration of the cardiac wall sets in. When the power of the blood to convey oxygen is lessened by diminution of its red corpuscles, the consequent want of oxidation leads to an accumulation of fat frequently noticed in anæmia, and a tendency to obesity frequently appears after severe hæmorrhage.

The pathology of fatty degeneration indicates its treatment. The supply of arterial blood to the organ must be increased, if possible, and its power to carry oxygen is to be augmented by the use of iron, so as to favour combustion. But, at the same time, we must try to restrain the decomposition of the tissues within proper limits. Alkalies have the power to check decomposition of one sort, as in diabetes, but we do not yet know their action upon other changes in the tissues, nor are we able to say that their utility in obesity is due to a power to diminish tissue-metamorphosis. But there is one way of influencing tissue change which I must not forget. By simply keeping an animal in a hot chamber for a little while, the tissues decompose more rapidly, and the evidence of their waste is to be found in the urine as increased urea. Quicker decomposition is followed by increased combustion, and the temperature of the body rises. Now begins a vicious circle; for the higher temperature itself quickens tissue-change and the fire supplies itself with fuel. The heat, too, stimulates the cardiac ganglia, quickens the heart, dilates the vessels, and accelerates the circulation. Acting on the respiratory centre, it quickens the respiration, increases the supply of oxygen to the body, and thus fans the flame. But, quick as the respiration may be, rapid as is the circulation of arterial blood, it is, as Wickham Legg has shown, insufficient in many instances to keep pace with the decomposition of the albuminous tissues, the products of waste accumulate, and we find them in the fatty heart of fever-patients and in the livers of Strasburg geese.

Now, we clearly see that, whatever may have led to increased tissue-decomposition and combustion in the first instance, the high temperature itself is a cause of mischief, and must be reduced. We no longer regard it as a conflict of vital spirits with which we cannot inter-meddle, nor as an angry struggle of the vital powers with some foe from without, to be encouraged by keeping up a roasting fire in the sick-room, carefully closing every cranny through which fresh air might enter, swathing the patient in folds of flannel, and giving him nothing but warm drink, in spite of his earnest entreaties for a drop of cold water to cool his parched tongue. Instead of this, we regard it as a chemical process going on too quickly, and we try to retard it by securing cool pure air through careful ventilation, while we refresh the patient with washes to his fevered skin and cool drinks to quench his raging thirst. We endeavour to lessen the onward fire which is consuming him by quinine, eucalyptus, or salicylic acid, and to render his feverish pulse slow by aconite. But, when these means fail, and the persistent rise of temperature will assuredly cause death, we know that we can bring it down by the free use of cold water.

This is no new remedy, for by its use Musa saved the life of Augustus. But it is not one to be ignorantly or rashly used; for, while it cured the emperor, it killed his nephew. Even now, in spite of the numerous instances in which life has been undauntably preserved by it, many scruple to use it, on account of the dangers which they apprehend.



hence from it. Experimental pathology and pharmacology have not given us the remedy, but they have taught us how to use it, what are its dangers, and how they are to be avoided. They are death from failure of the heart and death from failure of the respiration. The researches of Panum, Cyon, and others, have shown us that the heart is stimulated to increased action by warmth, but that a sudden fall in the temperature to which it is exposed may act upon its inhibitory ganglia and suddenly arrest its pulsations. The respiratory centre also is stimulated by warmth to increased action. But, while a high temperature quickens the heart and makes it beat more powerfully, it also exhausts it more rapidly. Supposing, then, that both the heart and the respiratory centre should be weakened by continuance of fever, we can readily see that the withdrawal of the stimulus supplied to them by the high temperature may cause them to act so feebly as to endanger life as well as that a sudden fall in the temperature may cause instant death by stopping the heart through its inhibitory ganglia. A knowledge of the dangers teaches us how to avoid them, and the lessons of experiment coincide with those of clinical observation. The temperature in such cases must not be brought down too quickly; it must not be brought down too low, and stimulants must be administered to prevent the action of the heart and respiratory centre from flagging.\*

While experimental pathology and pharmacology have done so much for us already, will they not do more? They have taught us how to use such remedies as cold affusion, which were known before, and they have put new ones, like salicylic acid, into our hands. But collapse still sometimes occurs after a cold bath, and salicylic acid does not always prevent the temperature from rising. Will this always be so? I think we may confidently answer, No. We shall yet discover remedies to prevent the collapse, and to keep the temperature within its proper limits. Every day is enriching medical science with some new discovery, diseases are being traced more precisely to their origin, and the action of remedies is being more exactly defined and localised. Order is beginning to appear amongst the crowd of new acquisitions to our knowledge, and isolated facts begin to range themselves under general laws. Pharmacology is allying itself to chemistry, and the rigid laws of the latter are beginning to extend to the former. We no longer attribute the power of drugs to an inherent energy, and say, with Molière, that opium causes sleep because it possesses a *vis dormitiva*. We are beginning to look upon the sleep as only one link in a chain, the beginning of which is a chemical affinity between opium and certain molecules in the nervous system. We observe that drugs having different chemical affinities differ in their effects on the body, while those belonging to the same chemical groups are nearly allied in their action. By altering the chemical composition of our drugs, we can alter the place of their action and change the nature of their effect. We can counteract the effects of one drug by another, and prevent death from a poisonous dose. We are learning the conditions which cause our drugs to affect one part of the organism rather than another, so that we hope are long to foretell from the chemical constitution of any substance the organ it will attack and the functional changes it will effect. At the same time, pathology is teaching us the parts on which we must act, and the nature of the influence we must exert, in order to prevent or arrest the processes of disease. Thus we may hope to predict that a body having a certain chemical constitution will prove an efficient remedy in a particular disease. Hitherto we have been obliged to trust to the substances we procure from plants for our most powerful agents; and, even if we were to know the constitution of the particular remedy we required, it might be impossible to procure it. But now one alkaloid has been made, another and another have rapidly followed it. We can change the constitution and action of these in the same way as we alter those derived from the vegetable kingdom. It is, therefore, highly probable that we shall be able to produce artificially the substances which will act on the body in any way we desire.

Nor may the time be so very far distant. When the oldest licentiates of this College now living were studying their profession, the discoveries of Lavoisier were novelties; digestion was still regarded as a process of solution; the functions of sensory and motor nerves were unknown, and the doctrine of reflex action was still far in the future. The distinction between the tissues had just been made, and the importance of the cell had not been recognised. Pathology had hardly begun, and scientific pharmacology did not exist. When we think of all this and compare it with our present knowledge, we are astonished. If we compare our practice, as at the beginning of these lectures, with that of the Egyptians and Greeks, we are discouraged; but, if we glance

at the advances made during a single lifetime, we cry, "Slow has been the advance of medicine, because she went astray; now the path she follows is right, swift has been her progress and glorious will be her future."

## THE DIAGNOSIS AND TREATMENT OF AUDITORY-NERVE VERTIGO.

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[Continued from p. 289 of number for March 10th.]

A GOOD illustration of the obscurity which gastric symptoms may confer on these cases was afforded by a woman, 50 years of age, who came under my care last spring at University College Hospital. She gave a long history of the symptoms of chronic ulcer of the stomach, for which she had been previously in the hospital. On examination, the stomach was found to be tender and evidently dilated. Vomiting was still frequent, occurring chiefly in the evening, when much of the food taken during the day was rejected. Giddiness was complained of as associated with the vomiting. When she was first seen, the giddiness was thought to be due solely to the gastric disturbance. Subsequent questions as to the character of the vertigo and the time of its occurrence elicited a very definite history of another kind. It appeared that the giddiness very frequently came on when there was no sickness; that it occurred in paroxysms; and that it was produced especially by sudden movements, as lying down, or sitting up, or turning round in any posture. In the attacks, the sensation was always of a definite character, being as if "something went over the top of the head from the right side to the left". If standing, she often fell, and, even if sitting, she would fall from the chair. She always fell to the right. Whether she fell or not, she always had, during these attacks, the sense of falling to the right and backwards, never forwards or to the left. Many attacks were witnessed. In some, she fell to the right; in others, merely backwards, although she felt as if falling to the right. In some, she almost lost consciousness; could be roused with difficulty. She said that she had many times actually lost consciousness for a few minutes. During the attacks there was slight flushing of the face. The eyelids were closed; on opening them, there was no dilatation of the pupils. The eyes were all the time in the median position, never turned either to the right or the left, even when the sense of falling to the right was most intense. The duration of the attacks varied from a quarter of a minute to several minutes. The vertigo commenced suddenly, but ceased gradually.

The definite character of the vertigo led to a careful examination of the state of hearing. It was found that a watch was heard less acutely with the right ear than with the left. (Right at one-third, left at two-thirds the normal distance.) She could hear all the notes of a piano; but, after listening for a little time, the upper and middle notes suddenly ceased to be heard. After a little time, she could hear them again. The upper notes, she said, constantly sounded a "long way off and faint, like the strings of a guitar". She had noticed lately that her daughter's voice, in singing, sounded distant and "squeaky", quite unlike its ordinary character.

Audition through the bones of the skull was tested with the tuning-fork. Placed in contact with the top of the head, she said she could hear it in the left ear only. Placed on the left parietal eminence, she heard it invariably louder when the meatus was closed than when it was open. Placed on the right parietal eminence, she could hear it only faintly, and, when the meatus was closed, she could not hear it at all. Examination with a watch yielded the same result. The meatus was free from obstruction. She had been troubled with occasional singing and whistling noises in the right ear.

Sight was unimpaired, except by presbyopia. The ocular muscles were unaffected. Smell and taste were both diminished. Neither peppermint, assafoetida, nor camphor could be recognised. Neither citric acid, salt, nor sugar could be tasted on either side. Quinine was tasted a little. No pain was referred to the ear, but neuralgic pain and tenderness over the right side of the head were complained of, and, on examination, there was distinctly defective tactile sensibility in the parts supplied by the right fifth nerve. There was a good deal of general weakness and prostration, and she was liable to occasional attacks of great prostration, sense of dyspnoea, surface pallor, without marked failure of pulse. She was disturbed at night by starting in her sleep, accompanied with a sensation of falling: she would wake in a

\* A remedy which pharmacology indicates as likely to be successful in cases of impending death from the effects of a cold bath in fever is atropia, which paralyses the inhibitory nerves of the heart and stimulates the respiratory centre.



perspiration. She constantly dreamed of falling, and dreamed that she saw other persons falling from heights.

Many drugs were tried to lessen the attacks of giddiness (bromide of potassium, belladonna, gelseminum, Indian hemp, etc.), but with no permanent benefit. Absolute rest in the hospital (when she was admitted under the care of Dr. Reynolds) was followed by marked improvement, and the attacks of paroxysmal headache were effectually relieved by inhalations of nitrite of amyl, which had, however, no effect on her vertigo. At a later date, she thought that salicylate of soda did her more good than anything else.

The evidence of defective labyrinthine function in this case is clear. The character of the vertigo, its paroxysmal and uniform character, render it probable in the highest degree that it was due to that morbid action of the right auditory nerve, of which there was independent evidence. The distinct affection of other cranial nerves suggests the probability that the impaired function was due to disease of the nerve-trunk or centre rather than to disease of the ear itself.

The more immediate interest of the case is, however, the combination which it presented of chronic gastric symptoms and auditory-nerve vertigo. The association was here conspicuously accidental, but the confusion in diagnosis which the association caused is typical. The same combination is constantly seen in cases in which the gastric symptoms are less pronounced. In this case, the distinction of the cause of the vertigo was easy, not only on account of its pronounced character, but because the gastric symptoms were those of organic disease, and organic disease of the stomach is less frequently accompanied by vertigo than the simple disturbances (chronic gastric catarrh: Trousseau).

The sufferers from this affection, besides their acute attacks, are often liable to a slighter chronic sensation of disturbed equilibrium, the "interparoxysmal reeling" to which Dr. Hughlings Jackson has called attention. It may take the form merely of a vague sense of instability, which is expressed by the word "dizziness" and the like. This condition is often in constant relation to the gastric functions. The least stomach-disturbance at once excites the feeling, and most careful dietetic management is necessary, in order to keep the patient free from his annoying sensations. The following case is an illustration.

A gentleman aged 35 sought advice on account of chronic gastric disturbance associated with slight giddiness, which he regarded as secondary to the dyspepsia. His tongue was clean and appetite fair, but he complained of acidity, flatulence, and frequent sense of prostration. There was marked epigastric aortic pulsation; no cardiac murmur, but a weak impulse and soft radial pulse. The giddiness from which he very often suffered was vague in character, and was worse when his stomach was a little out of order. It was only on inquiry for ear-symptoms that he said his left ear was a little deaf, and that he had occasionally "singing" in it, especially when his dyspepsia was troublesome.

Some years before, he had suffered from attacks of sickness and giddiness, but could give no detailed account of them. He dated his present symptoms from a series of severe paroxysms of vertigo six months previously. The first of these occurred without warning or apparent exciting cause. He was walking with a friend, who was on his right hand. Suddenly, he felt something which seemed like a blow on the left side of the head behind the ear, and made him "whirl round" to the right and fall on his right side with such force as to knock his friend down also. He said that it seemed "as if the ground on his right suddenly rose up to him". He stuck his hands convulsively into the ground, but did not lose consciousness, calling out at once to his friend, "Let me alone: I am giddy". In a few minutes, the giddiness gradually subsided, and he walked a mile or two home, but he had some difficulty in walking straight.

Two days afterwards, he had a second attack. He had been busy in law courts all day, and had omitted to take any food until long past his usual time. Then he had dinner, and afterwards walked along the street, when he suddenly found himself getting giddy. He had not time to call a cab, but managed to clutch hold of some railings. He seemed to hear a roaring sound in his left ear and fell towards the right. Although he held the railings with all his force, he could not prevent himself from falling against them and grazing his right cheek, and then sliding down to the ground. He believes there was no loss of consciousness; for he remembers the chaffing remarks of bystanders on his presumed intoxication. The giddiness soon passed, but he felt for a time weak and prostrated.

The third attack was less severe. It occurred in bed soon after waking in the morning. He was lying on his back, when the bed on which he lay seemed suddenly to be rolling over from the right; just as, in the first attack, the ground seemed to rise up from the right.

He had no subsequent attack until a day or two after my first interview with him, when he had a slight attack one evening while at

supper. He did not fall, but all objects seemed to revolve round a centre situated in front of him, those above the centre moving from right to left. Next day, he had an attack of diarrhoea.

When first seen, there was some wax in each meatus; but, after this had been completely removed by syringing, it was found that the hearing in the left ear was reduced to one-third. A tuning-fork in contact with the top of his head was heard, he thought, only in the right ear, but audition through the skull, tested by closing the meatus while a tuning-fork was sounding in contact with the parietal eminence, seemed defective in each ear. In each case, closing the meatus rendered the sound less distinct, and the diminution was greater on the right side than on the left. The watch in contact with the skull, however, was heard on the right side, and not at all on the left.

The case is thus a fairly typical one of labyrinthine vertigo. The noise in the left ear at the moment of the onset of the vertigo points to that ear as the chief seat of the mischief, and with this the defective perosseal audition of the watch corresponds, although the defect in the perosseal audition of the tuning-fork was greater in the right ear. The movement in the attacks was, therefore, as usual, from the side on which the ear was affected. The association of the giddiness and the gastric disturbance was marked both in some of the severer attacks and in the more persistent slight giddiness.

The most important point, then, in the diagnosis of auditory from gastric vertigo is the recognition of an impairment of the function of the auditory nerve shown, first, in deafness, and, secondly, in tinnitus, and the most significant change is the loss of the power of hearing a watch in contact with the skull. The point of next importance is the character of the vertigo. The sensation which results from a primary gastric disturbance is usually vague, a confused sense of defective equilibrium; that which results from a labyrinthine affection is definite, a sense of movement in a certain direction, subjective or referred to other objects. This statement is not in complete accordance with the descriptions of gastric vertigo which have been given by Trousseau and other writers, who have described vertigo of very definite character as the consequence of gastric disturbance only. But the fact that the patient may be unconscious of a most significant auditory defect, lessens the value of former observations as evidence of the definite character of stomachal vertigo. My own conviction is that, in the vast majority of the cases in which a vertigo of definite and uniform character is apparently excited by gastric disturbance, an auditory defect will be discovered on careful examination. In a small proportion of cases, no auditory defect may be found. In some of these cases, there may be disturbance of some other sensory nerve also related to the function of equilibration. But, on the other hand, the sensation which attends a labyrinthine disturbance may be vague in character. Hence definiteness in the character of the sensation is of greater value as suggesting a primary affection of the auditory nerve or the centre of equilibration, than is the absence of definiteness as excluding such a source of the giddiness. Lastly, the sequence of the gastric symptoms and vertiginous sensations is of some significance, although, as we have seen, this may easily be misunderstood. Vomiting, dyspepsia, or diarrhoea, after an attack of vertigo, is no evidence that dyspepsia is the cause of the trouble. Gastric derangement before the vertigo may be a primary cause of the vertigo, or may merely excite an attack in the presence of a derangement of the equilibrium centre.

*Cerebral Disease.*—Vertigo may be a symptom of cerebral disease, and the attacks which result from a labyrinthine affection may be of such a character as to simulate very closely those of cerebral origin. This resemblance depends chiefly on the occasional occurrence of loss of consciousness in the attacks of auditory vertigo, and on their suddenness. Sudden loss of consciousness may be a symptom of two forms of cerebral disease, apoplexy and epilepsy, and from each of these auditory-nerve vertigo has to be distinguished.

*Apoplexy.*—The resemblance to apoplexy struck Menière very forcibly, and the affection was accordingly termed by him "apoplectiform". Instances are occasionally met with which merit such a designation. A medical friend is now suffering from indubitable auditory-nerve vertigo, whose first attack was of an apoplectiform character. Now, the attacks are always referred by him to gastric disturbance. Although the sensations are described by him as intense giddiness and inability to stand, there is no definite sense of rotation or tendency to fall in a definite direction. The first sensation is a sense of suffocation and of oppressive heat; he then bursts into a perspiration and feels intensely giddy, so that he is obliged to lie down. As long as he is lying down, the sensation of giddiness ceases; but, if he attempt to rise, it comes on again. For many years, since an explosion near him he has been partially deaf in the right ear. A watch is heard six inches from the left, but is not heard at all with the right ear. A tuning-fork vibrating in contact



with the skull is well heard in the left ear, and increased by closure of the meatus. He thinks he can hear it in the right ear, but it is not increased by closing the meatus. He has continuous tinnitus in the right ear. When at his best, the noise is like a "dull buzzing"; but, if his stomach be deranged, or if overworked, the sound rises to a persistent hissing, "like an engine". It is greater for some hours before an attack of giddiness, but is not louder at the moment of an attack. His first attack was one of sudden and profound loss of consciousness, without much giddiness. He was walking in the City, when he suddenly lost consciousness and fell. He probably had no convulsion, but was taken to a hospital, where he was thought to be in a state of post-epileptic coma. Some hours passed before he recovered consciousness. The second attack, however, was attended with vomiting and no loss of consciousness.

But the cases are rare in which the loss of consciousness is so considerable and so lasting as to render the diagnosis a matter of real difficulty. A speedy return of consciousness, coupled with the persistence of vertigo and the absence of any symptoms of local weakness, generally renders the nature of a case sufficiently obvious. The history of preceding attacks will also indicate the nature of the affection. In a first attack, as in one depending on an acute inflammation of the semicircular canals, a diagnosis might be for a time impossible.

[To be concluded.]

## ON BLAPS MORTISAGA AS A HUMAN PARASITE.

By T. SPENCER COBOLD, M.D., F.R.S.,

Correspondent of the Academy of Sciences of Philadelphia.

THROUGH the kindness of Mr. J. Fletcher Horne of Barnsley, I am possessed of a living specimen of the larva of this somewhat repulsive coleopterous insect, commonly known as the churchyard beetle. In a letter accompanying the specimen, and dated February 3rd, Mr. Horne says: "The enclosed was this morning found in the motions of a child eleven weeks old. As it is, I believe, an unusual visitor in a child so young, I have thought that it might be of some interest to you. The child has been brought up with cow's milk, always boiled". On receiving the maggot, which I at once recognised as referable to the genus *blaps*, I wrote to Mr. Horne requesting him to make inquiries with the view of ascertaining the genuineness of the case regarded as one of parasitism. Replying to me on the 6th, he writes: "I have seen the mother of the child to-day, and have not been able to shake the evidence that the larva was passed from the bowel. The people have no garden, and they feel sure that the maggot passed into the napkin with the motion. Their washing is done at home, and dried before the fire. The child is apparently getting well rapidly, which I think strengthens the evidence."

Mr. Horne having been apprised of my desire to publish the case, he was good enough, in a subsequent communication, to mention some other particulars. Thus, in respect of the symptoms, it was noticed that the child had a cough soon after birth, and for five weeks previously to the time that it came under his professional care it "had a fit once a week", apparently convulsive in character, as the face was said to have turned blue during the paroxysms. "A neighbour says she detected, before the worm came away, a 'humming or buzzing' about an inch from the umbilicus on each side, which has now gone away." I may here remark that I agree with Mr. Horne in thinking that these supposed insect-like sounds were merely due to flatus; our informant probably using the term "buzzing" only because she had knowledge of the fact of an insect having been passed. Be that as it may, Mr. Horne adds: "The child has never had any diarrhoea, and its bowels are usually constipated, the motions being passed in small round pieces like little marbles. When I first saw the child, it had great difficulty in breathing, with frequent sighing. To-day (the 8th) the child seems to be getting on famously." In an earlier letter, Mr. Horne informed me that the treatment mainly consisted in the administration of powders containing hydrargyrum cum creta and rhubarb; and, although they were not given with the view of expelling the parasite (the presence of which was of course not so much as suspected), they nevertheless had acted anthelmintically.

Taken by themselves, the above particulars might hardly perhaps be considered as affording sufficient evidence of parasitism, or of having caused the symptoms in question. However, several authentic instances of the occurrence of the larvæ of *Blaps* having now been placed on record, it is clear that, even if this case were more than doubtfully genuine, it would not set aside the evidence afforded in the other and otherwise similar instances. For myself, no doubt remains respecting the parasitism in this case; Mr. Horne's opinion and my own being in entire agreement.

In my general treatise on the *Entozoa*, I have briefly alluded to the notorious and unquestionably genuine case of Mary Riordan, who not only passed *per anum* upwards of 1,200 larvæ, but also several perfect insects belonging to this species. I have likewise referred to Hope's Catalogue, wherein two other cases are given. The first-named case was reported by Pickells and Thomson, with the valuable co-operation of the well-known Dublin helminthologist Dr. Bellingham. One of the other authentic cases, in which only a few larvæ were present, was recorded by Patterson of Belfast, and the third by Bateman. I may mention that the Rev. F. W. Hope's Catalogue originally appeared in the *Transactions of the Entomological Society*, being afterwards published in the pages of the *London Medical Gazette* (1837). Patterson's case was also, I believe, first communicated to the Entomological Society. I mention this in order to show the difficulty of getting at the literature of this department of helminthology (if such it may be called), and also in the view of expressing my belief that several other recorded cases might be found, if diligently sought for, in the *Transactions of foreign societies*. The only other instance that I can at present find ready to hand is the one for which Sir J. Rose Cormack is responsible. A notice of this case appeared in the *Monthly Journal of Medical Science* (1841).

As regards the mode in which the maggot gained access to the child in the case before us, it is not easy to decide; but, in the case of Riordan the mode of ingress was sufficiently explained. The *Blapsidæ*, as a family, are closely allied to the meal-worms, and, like most of the *Tenebrionidæ*, are black and foul-smelling beetles, frequenting dark and damp situations, from which they retreat only at night. The family comprises numerous species, of which probably not more than three are found in this country. They are abundant in Africa, especially in Egypt, where (according to Fabricius, as quoted by Westwood, Figuer, and other entomologists) the women eat *Blaps sulcata* cooked with butter, in order to make them grow fat. The insects are also employed as specifics against ear-ache and the bite of the scorpion—a method of treatment which smacks somewhat of the principle of *similia similibus curantur*, since earache, amongst the superstitious, is often associated with the notion of there being maggots within the meatus. Moreover, many genuine cases of insect-larvæ within the external auditory passages have been published. The superstitious notion of a "charm" is generally at the bottom of all domestic theories on the subject of treatment. This was pre-eminently so in Riordan's case. Here, as Westwood observes, when epitomising Pickells's long account, the parasites "probably originated in an absurd and superstitious practice, which she had for some time followed, of drinking daily for a certain time a quantity of water mixed with clay, taken from the graves of two Catholic priests, and eating large pieces of chalk. One of these beetles was immersed repeatedly in spirits of wine, but revived after remaining therein all night, and afterwards lived three years".

The intolerance of light shown by the perfect insect seems to be equally shared by the larva. Of this fact I have had repeated evidence by observing the behaviour of the living specimen sent by Mr. Horne. Thus, when, on February 5th, I placed the maggot on the surface of some moist mould (taken from a fern-jar and put in a tin box), scarcely half a minute elapsed before it commenced to bore its way downwards, and in less than a minute all but the tip of the tail had disappeared. In like manner when, on the 7th, I raised the lid of the box, and found the maggot lying on the surface of the soil, it almost instantly proceeded to bury itself. In short, under similar conditions, its conduct is invariably the same; and, whether we speak of it as a larva or an imago, this insect may clearly be branded as "one that loveth darkness rather than light". At the risk of incurring the wrath of a certain society established for the prevention of cruelty to animals, I occasionally, for the benefit of the curious, poke up my *Blaps mortisaga*, when—judging by the alacrity it displays in its frantic efforts to escape—its discomfiture, not to say distress, is sufficiently obvious.

## NON-ERUPTIVE VARIOLA.

By ALFRED FLEISCHMANN, M.R.C.S. Eng.

IN the fourth edition of Watson's *Principles and Practice of Physic*, pp. 361 *et seq.*, will be found the following paragraphs.

"This frightful disease sets in with smart febrile symptoms..... pain in the epigastrium, with nausea and vomiting, and headache.".....The period of incubation is from ten days to a fortnight..... Amongst other symptoms, "vomiting is one, pain in the back another. Heberden noticed that acute pain in the loins was almost always fol-



lowed by a severe attack: that pain higher up between the shoulders was of better augury; and that it was to be reckoned in all cases a good sign if there were no pain in the back at all. Again, "its severity, in truth, is almost always in direct relation to the *variability of the eruption*." It is "accompanied by *inflammation of the tonsils and fauces* are tumid and red; and with this sore throat there is associated.....more or less *salivation*, which lasts for several days. At first, the discharge is thin and plentiful; but, towards the period of maturation, it often becomes viscid and ropy, and is with difficulty got rid of by the patient. This salivation is of some importance as a *prognostic symptom*."....."Besides this, Sydenham regarded the *ptyalism* as a *diagnostic circumstance*; as a mark which, identified with true small-pox, a fever called by him the *variola* fever; the *variola sine variolis* of De Haen and others."....."Notwithstanding this statement," says Watson, "*it is difficult to believe that any such disorder as 'variola sine variolis' ever prevents from the contagion of small-pox.*".....And once again, Watson says, "this affection of the salivary glands does not so often occur in children, but diarrhoea appears sometimes to take its place." (All the italics, except those in the penultimate sentence, are those of Sir Thomas Watson.)

In such a disease as small-pox, I do not think I need apologise for not quoting a more recent text-book. At any rate, I could not quote from a more accurate, painstaking, or classical authority; and even if it were at hand, which it is not, I doubt whether a better diagnostic summary is extant.

Last January, a dressmaker brought to my wife a piece of silk which she wished her to purchase; and, in the course of conversation, mentioned, with that utter *sang froid* characteristic of the Italians in all sanitary matters, that the reason why she wished to dispose of it was, that it belonged to one of her customers whose husband had died of small-pox between its purchase and conversion into an evening dress, and, therefore, the lady had commissioned her dressmaker to dispose of it, as it was unsuitable wear for a widow.

On coming home, this domestic transaction was related to me, and I at once directed my servant to take back the piece of silk to the dressmaker, and, knowing that small-pox was at the time rather endemic in Florence, I at once revaccinated my servant, who was the only member of the family about whose protective condition I was not fully assured. The vaccination "took", as revaccinations generally do, that is to say, it was not a virgin vesicle, but caused considerable local irritation. Exactly fourteen days after the revaccination, she came home from a "festa" complaining of great pain in her back, was violently sick, and very feverish, and, about three or four days afterwards, she called my attention to an eruption on the back of her neck, chin, and lower extremities. On examination, there was not much doubt in my mind (certainly there is no doubt now) that they were true but ill developed small-pox pustules. She continued sick and sorry for a few days, yet quite able and willing to continue her work as usual. About a fortnight after this, one morning my wife said to me, "I have such a sore throat, and such a disagreeable *smell* in my throat, like drains". On questioning and examination, I found she complained also of a sharp pain *between the shoulders*, the fauces were red and slightly tumid, with no ulceration or eruption, but well marked pyrexia. On passing from my bedroom to my dressing-room, I had to pass through my son's room (a boy of twelve), and I was greeted with the *very same* series of complaints. "Papa! I have such a nasty *smell* in my throat," etc. Both mother and son continued to complain for some three or four days of the same symptoms, but, to the former was added intense salivation, so great and so much that, for two nights, she had to go to bed with a large handkerchief between her head and the pillow, which in the morning was saturated; and during the same period, and added to the fetor and salivation, there was an abundant collection of viscid secretion about the tonsils, which could be pressed out by the fingers, and was difficult to remove even by gargling. The latter was seized with sharp diarrhoea and vomiting, but suffered slightly only from morbid secretion from the salivary and tonsillar glands.

To-day I have heard that, upon the dressmaker receiving back the silk she had brought us for sale, not being able to dispose of it, and her daughter wanting a wedding garment, she bought the stuff herself from the Italian lady to whom it had originally belonged, and she and her daughter were busily engaged in "making it up", when, two days before the wedding, the bride-elect was taken seriously ill, and is now at the point of death from confluent small-pox.

On hearing this, the true sequence of the chain of facts now narrated flashed across my mind; and it would have done so, I think, before, but, as I must honestly confess, I did not know, or had forgotten, that sore throat and salivation are diagnostic of variola; nor do I now know, nor does Watson mention, that the smell or taste

(whichever it can be called) of drains—in other words, subjective fetor of the fauces—is also diagnostic. Is it? Again, if it were wanted, no stronger evidence could be given of the protective power of cow-pox, not indeed against small-pox, but against the serious and fatal consequences of small-pox. It has often impressed itself upon my mind that the profession and its press would have done more to convince the public mind of the necessity of vaccination, and given a stronger checkmate to the crazy antivaccinators, if it had been more clearly impressed upon them that vaccination does not necessarily protect against small-pox, but against the severity and fatality of it; that, just as any one may have a recurrence of any eruptive fever, so one may have first cow-pox, and then cow-pox *unmodified in essence, but in circumstance*; in other words, small-pox.

It is a somewhat curious coincidence that my two sisters were carefully vaccinated as infants, and, about twelve years afterwards, both took small-pox from a servant. One had about half-a-dozen pustules, and the other *none*. In the present instance, I have no doubt, nor do I think my readers will have any, that the three recent cases I have recorded, are also veritable cases of "*variola sine variolis*". I trust that the imminence of the present epidemic in England will furnish an apology and a reason for the appearance of these notes.

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## NOTES OF A VISIT TO THE MILITARY HOSPITALS OF THE CONTINENT.

By ALBERT A. GORE, M.D., Surgeon-Major, Dublin.

### III.—GERMANY.

WHEN a soldier "falls sick" in Germany his name is entered in the company's sick-book, which is laid before the surgeon on his visit to barracks. If the complaint be trivial, the surgeon writes opposite the man's name, "Fit for duty"; if sick, the nature of his disease, and whether he is to be confined to barracks, or sent to the lazareth. If removed to hospital, his name is entered on an admission-card, with the number of his regiment, battalion, company, and several other particulars, and on the back an inventory of his clothing; and without this card he will not be admitted. He is either marched or carried to hospital. This card can be used at least six times, and, as the service of the German soldier with the standards only extends to three years, usually suffices for his whole military career: it is a kind of regimental record of his diseases or admissions to hospital.

Upon his arrival at the lazareth, he is seen by the Oberstabsarzt, or senior staff-surgeon, in the consulting-room of the hospital, who distributes the patient to his proper division, and causes his name to be entered in the admission and discharge book. His name is also entered in the daily diet-sheet (*Haupt-Diät-Verordnung*) for the information of the superintendent or commissary of the hospital. His regimental clothing is taken into store, he receives a bath, and next assumes the blue and white striped hospital dress, proceeds to the ward, when the assistant-surgeon enters the particulars of his case and disease in the medical case-sheet (*Journal-Blatt*); this is hung at his bed-head, and kept up daily; in the case of acute diseases, the temperature is recorded for the information of the Stabsarzt, or visiting staff surgeon, who is accompanied by the Assistenzarzt or Unterarzt, to whom the necessary directions as to diet and treatment are given. A bedside cupboard contains the patient's clothes, medicaments, etc. In the centre of each ward are a few chairs and a table, at which the convalescents are allowed to amuse themselves, playing at cards, etc. In some hospitals is a separate ward, where the men are allowed to smoke. The counterpanes are white; and sisters of charity, or deaconesses of the Order of St. Elizabeth, usually supplement the ordinary hospital attendants. As only the non-commissioned officers are allowed to marry, there are no women's and children's hospitals. In Berlin, the sick of the garrison will shortly be treated in two lazareths, capable of holding in the aggregate 1,120 patients.

The diets are prepared in copper boilers or closed ranges, and consist of soup, meat, and brown bread for the less severely sick, and small loaves of white bread, and chops or roasted meat, with various "extra portions", for the graver cases. Breakfast (*Frühstück*) is taken at 7 A.M., dinner (*Mittagsessen*) at noon, and supper (*Abendessen*) at 7 P.M. Extras, consisting of "portions" of wine, beer, porter, tea, milk, etc., seem to be sparingly given, but can be ordered without restriction if required. In the hospital with three hundred sick, only twenty-nine of the patient were on extra diet.

Closets and urinals are on each landing in proportion to the number of inmates; the baths are generally in a separate room or build-



ing, and in the passages are basins and spittoons. The wards are warmed by the German earthenware stove, which gives out a good deal of heat. In each hospital are two classes of sick attendants, warriors or waiters, and orderlies of the sanitäts-corps. The former wear a canvas dress, are sometimes civilians, and look after the cleaning of the wards, passages, etc.; whilst the others accompany the surgeon during his visit, administer medicines, apply minor dressings, poultices, etc. During the annual drills and manoeuvres, a large proportion of these men are withdrawn from the hospitals in order to be present with the train-battalions, or the staff-surgeons who accompany the troops.

The mortuary is detached, and in the enclosure is a barake or wooden hut. The greater number of these huts date from the wars of 1866 and 1870-71; they are intended for the reception of the wounded, and are capable of containing from twenty-eight to thirty patients each. They are ventilated by means of an elevated ridge along the roof with louvered sides. All of these have opposite doors and windows. Heated by means of an iron stove, they remain equipped with their proper quota of iron beds, stretchers, and ward-utensils, when unoccupied.

During the annual drills and manoeuvres, the Stabsärzte accompany the battalions; the Oberstabsarzt, or senior staff-surgeon, with a proportion of the assistants, remaining in charge of the hospital, to which the sick are sent back by train. If too far from the lazareth of the garrison to which their regiment belongs, they go to the nearest military hospital. The slighter cases are treated in camp. As a rule, the percentage of sick on such occasions is very small. During the autumn manoeuvres of 1876 near Berlin, in one of the regiments, only three men required hospital treatment, and ten medicine in the field. In inclement weather, catarrhal and bronchial affections mostly prevail. During these manoeuvres, the men rise very early—4 or 5 A.M.—and are soon miles away from their last bivouac. The hospital and professional returns are few. An admission and discharge book is kept, from which at the end of the month is compiled a monthly sick return (Kranken-Rapport). This is sent through the division-surgeon to the corps surgeon-general, in whose office is made a quarterly summary for the general Stabsarzt of the army. A monthly report is also compiled by the commissary or superintendent from the diet sheet. A daily distribution of sick, for the purpose of dieting them, goes each morning to the hospital superintendent.

Since 1868, the Oberstabsarzt in charge of each garrison lazareth occupies in the hospital, under the general officer of the district, exactly the same position as does a colonel in his regiment. He is responsible for everything in the establishment, over which he is given a supreme control. He distributes the sick, supervises their treatment, consults with the medical officers, and controls the intendent, or superintendent, whom he may suspend if necessary, and who has under him charge of all the stores and equipments. Everything appertaining to the treatment, lodging, and equipment of the sick is in charge of the military surgeons, and no attempt at a dual authority is allowed. The pharmacies are in charge of apothecaries under the Oberstabsarzt.

Each year, the senior staff-surgeon in charge of the regiment accompanies the general, his aide-de-camp, and the civil commissary, in their visit to the villages of the district from which the regiment receives its quota of recruits. All young men who have completed their twentieth year are examined, as well as those put back on the last inspection, and, if found fit in every respect, are drafted into the battalion to go through their three years' military training in the active army. If too weakly and insufficiently grown, and not found likely to improve upon the third annual examination, they are finally excused, and are only called up for duty in the fortresses in the event of war. Feebleness of constitution and physical defects or deformities are the chief causes of rejection. A lad, eighteen years of age, well developed, and with a good chest, would be allowed to serve. Large numbers of the infantry are not more than four feet ten inches in height; small, active, broad-shouldered, hard-marching fellows. These small men are preferred by German officers, who say they are more easily drilled, and capable of bearing a greater amount of fatigue. During the last war, the pea-sausage after a few days was tired of, but proved to be most palatable when made into soup and eaten with bread. Fresh meat was always sought after. The soldier is paid three thalers (nine shillings) a month, and carries sixty to seventy pounds. The spiked helmet is a soldierly headpiece, but rather heavy; the tendency of late is to make it smaller. This helmet is worn by medical officers, the only distinctive mark of the profession being a small figure of Æsculapius on the shoulder knot.

Each soldier has a parade, working, and Sunday uniform. He prefers beer for his ordinary drink; if that cannot be obtained, wine; and, least of all, spirits. During the Franco-German war, half a bottle of wine was issued to each man daily when it could be obtained, and

was, in the opinion of German surgeons, a good practice. During the first year, the Prussian soldier is at drill incessantly, he therefore learns it; the next year he becomes perfect in it; the last year he learns discipline. He is now supposed to be a soldier, but not before.

Of the many kinds of hospital to be seen in Germany, the isolated pavilion, complete in itself, capable of holding thirty patients in wards at each side of a central hall, or in a single ward, with ridge ventilation, tiled floor, double windows, a brick framework, elevated basement, and opposite windows, heated by hot-water pipes, and, having a summer verandah at one end, appears to combine the greater number of good points in hospital construction. The greater number of the blocks at the new Templehof Lazareth near Berlin are similarly constructed. The blue and white tiles have a very pleasing effect to the eye.

The active army of Prussia upon a peace establishment numbers some 360,000 men, divided into sixteen army corps located in the different provinces. This large force is in the medical charge of the "Sanitäts-Officier-Corps", who are embodied into a military medical division, "Militär-Medicinal-Abtheilung", under the general Stabsarzt of the army, who has the rank of lieutenant-general. The other officers of the corps are fifteen general and corps-surgeons, one hundred and ninety-nine senior staff-surgeons, three hundred and forty-four staff-surgeons, three hundred and eighty-four assistant-surgeons, with a number of under surgeons and student volunteers. Each grade of officer has a specific charge. The senior staff-surgeons are in charge of the regiment and garrison lazarets, the staff-surgeons of the battalions or barracks, and the assistant-surgeons are mostly employed in the hospitals. The senior staff-surgeon of a division is the division-surgeon, through whom returns go to the corps surgeon-general, who is chief of the medical staff of each army-corps, which is decentralised and complete in itself in every respect without reference to any other army-corps. The total of medical officers is—one corps surgeon-general, one assistant, one staff-apothecary, two or three garrison-surgeons, two division-surgeons, thirteen senior staff-surgeons, twenty staff-surgeons, twenty-eight assistant surgeons, two or three under surgeons; total, seventy-six.

The medical reserve of the Prussian army consists of two classes of officers—the "General-Aerzte à la Suite des Sanitäts-Corps", of which Professor Langenbeck is the senior; and the "Landwehr Surgeons", of which force Dr. Esmarch is Surgeon-General. The actual strength of this corps in 1873 was as follows:—Generals-artzt, one; Oberstabsärzte, twenty-two; Stabsärzte, three hundred and thirty-two; Assistenzärzte, nine hundred and forty-eight. The appointments are honorary ones during peace. The third reserve are the medical aid societies, who are never employed in the first line; and, behind all, are the great civil hospitals of the country, and their medical *personnel*. Decorations of honour (Ehrenzeichen) are liberally bestowed upon the senior medical officers. During war, the autumn drills and manoeuvres, and when proceeding with troops on the march, officers of the Sanitäts-Corps are mounted.

The foregoing is a mere sketch, which, if space permitted, might be extended to much greater length. I would only say in concluding, that the German medical service is to be chiefly admired for the strong professional tone and unity of sentiment which prevails; its simple organisation and returns; the perfectness of every detail; the decentralisation of medical corps, as units complete in themselves; and the complete control given in all things medical to the sanitary corps.

In closing these sketches, I must express my obligations to Drs. Dietrich, Ullmann, Krüger, Schnier, and my friend Dr. Tellerbeck, of the German Army; Dr. Rammel of Vienna, and Dr. L. Hendrickx of the Belgian Service.

## THERAPEUTIC MEMORANDA.

### THE ADMINISTRATION OF PHOSPHORUS.

THE marvellous power which phosphorus possesses over trifacial neuralgia is likely to be doubted by many who prescribe the drug in the solid form of pills. Phosphorus pills generally pass through the system unchanged: a circumstance which may, perhaps, account for the want of success which is sometimes met with. Previous solution in *tolu balsam* or other solvents does not lessen this tendency; and to obtain the real action of the drug, we must give it in the form of a draught. Now, we have no good pharmacopœial preparation of this invaluable drug; but the homœopaths prepare a solution of a fairly reliable and uniform strength of one per cent. Accordingly, I am now always in the habit of directing my patients who require phosphorus to take their prescription to a homœopathic chemist, who makes it up



without demur. I write, in plain uncabalistic English, "One ounce of mother tincture (ethereal), one per cent. in strength. Take two (or four, up to eight) drops three times a day in water." Until our own chemists keep a similar preparation, I strongly recommend all those prescribing phosphorus to send to the homeopathic druggists instead of trusting to the much advertised pills, which are about as digestible as glass.

While writing about phosphorus, I may mention a curious set of symptoms which I lately saw induced by the drug. The patient, a lady aged 30, was taking three drops of the homeopathic tincture thrice daily for intercostal neuralgia; and, after each dose, she became hysterically delirious, and remained so, talking the greatest nonsense and generally comporting herself as if intoxicated, for two or three hours. It is the first time I have noticed symptoms of excitement follow the administration of the drug, and therefore I thought it perhaps worth recording.

S. M. BRADLEY, Manchester.

### INJECTION OF AMMONIA INTO THE VEINS IN COLLAPSE.

THE following may not be uninteresting, bearing as it does upon a case reported under the above heading by Dr. Pinnock of Melbourne in the BRITISH MEDICAL JOURNAL of February 24th.

In July 1875, I was taken by Mr. T. N. Fitzgerald, a leading surgeon in Melbourne, Victoria, to see a case in which ammonia had been successfully injected into the veins of an apparently dying man. Two days before, Mr. Fitzgerald had been hastily summoned to see the patient, a middle-aged man, who had for some time been suffering from profuse suppuration. On his arrival, he found the man, to use his own words, "apparently dead, with no pulse at the wrist, and no perceptible respiration". He at once injected thirty drops of a solution of equal parts of liquor ammoniæ fortior and water. The patient was violently convulsed, but soon sat up in bed and talked rationally. The good effect lasted some eight hours, when he again showed symptoms of collapse, and his usual medical attendant injected a like dose of ammonia, a large portion of which must have found its way into the subcutaneous tissue instead of into the vein (median cephalic), but it produced no decided effect. Mr. Fitzgerald then again injected successfully. The convulsive movements were more violent than before, but the ultimate effect was most satisfactory, and no return of the alarming symptoms appeared. At the time when I saw him, about thirty-six hours after the last injection, he was doing well, and, I was told, subsequently recovered completely. The ammonia that had escaped under the skin produced a large slough, as might be expected; but, if in injecting, the vein be separated thoroughly from the surrounding tissues, or perhaps even raised from them by the insertion of a probe under it, so that the operator may be quite sure that the nozzle of the syringe enters the vein, such an accident cannot occur. This treatment seems to produce a most direct and powerful stimulation of the heart, and might be worth a trial in cases of impending death from chloroform.

FRED. C. SHAW, M.R.C.S. Eng.,  
Late Acting Colonial Surgeon, West Australia.

### THE DISCRIMINATION AND TREATMENT OF NEURALGIA.

I HAVE for several years used a simple and ready method of discovering whether stimulants and tonics, or whether alkalies and aperients, would be more likely to cure any given case of facial or dental neuralgia. The patient is first directed to hold warm water in his mouth, or to otherwise apply warmth to the seat of pain; and if little or no relief is thus gained, but especially if, as often happens, the pain is actually intensified, then to employ cold water in a similar way. If the cold water relieve the pain, this is regarded as being chiefly due to impurity of blood; and I have always found that it is relieved with certainty by magnesia and dieting. If, on the contrary, warmth relieve the pain very distinctly, then tonics, varying as the locality (district), constitution of patient, and precise causation, are surely indicated, and will, if in sufficient doses and combined (when necessary) with sedatives, remove—for a time at least, but often altogether—the insufferable pain. Many cases have occurred in which patients at first resolutely bent upon having one or more teeth extracted, have been enabled to retain them for years simply by putting in practice this test and its associated treatment. There are some cases of neuralgia in overworked persons in which both plans of treatment are required. A man catches cold and has hemicrania. He is better out of doors; but, upon entering a warm room, is shortly in unendurable pain, especially

about one eye, which becomes congested and tear-streaming. A single large dose of magnesian aperient, followed by ten- or fifteen-grain doses of ammonium chloride in infusion of bark, will remove this condition. Again, the same patient may at one time require the magnesia plan and at another time the tonic and stimulant plan for pain in the selfsame nerve, this difference being shewn and the proper method suggested by the altered effect of cold and heat; and it is probably the want of recognition of this fact which produces the apparent fickleness and uncertainty of any particular drug, such as phosphorus, guarana, quinine, etc., in this disorder.

T. CHURTON, M.B., Physician to the Leeds Dispensary.

## OBSTETRIC MEMORANDA.

### RETROVERSION OF GRAVID UTERUS.

MRS. M., aged 26, three months advanced in her sixth pregnancy, sent for me on February 19th, believing herself to be suffering from falling of the womb. She had been troubled for some time with constipation, and, a week previously, while straining at stool, felt something give way inside her. She did not at the time experience pain, but soon afterwards had pain of a dragging and forcing character in the back and in the iliac regions. She had had gradually increasing difficulty of micturition, which, during the last two days, had amounted to almost complete retention. On examination, the bladder was found greatly distended, reaching to the umbilicus, and there was a large globular tumour (fundus uteri) between the vagina and rectum, pushing down the posterior vaginal wall (rectocele). It had been mistaken by the patient for prolapsus. The os uteri could not be reached, but the cervix could be felt stretching across the upper part of the vagina. The bladder having been emptied by a catheter, which was passed with difficulty, the patient was placed resting on the elbows and knees, and reduction of the displaced uterus was effected by two fingers of the left hand in the vagina pressing the fundus upwards and forwards at the same time that, with the forefinger of the right hand, the cervix was drawn downwards and backwards. A large barred Hodge's pessary was then introduced, an opiate and saline mixture ordered, and the patient confined to bed for a week. At the expiration of that period, the pessary was removed and the patient allowed to get up, as she expressed herself as feeling quite well again.

HERBERT J. LOTT, M.B., Bromley, Kent.

## REPORTS

OF

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### HOSPITAL NOTES.

LONDON HOSPITAL: WARDS OF DR. SUTTON AND DR. TURNER.

*Pelvic Cellulitis.*—A woman aged 35, anæmic and with the expression of suffering, complained of "dreadful pain in paroxysms shooting across the hypogastrium, especially on any movement, taking a deep breath, or in the act of micturition"; there was also a constant gnawing pain deeply seated in the pelvis. No distinct swelling could be felt in the iliac fossa, but there was much abdominal resistance. On internal examination, the uterus was found drawn up, and a swelling was felt on the left side of the pelvis, so also on examination *per rectum*. The woman had passed through a hard labour a fortnight before, and the pain commenced on getting up three days previous to admission. Dr. Sutton considered the cause of the acute paroxysms of pain as probably due to movement of the inflamed parts. In the somewhat analogous case of pleuritis there may be intense pain and nothing seen on necropsy; so there may be intense præcordial pain, as if from pericarditis, and no lymph found. Probably engorgement of vessels pressing upon adjacent nerves causes pain; lymph effused may paralyse instead of irritating the sensory nerves; this probably happens occasionally. Such cases may occur during labour from injury to vessels causing hæmorrhage; or, two or three days later, the patient may complain of aching pain in the hypogastrium, increased on movement. Again, the symptoms may be delayed till the woman begins to move about, as in the present case. The pain then sets in, and the thigh becomes semiflexed upon



the trunk on the affected side, owing to pressure upon the iliacus. In such instances, physical examination may detect nothing; but usually there is a sense of resistance felt in one direction, often there is a tumour felt in one iliac fossa, and yet the patient is able to walk about and attend an "out-patient department". In such a case, attending Dr. Sutton's *clinique*, sudden bursting into the peritoneum occurred, and terminated life before the woman could be removed to the ward—here the mass had suppurated. In another case, the resulting abscess burst into the rectum, and produced a painful ulcer at the point of rupture; the case however, though tedious, did well. Rest was enjoined, and sedatives.

*Jaundice: Probable Extension of Gastric Catarrh to the Bile-Duct.*—The woman, aged 42, presented a moderate depth of jaundice, without the greenish hue which indicates chronic obstruction. There was no appreciable enlargement of the liver; no signs of thoracic disease. She had been "living hard", and endured much mental anxiety lately. Her illness commenced a fortnight before, with severe pain extending across the epigastrium, not being confined to the region of the gall-bladder; there was also constant vomiting after food. These seem to indicate the onset of gastritis. A week later, jaundice appeared, and the motions became pale; probably the catarrh extended to the common bile-duct. A light diet was ordered, and small doses of chloral-hydrate to relieve the mental excitement.

*Bright's Disease: Post Mortem Examination.*—The girl, aged 14, had acquired acute idiopathic nephritis four months previously. At the time of death, there were pericarditis, double pleuritic effusion, and great anasarca. In examining the kidneys, Dr. Sutton demonstrated that the capsule was tightly stretched, but easily removed, leaving the surface of the kidney studded with yellowish white spots. On section, the veins of the pyramids were seen deeply congested, indicating recent acute nephritis. Where the yellow exudation was most abundant, congestion was less. On microscopical examination, the exudation matter would probably be found both intertubular and intratubular. The kidney was passing from a state of acute nephritis into a "large white kidney". The lungs were congested, smooth, dense, and homogeneous; of a "fleshy feel", indicating chronic oedema, leading to the outpouring of albuminoid matter. Dr. Sutton referred to this as a character of the lungs after acute Bright's disease. There were also pericarditis and pleurisy; and the question was raised whether this saline albuminoid exudation favoured the accumulation and increase of leucocytes, and the development of inflammation. Leucocytes are not exuded in ordinary oedema, but possibly they accumulate in an albumino-saline exudation.

*Intracranial Disease.* (Under the care of Dr. Turner.)—A man aged 40, of cachectic appearance, was the subject of paresis of several cranial nerves on the right side. Here the facial muscles were weakened and somewhat rigid; the three divisions of the trigeminal nerve were almost insensitive, and the seat of troublesome neuralgia; the right eyeball was insensible and commencing to ulcerate. The masticatory muscles supplied by the motor division of the fifth nerve were rigid, preventing depression of the jaw. The tongue was protruded to the paralysed side, its right side being flabby, owing to palsy of the right hypoglossal nerve. Taste was greatly impaired through want of function in the glosso-pharyngeal; there was also much difficulty in deglutition. Lastly, the right sterno mastoid and trapezius were markedly weakened and wasted, from paralysis of the spinal accessory nerve. Dr. Turner remarked: "This evidence of extensive nerve-injury points to a central origin, and this seems further indicated by the incompleteness of the paralysis, and by the fact that the facial muscles respond to faradisation. It is not easy to account for the wasting of the muscles supplied by the spinal accessory nerve. There may be some thickening of the dura mater about the orifices of emergence. Within the last few days an ulcer has appeared upon the soft palate and completely perforated it; this raises a suspicion of syphilis, though there is no history of infection, and the patient has taken iodide of potassium and mercury. Has the depressing effect of these drugs aroused the syphilitic taint into activity? There is no vomiting, no paralysis in the limbs, and no change in the optic discs."

*Spina Paralysis.*—A rather feeble looking woman of neurotic type lies in bed, and is only just able to walk a few paces with assistance. Her illness commenced rather suddenly about three months ago. She is a professional pianist, and found difficulty in accurate "fingering"; she then felt "rheumatic pains", and sensations of "burning pain" in the extremities, and became unable to walk. The legs are rigidly extended, but can be bent by passive movement without pain, and power to move them voluntarily is not wholly lost; the legs are somewhat wasted, and cutaneous sensibility impaired. Muscular power is also weakened in the upper extremities. Dr. Turner remarked, that the very varied nature of the symptoms in this case is scarcely com-

patible with a lesion restricted to one tract of the cord. The incoordination and numbness, amounting to considerable loss of tactile sensibility, are evidence of implication of the posterior columns; the remarkable rigidity of the extended legs is indicative of implication of the lateral columns; while in the loss of muscular power we have evidence that the anterior columns have probably not wholly escaped. The loss of reflex excitability on tickling the feet shows that the lower spinal centres are involved as well as the upper. It seems, then, that there is a disease of the cord over a very extensive area, though affecting each region to a partial extent only. The suddenness in onset of the symptoms, the burning pains in the feet and wrists of which the patient complained so much, the jumping up of the legs which she experiences from time to time, and the quick appearance of red patches over the sacrum and trochanters, indicate an irritative or sub-inflammatory nature of disease. Such a combination of symptoms as these might be due to a number of circumscribed areas of disease in the cord, as disseminated sclerosis. It is perhaps, more probable that we have to deal with a subinflammatory affection of the cord invading it in a more continuous manner, analogous to such a pathological condition as may produce contraction of the kidney or cirrhosis of the liver. The origin of the disease in this case seems equally obscure with that of the renal affection. In this patient there is no evidence of kidney-disease, but she has some emphysema, and probably some fibroid changes of the apices of the lungs. There is no distinct evidence of syphilis, and the symptoms do not seem to point to such an origin.

## BOROUGH LUNATIC ASYLUM, NEWCASTLE-ON-TYNE.

### GENERAL PARALYSIS OF THE INSANE

FOR the report of the following case, we are indebted to Dr. W. J. Brown. It is interesting on account of a lesion of the left side of the brain being accompanied by paralysis of the left side of the body, and not, as might have been expected, of the right side of the body.

William G., aged 50, married, a confectioner, was admitted to the Newcastle-upon-Tyne Borough Asylum, on June 19th, 1875. He had been an inmate of the workhouse. This was the first attack; it had lasted for about a month, and the cause was not known. He was said neither to be subject to epilepsy nor suicidal, but dangerous to others. He had never previously been under treatment.

The medical certificate stated that there were loss of muscular power; inability to control his movements; difficulty in articulation, words being slurred over in speaking. His ideas were exalted, and he believed himself to be rich. On admission, he was placed in the infirmary ward. He appeared to be below the average height. His features were small and emaciated. The hair on his head was of a light brown, and that upon his chest of a black colour. He had a thick moustache. The pupils were equally contracted. His speech was distinct at first, but afterwards tremulous, and one word joined to another in a peculiar manner. He wept when spoken to. He appeared to be very feeble, and complained of pain on his left side, but no injury was detected. Great dulness on percussion was found over the clavicular regions. The thoracic muscles were emaciated. There were copper-coloured spots upon his shoulders, back, chest, and right leg, and a warty tumour over the spine, beneath the scapula. There were old cicatrices, below the sternum in front, and the scapula behind, upon the left side. The respiratory sounds were feeble and indistinct. The heart's action was regular, but weak and indistinct. The radial pulse, in the prone position, was 96 and full. There were bruises over each elbow, and the right heel was galled. He was extremely emaciated, and in a very poor condition, both mentally and bodily.

July 3rd. He said that he could not sleep the other night because his wife was knocking at the door all night. He stated, also, that his wife had three husbands, and that one of them was another patient named John R—.

July 11th. He was ordered a pint of porter (extra) *per diem*.

July 15th. His bodily condition was improved. The extra porter was reduced to half a pint.

July 25th. He became very excited at 3.50 A.M., and was removed from the epileptic dormitory to a single room.

August 19th. He was knocked down by, and received a "black eye" from, another general paralytic.

September 24th. He became suddenly indisposed at 12.15 P.M. When seen he was very pale, but nothing could be detected except extreme weakness, apparently arising from a shock of some kind. He was placed in bed, and given some brandy and water, which quickly revived him.



September 25th. He was much better, and was allowed to get up.  
October 1st. There was no change; he was very feeble and restless, and fell off his chair.

October 6th. He was very drowsy, stupid, and weak. There was left hemiplegia. He was ordered—R. ether. chlor. ʒss; liquoris strychnis ʒj; tinctura ferri mar. ʒij; infusi calumbæ ad ʒviij. Half an ounce to be taken three times a day. He sometimes refused his porter. His appetite was good. He was always very restless, and generally noisy at bedtime.

October 12th. He did not sleep at night, except when he had forty grains of chloral-hydrate at bedtime.

November 17th. He was confined to bed in consequence of a bed-sore on the right hip, which was being dressed with carbolised oil (1 to 30).

November 22nd. The bed-sore, which was being dressed with ungutmentum resine and bread-poultices, appeared to be somewhat better.

December 13th. He was found wet at 9 P.M. and 6 A.M. He was more frequently reported as noisy during the night than any other male patient. He was becoming very feeble. The bed-sores were better one day and worse the next.

December 14th. He was found wet at 9 P.M. and 6 A.M. The bed-sores had an inflamed appearance. He could seldom be kept dry, and he passed his urine immediately after taking the porter. He was looking very pale and sleepy this morning. Decubitus was lower than usual. Breathing was accompanied by a slight stertor. The cheeks were puffed out during expiration, and collapsed during inspiration.

December 15th. He was much worse this morning, probably owing to the sudden change in the atmospheric temperature, a severe frost having set in during the night. He was found wet at 12 P.M. and 6 A.M. Stertor was increased, and the cheeks were puffed out more than yesterday. He rallied at 12 noon, and was conscious when spoken to. He was given a teaspoonful of brandy and water occasionally. The stertor disappeared in the afternoon, but he appeared to grow weaker every hour.

December 18th. His condition remained unchanged until 9.55 A.M., when his face was observed to have assumed a greyish colour, and his breathing to have become more rapid. The pulse ceased at the wrist at 10 A.M.; and at 10.5 A.M. he died.

December 20th. The *post mortem* examination was performed at 11 A.M., being nearly forty-nine hours after death. The weights of the various organs in ounces were, encephalon, 51; cerebellum, 6; heart, 8; right lung, 18; left lung, 20; liver, 41; spleen, 4; right kidney, 4; left kidney, 4. The height was 5 feet 6 inches. Rigor mortis was present and well marked. The body was greatly emaciated, and the adipose tissue was almost completely absorbed. The lumbar and gluteal regions were a mass of bed-sores. *Post mortem* ecchymoses were present upon the most dependent portions of the body. The intestines and peritoneum exhibited a brick-dust colour, the former being distended with gas. Both lungs were adherent to their respective pleurae at various points. The right lung at its base had become so firmly united to the diaphragm and pleura that, upon attempting to remove it, the pleura in some places became detached, while in other places portions of the lung-substance remained behind. The lung-substance towards the base had become disorganised and changed into a dark red fleshy substance which, upon pressure, exuded a sero-sanguineous fluid. Nothing abnormal was observed about the liver. The gall-bladder, which was small, contained a number of gall-stones. The heart appeared to be healthy, and its cavities were filled with yellow fibrinous clots. The aortic valves were competent. The spleen was disorganised, friable, and of a dark red colour. The kidneys were of a dark colour, and the right appeared to be situated higher up than usual. Upon removing the calvarium, the dura mater was found to be non-adherent to, and as if shrunken from, the cranium. The arachnoid presented an opaque appearance in consequence of numerous deposits of organised lymph between it and the pia mater. The cerebrum appeared to have become atrophied, and, upon the left side, posterior to the fissure of Rolando, a depression between two folds of the ascending parietal convolution had become enlarged into an irregular quadrilateral space of sufficient size to admit the point of one's thumb. This appearance was apparently due to the atrophy of the brain-substance having caused a portion of the convolution to unfold and separate from the ascending portion. This cavity was bounded on three sides by the ascending parietal convolutions; and, on the fourth side, by the fissure of Rolando. A similar process had commenced on the right side. The cortical substance exhibited three layers; the outer a yellow, the middle a dark grey, and the inner a lighter grey. The lateral ventricles were slightly dilated, and their floors roughened.

The brain-substance was firm. The apparent cause of death was general paralysis.

This case appears of interest on account of the probable connection between the left hemiplegia and the left cerebral lesion, contrary to what might have been expected according to the usual theory of cross paralysis.

## REPORTS OF SOCIETIES.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 27TH, 1877.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

ON MORPHEA ALBA OR LEUCE, WITH CASES.

BY GEORGE GASKOIN, M.R.C.S.ENG.

THIS paper referred to the threefold division of leuce as recorded by Hensler, *i.e.*, into morphea alba, leuce, and tyria. It was declared to be superfluous, as the same morbid process reigned in all, and they were all three distinguished by a red areola. The morphea alba had never been considered otherwise than as a surface-lesion; and the idea thus entertained of it was accounted for perhaps by a vice of origin; the term being first introduced in early translations from the Arabic, serving then as equivalent for *alphos*, which we now account to be psoriasis. At the present day, it had supplanted the leuce. The consequence of this had been that many important cases were disinherited of their name and position, and were recorded as anomalous. Two such were gathered from the experience of Sir Benjamin Brodie; one superficial, and the other deep. They were regarded by that eminent surgeon as cases of cutaneous gangrene; but, in accordance with the classification of Alibert, they might be grouped with leuce tyria. Cases were laid before the Society, which were alleged to resolve many points in the natural history of leuce; among others, that curious exfoliation of the epidermis which had been likened to the shedding of a serpent's skin (*à tyro serpente*), showing that this might occur in the most chronic and superficial cases, being little more than an accident in the disease, and no true test of its severity. The position was controverted that leuce was to be distinguished from lepra and elephantiasis by "absence of roughness, erosion, and pruritus." It was stated that, agreeably to the definition of Swediaur, it might be attended by crusts, occasionally of ponderous character, but still with a notable difference from those of psoriasis. The cases were illustrated by drawings.

Sir JOSEPH FAYRER said that morphea was not uncommon in India, and was of en considered to be an indication of the approach of leprosy. He believed, however, that it was a distinct disease from that, although it was sometimes difficult to determine whether a case was one of leprosy or not.—Dr. TILBURY FOX said that most dermatologists agreed that there was no necessary connection between morphea and leprosy. The affinity of morphea was rather with scleroderma, with which it had been confounded. He regretted that Mr. Gaskoin had revived the use of the term leuce, which had been used very indefinitely by old writers; especially as we had the term morphea. Atrophy was not uncommon in morphea; sloughing was rare. He had seen a case of sloughing, probably the result of malnutrition and also of change of texture from the deposit of morphea matter. He did not attach much importance to exfoliation. In morphea, there was a distinctive character—a deposit, which might have become absorbed when the patient was seen, but which might be proved on inquiry to have been present at some time. In leprosy, anaesthesia was a very early symptom; but it was, he thought, not a marked symptom in morphea.—Dr. THIN said that Mr. Hutchinson, in a clinical lecture, had shown that morphea was simply scleroderma. Confusion had arisen from the attempts of dermatologists to include every probable thing under one definition. Kaposi introduced the term morphea, but it was difficult to find what he meant. In New York, one dermatologist had introduced a synonyme for certain cases as morphea; while another, who called the same thing scleroderma. Mr. J. NATHAN LEE, of New York, said it was very desirable that the patients themselves whose cases were described should be produced before the Society. He suggested that the discussion should be adjourned, and that Mr. Gaskoin should exhibit his patients; and he would let the same time see several cases of scleroderma or morphea. He agreed with Dr. Thin as to the impossibility of absolutely separating scleroderma from morphea. The latter presented very different appearances at different stages. He believed, however, that there were some broad features which would help in the diagnosis in many cases. Mr. WEST, who had been attending the case of morphea mentioned, said that he was not sure that a morphea was capable of spontaneous cure, although the morphea in this case was not quite



restored from its atrophy. A patient whose case had been described by Addison twenty years ago was still alive, with but little trace of the disease. Leucoderma was always symmetrical, and was never recovered from. He joined in regretting the revival of the terms used by old writers. He did not believe that Celsus knew anything of morphea; what he knew was probably leucoderma. He was a little surprised to hear that morphea was common in India. When he was in Norway some years ago, he was informed that it was very rare in that country; he did not see a single case, nor a drawing of the disease. Morphea occurred in all countries without regard to the causes of leprosy; it was not hereditary, and not symmetrical, as leprosy was.—Dr. EWART said that, though morphea was not common in India, it was met with. It was, he believed, quite distinct from leprosy. He had observed that it was not symmetrical, unlike leprosy and leucoderma, which was very common in India.—Dr. TILBURY FOX said that morphea was sometimes symmetrical.—Mr. MORRANT BAKER had seen a case of symmetrical morphea.—Mr. GASKOIN said that he could not bring any of the patients referred to in his paper before the Society; and made some remarks on the affinities between leprosy and other forms of skin-disease.

CASE OF INDIA-RUBBER TRACHEOTOMY-TUBE REMOVED FROM THE RIGHT BRONCHUS. BY H. G. HOWSE, M.S., F.R.C.S.

Details were given of a case in which an India-rubber tube was withdrawn from the right bronchus of a patient in whom tracheotomy had been performed ten years previously for syphilitic disease of the larynx, but in whom the tube had only been in use for seven weeks. The way in which the accident had occurred was described; and suggestions were offered for the avoidance of similar accidents in the future.

Mr. MORRANT BAKER said that Mr. Howse's account confirmed what he had said when he introduced the India-rubber tube to the notice of the Society some months ago, as to the necessity of testing their strength and carefully managing them. Of course, all trachea-tubes, metallic or otherwise, in time became unfit for use. He did not think that surgeons would give up the use of elastic catheters because one occasionally broke in the bladder; nor should the occasional failure of the India-rubber trachea-tube lead to their abandonment. He had found that, through a misunderstanding, the manufacturer of the tubes had not made the tubes of catheter rubber, which would be employed in future. He had also, adopting a suggestion of Mr. Napier, introduced a strip of canvas between the layers of the India-rubber, so as to destroy the extensibility of the tube. (In Mr. Howse's case, the tube was broken by being extended by the patient while fixed in the opening in the trachea). He thought the accident arose not from any fault in the tube, but from a defect in its manufacture which might be overcome.—Mr. NAPIER said that he had paid much attention to the preparation of India-rubber for the manufacture of instruments. Great care was required in applying the right amount of heat.—Mr. HOWARD MARSH had seen great relief produced by the use of the India-rubber tubes in place of the silver ones. They did not become blocked up so much as the metallic tubes—probably because they produced less irritation.—Mr. HOWSE thought the India-rubber tubes most valuable, but rather for hospital than for general use.

*Case of Lupus Marginatus.*—The subject of the disease for which this name was proposed was a fair-complexioned boy, aged 8, who had suffered from his skin-disease from infancy. The patient was shown by Mr. JONATHAN HUTCHINSON. He had numerous patches on his face and left upper extremity, all of which were accurately mapped out and very conspicuous. The middle of the patch consisted of a thin, supple, delicate cicatrix, around which was a narrow margin of new growth. This margin was slightly raised, a little rough, and of a red-brown tint. In most places it was scarcely more than a line in width, and neither erythema nor swelling was visible in the adjacent skin. The whole disease was on the smallest possible scale. The scar left decided it as essentially lupus; and the fact that the margin was the only conspicuous point seemed to justify the appended adjective.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MARCH 7TH, 1877.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

*Distribution of Placental Vessels.*—Dr. MABERLY showed two placentae with membranes attached, in which the blood-vessels, instead of uniting on the surface of the organ, ran for some distance along the membranes, and then united to form the umbilical cord.

*Revolving Needle.*—Dr. AVELING exhibited a curved needle which, by a mechanical contrivance, can be made to revolve, giving the operator the power of introducing its point in one direction, and bringing

it out in another exactly opposite. He had invented it for cases of vesico-vaginal fistula, and more especially where the wound to be closed was situated high up or transversely. The needle has a notch near its extremity, in which a loop of the suture to be passed is placed. It is made by Messrs. Mayer and Meltzer.

*The Forceps in Modern Midwifery.*—Dr. EDIS read a paper on this subject. His object was more to provoke discussion upon the subject and elicit the opinion of the Fellows, than to define under what circumstances the forceps might or might not be employed. During the year 1874, the Registrar-General's returns showed that there were nearly 6,000 deaths from accidents of childbirth alone. Many of these, Dr. Edis believed, were due to patients being allowed to remain too long in labour without timely assistance being rendered. Statistics bearing upon the question were given, but no definite conclusions could be drawn from them, as the high and low forceps operations were not distinguished in these calculations. The point attempted to be elucidated was "the highest rate of frequency of application of the forceps coincident with the lowest rate of mortality to mother and child". The experience at the Rotunda Hospital, Dublin, during the last ten years, threw some light upon this question. It was chiefly in reference to cases of tedious and difficult labour, more especially in primiparae, when the os uteri was not fully dilated that the advisability of an early resort to the forceps was suggested.—Dr. ASHBURTON THOMPSON thought that the numerical method could not be applied to settle this question, nor could the result of personal practice. Different practices offered different percentages of forceps delivery. Occupation would give rise to such deficiencies. The causes of difficult labour were not uniform. The forceps had recently been used much more frequently than in former times; he thought that difficult labours had not increased in proportion.—Dr. CLEVELAND said that in private practice he had obtained excellent results from the use of the forceps, and believed that in judicious hands its employment was capable of further development. If one attempt at delivery by its means failed, a second might prove successful. However valuable statistics on a large scale in a lying-in hospital might be, still in private practice we should be mainly guided in the use of the instrument by individual experience.—Dr. AVELING believed the determination of the question how often and when the forceps should be used must for the present be decided by personal experience, and not by statistics or the relation of individual cases. A scientific rule of practice might some day be obtained when ready methods had been found of measuring the expulsive force of the uterus and abdominal muscles, the dimensions of the foetal head and pelvis, and the resistance of the soft structures.—Dr. PLAYFAIR said that it was astonishing that the conservative instrument the forceps should have been looked upon with dread, while the perforator, until comparatively recent years, had been used with appalling frequency. He had deliberately advised the use of the forceps in lingering labour, and had done so after mature reflection. He had recommended a frequent use of the forceps when the head was delayed low down in the pelvis by simple *inertia uteri*, and when only a slight *vis à fronte* was required to supplement the deficient *vis à tergo*. The high forceps operation when the head was at the brim was in an entirely different category. The advantages of frequent resort to the forceps were the saving of suffering to the mother, the shortening of labour, better recovery of patients, and the saving of infant life. Were there dangers associated with the frequent use of the forceps which counterbalanced those advantages? It had been stated that ruptured perineum was more common now than formerly, and that it was due to the more frequent use of this instrument. But, supposing such were the case, it would not counterbalance the saving of a single human life. On the other hand, the number of cases of vesico-vaginal fistula had diminished. He concluded by expressing his opinion that, in spite of the objections made to forceps, delivery by its means when the head was low in the pelvic cavity was a more conservative practice than the use of it as a last resource.—Dr. GALABIN thought the statistics of Dr. Kidd, based on the number of deaths after protracted labour, were unreliable, since there could be no exact criterion when labour should be considered protracted, especially when the observers were not the same. A comparison with the earlier records of the Rotunda Hospital gave a different result. The mortality in Dr. Johnston's mastership, namely, 21.6 per 1,000, was more than half as large again as that from the foundation of the hospital in 1745 to 1853, which was only 12.1 per 1,000. In 88 cases, within three years, in which the forceps were applied before full dilatation of the os, simply on account of premature rupture of the membranes, there were 4 deaths, a mortality of no less than 46.6 per 1,000. It was, therefore, at least not yet proved that such a use of forceps was free from risk. In the Guy's Hospital Charity, out of 23,591 deliveries in twelve years, the forceps cases were only 5.2 per 1,000; the maternal deaths only 4.4 per 1,000, of which only 0.8 per



1,000 occurred after protracted labour. The children still-born were 4.06 per cent.; those still-born with a vertex presentation, 2.7 per cent., of which only about one-seventh were decomposed or premature. He had always supposed that most of those children were sacrificed on account of the rule that forceps should not be applied without sending for the assistant obstetric physician; but a comparison with the neighbouring charity of St. Thomas's made this conclusion doubtful. The forceps was there used about ten times as often, but the ratio of still-births was almost exactly the same, the slight difference being in favour of Guy's Hospital.—Dr. FITZPATRICK thought the discussion on the use of the forceps much called for, and that it would be looked to with avidity by the profession generally. The forceps had been weighted with restrictions and conditions so as to materially diminish its value. Our object was in many cases opposed to Nature's. Nature's object was to repress feeble additions to the human stock; ours, on the contrary, was to save life and relieve suffering, and for this object the forceps was an indispensable help.—Dr. PARR remarked that, however skilful in the use of forceps a gentleman might be who related 400 and 700 consecutive cases without the loss of a single child, he certainly was very fortunate. Dr. PARR, in less than 400 cases, had 4 children still-born from (two) mothers suffering from syphilis; not one of these labours exceeded three hours in duration. In a fifth case, the child was born dead, suffocated by a short cord drawn tightly round the neck. No care could exclude such cases.—Dr. DALY said that, in 800 cases, he had used the forceps in 80; in 50 of which the head was in the pelvis or in the perineum; and in 30 above or in the brim. Of the 800 cases, 4 died. Of the 80 forceps cases, 2 died; one was dying, when called in, of accidental hæmorrhage; the other, of puerperal fever. Another of the forceps cases had pelvic cellulitis. There were 10 still-births, 2 being forceps cases. Laceration of the perineum occurred more frequently in first cases when the forceps was not used. Craniotomy was not resorted to in any case; while, during an experience of five years while a pupil in a country district in Ireland, the forceps was not used once, but craniotomy was performed five times, and in every case with a fatal result to the mother.—Dr. POOLE thought that help might be given by other than instrumental means, viz., by well directed external pressure. He had used the forceps much less lately than formerly.—Dr. ROPER could not see the desirability of frequent use of forceps in lingering natural labour. He had never applied forceps without ascertaining first that the natural power was insufficient to accomplish labour with safety to mother and child. In obstruction caused by a rigid os uteri, the perineum slowly and naturally gave way; and there was one condition which contraindicated the use of the forceps, namely, the retrogression of the head or the cessation of pain. In laborious labour, it was only when uterine power was exhausted that rhythmic action of the uterus ceased and became one of persistent unremitting contraction, and then immediate delivery was indicated. The assertion that children were frequently born dead from delay in lingering labour who might be saved by timely use of the forceps was not borne out by statistics. In Dr. Hamilton's 300 successive cases without loss of a single child, the calculation excludes all children known to have been dead before forceps were applied. The number of these was 8, so that really his fetal mortality is 1 in 37. Dr. Roper thought that the application of the forceps when the os uteri was only one inch and five-eighths in diameter was opposed to all propriety. His experience in the Royal Maternity gave, in 4,377 cases, forceps used once in about 109 cases; still-births, 1 in about 77; maternal deaths, 1 in about 463.—Dr. W. R. ROGERS thought that the use of the forceps was not required as often as it had been stated. Labour was a natural process, and terminated favourably without interference in the large majority of cases.—Dr. WALLACE thought that some expression of opinion by the Society as to the length of time one should wait after impaction or arrest before applying the forceps would be of great value. He waited two hours, rarely longer; and, in 800 cases attended in the last two years, he had applied forceps 26 times. Amongst the forceps deliveries, there was one maternal death and one still-born child.—Dr. GRAILY HEWITT believed it to be impossible to lay down a hard and fast rule for the employment of the forceps. For its employment, education and a certain mechanical aptitude were necessary; and mechanical aptitude was absent in some instances; hence, a timidity and hesitation to employ the instrument on the part of some. Others, finding the operation simple and easy, would naturally employ this method of delivery more frequently. His view as to the expediency of the employment of the forceps was practically the same as Dr. Playfair's, that is to say, considering the cases of the *low* operation. The *high* operation was undoubtedly difficult and more dangerous. This distinction of forceps cases into high and low operation was Dr. McClintock's, and the distinction was a most important one to make. He thought that the greater frequency of perineal laceration was partly due to too rapid extraction. The perineum must be allowed time to

expand. Nature's method should be imitated. The importance of exercising traction in a forward direction was sufficiently emphasised in the ordinary text-books.

## MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS OF IRELAND.

WEDNESDAY, JANUARY 3RD, 1877.

THOMAS HAYDEN, F.R.C.P., Vice-President, in the Chair.

*The Cold Bath in Typhus Abdominalis.*—Surgeon-Major A. A. GORE read a paper on the antipyretic treatment of enteric fever by the cold bath. During a visit to Germany last autumn, he had had an opportunity of seeing the treatment in very general operation, and apparently with favourable results. The bath used in military hospitals was upon wheels, and so easily moved to the patient's bedside when required. Having sketched the history of this mode of treatment and quoted Liebermeister's statements as to the influence of the cold bath upon certain complications of enteric fever, Dr. Gore went on to say that, immediately after the bath, the patient should have rest, be wrapped up in a dry sheet, and put to bed, lightly covered, and given a glass of wine. In dealing with very feeble persons, the bath may be gradually cooled down, as recommended by Ziemssen, beginning with about 93 deg., and adding cold water gradually until the temperature is reduced to 72 deg., or below. Such baths should be of longer duration. Whenever the temperature in the rectum reaches 103 deg., or in the axilla 102.2 deg., a cold bath should be given. In mild cases, and in the later period of severe ones, the lowered condition of temperature is often maintained for several hours; but, under severe attacks, the original temperature is very nearly reached in two hours, when a repetition of the bath is demanded. Hence, the duration of the effect of the bath is, to a certain degree, a measure of the obstinacy of the fever. In some instances, the number of baths required by a patient during his entire illness has exceeded two hundred; but, in the majority of instances, four to eight *per diem* will be found sufficient, with fifty to sixty in the aggregate, especially if antipyretic drugs be administered at the same time—such as quinine, the use of large doses of which obviates the necessity for the so frequent use of immersion. In conclusion, Dr. Gore compared the results of the ordinary mode of treatment in this country with the antipyretic treatment as carried out in Germany and elsewhere, taking Liebermeister's statistics as a basis of comparison. He gives 27.3 as the percentage of mortality before the introduction of the complete antipyretic treatment at Basle. This seems to be a very large death-rate as compared with the figures below.

London Fever Hospital, percentage of mortality	... 16.6 to 18.2
Troops, United Kingdom, 1874	... 15.2
Cases treated in Royal Infirmary, Dublin, 1871-2-3	... 13.8
Epidemic amongst troops, Mullingar, 1871	... 11.1
Average mortality, Cork Street Fever Hospital, 1875-6	... 10.6
Cases treated in Contagious Hospital, Portobello, 1876	... 7.7
Cases treated in Royal Infirmary, Dublin, 1874	... 6.9

In contrast to these figures, the antipyretic treatment at Homerton in severe cases showed a mortality of 14.3, and the complete antipyretic treatment at Basle 8.2 per cent. In the latter case, it is probable that many simple fevers were included, as the percentage approximates very closely to that yielded by the statistics of the Cork Street Fever Hospital, for simple and continued fevers comprised, viz., 7.6. It is somewhat curious that, under the system of blood-letting and stimulants pursued by Cheyne at the Hardwicke Hospital in all fevers admitted during the years 1816 and 1817, the percentage of mortality should have been only 7.0. The foregoing table shows that the ordinary treatment of enteric fever, as taught in the Dublin School of Medicine, yields results which in many instances bear favourable comparison with those given by Continental physicians.—The CHAIRMAN said the treatment by cold immersion had not been generally practised in Dublin. He objected to it because of the frequency of chest-complications in typhoid fever, because it was the treatment of a symptom and not of the cause of that symptom—pyrexia, and because of the low mortality from the disease in Dublin as compared with that in cities where cold baths were extensively used as a means of treatment.—Dr. LYONS said that nothing had been adduced to show that cold immersion checked, modified, or in any way altered the progress of the disease. He thought it was not a safe practice for general adoption.—Dr. GRIMSHAW had had some little experience of the use of the cold bath in enteric fever, and he believed the practice to be so dangerous that he determined not to pursue it. The rates of mortality occurring at different times and in different epidemics should not be compared with each other, since epidemics varied so much in intensity. A mortality of 27 per cent. seemed so serious as to indicate that the treatment had been excessively bad.—



After some remarks from Drs. DOYLE and MACSWINEY, Dr. FRANKS gave the following statistics, collected by Dr. Mayet, of the cases of enteric fever treated in the hospitals in Lyons from 1872 to 1876. In 1872 and 1873, the mortality was over 26 per cent., all being treated by the ordinary methods, except 9 in 1873, all of which recovered. In 1874, 433 cases were treated by ordinary means, with a death-rate of 12.47 per cent.; whilst, of 279 treated by the cold bath method of Brand, the mortality was only 9.31 per cent., although the cases submitted to this treatment were invariably those in which severer symptoms presented themselves. The statistics for 1875 and first nine months of 1876 showed equally in favour of the cold bath treatment, though, from the limited number of cases enjoying this method, such decisive inferences could not be drawn.—Dr. FINNY alluded to the large quantities of stimulants which, according to Dr. Gore, were given in cases treated by cold baths after the patients were removed from the bath.—Surgeon-Major GORE, in reply, said he was of opinion that the ordinary treatment led to as good results as the bath.

*The Management of the Bowels in Enteric Fever.*—Dr. T. W. GRIMSHAW read a paper on this subject, illustrated by brief notes of four cases, in which injury had been done by the injudicious use of astringent or purgative medicine. He considered that the main point to be attended to is to keep the bowels free, but not too free, and to avoid as much as possible purgatives or astringents. The bowels may be moved four times in the twenty-four hours with advantage to the patient, and they should never be allowed to remain confined for more than forty-eight hours. The measures he took to promote these objects were generally connected merely with regulation of diet. In diarrhoea, the patient should be fed on boiled milk, with or without saccharated lime-water. Beef-tea should be avoided. Dilute sulphuric acid, morphia or laudanum, and (in extreme diarrhoea) pills of acetate of lead and opium, were the medicines on which he relied. Linseed-meal poultices and stupes of turpentine or mustard were useful auxiliaries, where pain or tenderness was complained of. The treatment of constipation was a more easy affair. He employed a single drug—castor-oil—and usually combined it with opium. He seldom gave more than a teaspoonful for a dose; and in many cases but half that amount. In the early stage of the disease, when he found that the bowels had been confined for some days before the patient came under treatment, he at once gave a dose of castor-oil. This not only benefited the patient, but in a doubtful case assisted the diagnosis by often producing a characteristic evacuation. Great caution must always be observed in giving meat in early convalescence, as it is likely to produce diarrhoea. He preferred here to begin with chicken broth, then chicken, and lastly mutton. If a rise in temperature occur after a change of diet, diarrhoea might be expected and should not be waited for, but the meat at once discontinued, and the milk resumed. In cases of hæmorrhage, he had found ergot the most useful remedy, and so far he had never lost an enteric fever case by hæmorrhage.—The CHAIRMAN agreed with the author of the paper that the administration of saline purgatives was one of the greatest evils in enteric fever. Blistering the ileo-cæcal region, sulphurous acid with laudanum, and morsels of ice were useful remedies. The regulation of diet was all-important.—Dr. LYONS thought that purgatives by the mouth should be tabooed in enteric fever. Enemata were strongly to be recommended. A decoction of camomile flowers, with the addition of half-an-ounce of turpentine and the yolk of an egg, had long been used for that purpose in the Hardwicke Hospital. He had frequently checked diarrhoea by means of an enema, because it removes matter that nature was struggling to get rid of, there being from eighteen to twenty inches of intestine covered with diseased points, over which everything had to pass. He had not the slightest hesitation in saying, from an experience of many thousands of cases at home and abroad, that it would be far better to have no motions of the bowels in the day at all, after the preliminary diarrhoea, than to have three or four, as Dr. Grimshaw apparently thought unobjectionable. Milk, eggs, arrowroot, lime-water, and Carrara-water were quite sufficient to tide the patient over a long period of the disease.—Dr. DOYLE remarked that Niemeyer recommended five-grain doses of calomel, and he had himself used it with good effect where the disease set in with constipation.—Dr. DUFFEY, in speaking of castor-oil as an aperient in the disease, called attention to a recent article on the Intestinal Lesions of Typhoid Fever, in *The Philadelphia Medical Times*, an abstract of which was given in *The Dublin Journal of Medical Science* for January, page 110. In that article, castor-oil was condemned on account of its power of exciting peristaltic action.—Dr. JAMES LITTLE thought that, where the head was much threatened in the early stages of the disease, purgatives were sometimes required. Before the ninth day, the patient could often be relieved of his headache by five grain doses of calomel. Later in the fever, when the abdomen was tympanitic or distended, he had given a teaspoonful of castor-oil and turpentine. As to diarrhoea, if the cause

of it could be removed, it was better than using astringents. Sulphurous acid, according to his experience, would prevent diarrhoea from setting in, probably arresting decomposition, but, once it had set in, it would not arrest it. Of all the remedies that he had heard of for controlling diarrhoea in typhoid fever, the best was one for which he was indebted to Dr. Hudson, and which, he thought, was infinitely superior to any other astringent in respect of safety and general satisfactory character. It consisted of a pill composed of a sixth of a grain of opium, the same proportion of carbolic acid, and three grains of bismuth. He had found the application of two or three leeches over the ileo-cæcal region to be of benefit, and blistering was not unfrequently followed by mitigation of the irritation of the bowel.—Dr. GRIMSHAW replied; after which the Society adjourned.

## HARVEIAN SOCIETY OF LONDON.

THURSDAY, MARCH 15TH, 1877.

T. CARR JACKSON, F.R.C.S., President, in the Chair.

*Examination of the Ear.*—Mr. KEENE exhibited some instruments of his own design for the better examination of the middle ear. The first was a nose-piece for Politzer's bag, which entered the cavity more easily than the finger. The other was a double current syringe for the better injecting of the cavity.—The PRESIDENT and Mr. DALBY expressed their approval of the instruments.

*Salicylic Acid in the Urine.*—Dr. SQUIRE spoke of the readiness with which the substance was found in the urine after its administration in rheumatic fever. He added that the salicylate of iron was an useful agent in the treatment of the subacute sequential stage succeeding the pyrexia. The amount of solids in the urine were increased by its use.—In answer to a question, Dr. SQUIRE said it had a slight tendency to produce constipation.

*Affections of the Ear with Nervous Symptoms.*—Dr. HUGHLINGS JACKSON read a paper on this association of ear-disease with nervous disturbance. Otorrhoea was a disease of the tympanum, and even of the petrous bone. The loss of hearing was a small matter to the danger of an abscess forming or of meningeal disease. The local symptoms were pain, with facial paralysis. There was no paralysis of the palate with uncomplicated ear-disease; this paralysis always indicated intracranial complication. In acute cases, it was impossible to distinguish betwixt an abscess and meningitis. In chronic cases, the diagnosis was less difficult. Chronic cerebral abscess may furnish no symptoms. Even when symptoms are present, they may not be sufficient to be indicative betwixt abscess and tumour. The headache is often intense. Often there is no defect of sight, and the resort to the ophthalmoscope is essential. Patients sometimes recover from acute conditions for a time. These sufferers are liable to die suddenly from intense pain, so analgesics are indicated. There may be general disturbance, pyæmic rigors, with rapid oscillations of temperature; neither of which are common in pure uncomplicated brain-disease. There may be thrombosis of the veins. There are also epileptic seizures; and either paralysis or anæsthesia of the opposite side of the body. Another symptom is auditory vertigo. Rarely there is loss of consciousness. Vertigo may be induced by syringing the ear; or, indeed, by anything which disturbs the contents of the labyrinth; or it may arise from tension of the tensor tympani. It was often attributed to visceral disturbance, especially when accompanied by vomiting. This form of vertigo could be distinguished from gastric, epileptic, and optical vertigo, or that induced by exhaustion. Auditory vertigo was often violent, even when only lying down. Giddiness was a slighter stage of reeling. This vertigo was often found with obvious and patent ear-disease. It indicated something troubling the labyrinth. It was also called Menière's disease.—Dr. BUZZARD agreed with Dr. Jackson's views. The ophthalmoscope should be used in all cases of persistent vomiting. Auditory vertigo might be found without apparent ear-disease; and arise from centric disturbance. A sort of "nerve-storm" in the centres might be set up by a perturbation in an afferent nerve. Such perturbations in nerves of special sensation corresponded to the neuralgic of nerves of common sensation.—Dr. BROADBENT said his experience was confirmatory of what Dr. Jackson had stated. Facial palsy may not indicate anything serious. The most severe vertigo he had ever seen occurred in a child who had disease of its mastoid cells.—Dr. MAHOMED drew attention to circulatory vertigo. It was found both in anæmia and hypervascularity of the brain.—Mr. DALBY had seen a fit of epilepsy brought on by syringing the ears. Menière's disease arose from pressure in the tympanic cavity in many cases.—Mr. HENRY POWER spoke of the pallor and vomiting found along with this vertigo. He thought the auricular branch of the pneumogastric had something to do with the symptoms. Dr. WOLKE pointed out how commonly members of the profession were the subject of this disease,



and especially country doctors.—Dr. JACKSON replied; and the meeting adjourned after a vote of thanks to him for his able and lucid exposition of the subject.

#### SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT.

MARCH SEPT, 1877.

THOMAS TRENT, Esq., in the Chair.

*Stenosis of Pulmonary Artery: Patent Foramen Ovale.*—Dr. GALTON exhibited a patient, aged 14, with pulmonary stenosis and patent foramen ovale. The patient was fairly developed, with livid lips and clubbed fingers, slightly pigeon-breasted. He was a twin; the other presenting the same symptoms of lividity at birth in a more marked degree, and dying at fifteen months of age from bronchial attack. When the children were four months old, the mother had rheumatic fever. He had had dyspnoea from birth; was three years and a half old before he walked; latterly, he had been in better health, and breathed more easily. There was a loud systolic *bruit* over the præcordia, most marked to the left of the sternum between the sixth and seventh costal cartilages. The heart-dulness was increased laterally to the right side. The *bruit* was slightly audible in the axilla and behind, and, contrary to the usual description of such cases, also up the course of the aorta. In Ziemssen's *Cyclopadia* is a record of ninety-nine cases, of which fifty-six died before the sixteenth year of age, the rest between that age and forty. According to Kussmaul, an age of sixty-five has been obtained. There is a great tendency to pulmonary tuberculosis in these cases, as it occurs in one-third of all cases of stenosis of pulmonary artery. The greater tendency of obstructive disease on the right side is accounted for by the greater pressure of the circulation upon the valves of the right side during foetal life.—Mr. ECCLES and Dr. ADAMS made observations. The latter had a case which died at a little younger age. No tubercle was found in the lung.

*Cerebral Tuberculosis.*—Dr. GALTON referred to two cases of recent occurrence of cerebral tuberculosis, one aged 5, the other 11. The duration of symptoms in both was sixteen days; they were very obscure at the outset. Both were treated with iodide and bromide of potassium, and both were fatal.—Dr. LANCHESTER mentioned a case of a child aged 12, in whom the only symptom was squinting. The case was seen by Mr. Power, who found double optic neuritis, and diagnosed cerebral tubercle. A fortnight afterwards, paralysis and convulsions came on. Another child of the same family was taken ill with typhoid fever, and had convulsions at the same time. He found no drug of any use but chloral, which stopped the convulsions and painful cries.

*Osteotomy for Knock-knee.*—The SECRETARY read a report by Mr. H. S. TAYLOR of GUILDFORD upon a case of knock-knee, cured by excision of a wedge-shaped portion of bone from the lower third of the femur. The patient was in the Surrey County Hospital, a healthy-looking lad aged 17, a farm-labourer. The deformity had existed about a year. Mr. Maunder assisted at the operation. At the outer side of the thigh, about a hand's breadth above the condyle, a small transverse incision with a double-edged knife was made down to the bone, which was divided with chisel and hammer, the chisel being directed in different ways, till, in about a dozen strokes, the whole thickness was cut through. By very little force, the limb was made straight. A compress of lint was placed over the wound, well-padded side-splints were applied, and the limb was bandaged from foot to hip; afterwards a falling weight was applied to the foot. For the first few days, there was some pain at the seat of operation, and the temperature rose to 103 deg.; slight effusion took place into the knee-joint, and the wound suppurated slightly. At the end of three weeks, the divided bone was tolerably firm; and consolidation was complete when the splints were removed at the end of eight weeks, the femur showing a distinct curve at the point of division, with shortening to the amount of three-fourths of an inch. The patient was now able to walk well.—Mr. HOWARD MARSH had seen knock-knee so amenable to ordinary mechanical treatment that he thought, in a case of only twelve months' duration, some other means might have been tried first. He had performed the operation in extreme cases of bowed leg. He thought very highly of the operation; but it should be used as a last resource, as in some of Mr. Adams's cases section of the neck of the femur had been fatal; and in a case of Mr. Willett's, in St. Bartholomew's Hospital, death followed.—Dr. BURGESS referred to a case of knock-knee due to mollities ossium. He thought that this might be the cause of the sudden occurrence in this case. In reply to Dr. LANCHESTER, Mr. HOWARD MARSH stated that he preferred the chisel to the saw. Mr. GORDON BIRD preferred the chisel for making clean-cut edges without *débris*.

It was urged by Mr. Adams that with chisel we cannot obtain movable joint, but he did not see why not.

*Roussel's Transfusion Apparatus.*—Mr. MAUNDER gave a most successful demonstration of Roussel's *transfusur* upon a living subject.

*Mania after Scarlet Fever.*—Dr. DALTON read a case of acute mania after scarlet fever. It occurred in a lady aged 28, who had five children. The rash lasted one week; there were some rheumatic symptoms. The urine was slightly albuminous then for one week, during which there was maniacal excitement. The patient was not free from excitement for one month, but then the urine was free from albumen. The treatment consisted in watching, with bromide of potassium. Insanity after scarlet fever was very rare. Dr. Wilks mentioned sudden mania subsiding on the appearance of the rash; and Dr. Savage of Bethlehem Hospital had seen cases following scarlet fever, exhibiting especially repugnance to food. He did not think that the kidney-disturbance was the exciting cause in his case. The father of his patient had some symptoms of mental aberration during the latter part of his life.—Dr. BURGESS and Mr. SIDNEY TURNER remarked upon the case. The latter suggested rheumatic affection of the membranes as a cause.

*Contraction of Little Finger.*—Mr. SIDNEY TURNER exhibited a patient and apparatus applied for contracted tendons of the little finger. After division of the flexor brevis and sublimis tendons (contracted as the result of injury), a steel splint of light construction was adapted to the back of the hand and little finger, and extension kept up by elastic rings applied round the finger. The result was very good.

#### BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

FRIDAY, JANUARY 26TH, 1877.

T. H. BARTLEET, M.B., F.R.C.S., President, in the Chair.

*Dissection of Aorta showing Primary Seat of Atheroma.*—Dr. RICKARDS showed a specimen, in which he had carefully dissected the various coats of the artery in order to show the primary seat of the disease.

*Abnormal Origin of Vessels.*—Mr. BENNETT MAY showed a specimen of abnormal origin of vessels from the arch of the aorta. The order was, internal carotids united at the origin; right subclavian; left subclavian; the latter crossing backwards underneath the other and behind the trachea and œsophagus.

*Scirrhus of the Breast.*—Mr. GAMGEE opened a discussion upon scirrhus of the breast, and exhibited two cases (living) illustrating his remarks. He said that the most practical question in dealing with this disease was action or non-action. The answer required earnest thought. He considered it a local disease, though possibly of constitutional origin. The question of recovery was greatly obscured by the impossibility of following up cases. It was, however, clear that rapid recurrences were from portions of the growth left behind in operating. He had three especial regrets: 1. That there were many cases where no operation was admissible from lapse of time; 2. Being witness of operations that ought never to have been performed; 3. The operation having been done and recurrence taking place, that the new growth should not be removed immediately. There were certain cases in which operation was not advisable: 1. In harmless quiet cancer in an old woman; 2. Unless the whole of the disease could be removed and the wound well closed; 3. Where there was an open sore, unless a covering could be obtained; 4. Where there was adhesion to the pectoral muscle; 5. When a chain of glands was affected in the axilla, one gland being of no importance; 6. If glandular enlargement should be complicated with thickening and mischief above the clavicle; 7. Where the breast was greatly infiltrated; 8. Where the skin was largely infiltrated; 9. Where the other breast suffered similarly. It was true, on considering these groups of cases, that some might need exceptional thought; but, to do an operation because, if one declined, some one else would undertake it, was no fair argument. In operating, he would make free incisions down to and well clearing the pectoral muscle. The elastic ligature was not to be compared to the knife. Caustics might be useful in open sores. In dressing, the edges of the wound should be brought together accurately, the interior having been painted over with styptic colloid, and a drainage-tube inserted. Then, the wound should be well covered with cotton-wool, tenax, or picked oakum. Respecting danger, Mr. Gamgee believed mortality to be due to hæmorrhage, not to sepsis. Mr. Willett said that Mr. Gamgee was to complete removal of the growth. He did not see the necessity for either closing the wound or preserving the skin. He had removed



both breasts with success. Early operations gave the best prospects of success. In dressing, he would not use styptic colloid, but would always use the drainage-tube.—Mr. GEORGE YATES narrated a case treated by the application of strong sulphuric acid. The case did well; but the patient died one year afterwards of internal cancer.—The PRESIDENT considered cancer to be a local hyperplasia, with the elements carried through the body by the blood-current: a heterotopy not a heterology. He did not believe that there were antecedents to cancer; the sufferers were healthy people. In operating, he would cut away all the tissues apparently affected, remove all glands, and heal early.—Mr. GAMGEE, in reply, said it was impossible to get healing too early. He would not wet the wound; he would mop it with lint and dress dry. In operating on a case where the pectoral muscle was affected, he would remove as much of it as necessary, but would rather select cases presenting no such complication.

## SELECTIONS FROM JOURNALS.

### MEDICINE.

**PASSAGE OF DRAINAGE-TUBES INTO THE CAVITY OF THE PLEURA: REMOVAL BY EXSECTION OF THE RIB.**—An interesting case of removal of drainage-tubes from the cavity of the pleura, by means of exsection of a portion of the eighth rib, has been recently under treatment at St. Francis's Hospital, New York. A man aged 30, had an attack of acute pleurisy, which was treated by aspiration. The fluid became purulent, and the resulting empyema was treated by making a free incision and inserting a drainage-tube. The patient was under observation in the country, and from the history furnished by him it would seem that the tube slipped into the pleura. Another tube was then used, and met with a similar fate. An attempt was made at removal after the second tube had passed within the pleura, but without success. A third tube was then inserted, and the patient sent to hospital. On admission, January 15th, the left side was found to be retracted to the extent of an inch and a half, and the ribs closely approximated. Dr. J. H. Ripley made an incision about three inches long, beginning at the original opening and extending inward on a line with the nipple. A portion of the eighth rib was then removed by means of a drill and bone forceps, and a perforation made sufficiently large to admit the little finger. A polypus-forceps was introduced, and a drainage-tube detected posterior and superior to the opening: further search with this instrument proved unsuccessful, and it was substituted by one of Emmet's flexible silver probes, bent at the extremity so as to form a hook. After a search lasting twenty minutes the second tube was withdrawn. The tubes were in good preservation, and each measured seven inches in length. After the operation the patient did well.—*New York Medical Journal*, March 1877.

**LARGE BILIARY CALCULUS PASSED BY THE RECTUM.**—The *American Practitioner* for February contains an account, by Drs. W. F. and J. Reilly, of an extraordinarily large biliary calculus passed by one of their patients. Mrs. —, aged 65, mother of eight children, was attacked last spring with diarrhoea; the abdomen was swollen and tender, especially in the right hypochondrium; she had paroxysmal pain in the abdomen, and it was attended with bilious vomiting. Then followed what seemed to be typhoid fever, lasting six weeks. Three weeks after recovery, she passed from the bowel the calculus, after four hours of severe suffering. She said that she had previously evacuated similar, though much smaller, formations. The measurements of the stone, which was an ellipsoid, were long diameter one and five-eighths inches, short diameter one inch. Its weight was one hundred and ninety grains. The nucleus was of dark biliary resin, while the mass was of cholestearine, extending in regular radii from that nucleus.

### SURGERY.

**THE USE OF CAUSTICS IN OSSIFLUENT ABSCESS.**—Dr. Fourestié describes (*Thèse de Paris*, December 16th, 1876) the proceeding which Dr. Labbé has employed in his service at La Pitié in cases of voluminous ossifluent abscess. The proceeding is as follows. First, the limits of the purulent cavity are as far as possible made out. A large round hole, of which the circumference may be a little smaller than that of the tumour is cut in a bond of sticking plaster. The plaster thus cut is applied by its adherent face on the swelling in such a manner that the circular opening lies over the abscess. Then a sufficient quantity of Vienna paste is prepared to cover all the skin comprised in the opening. The thickness of this layer is of little importance, for it only acts by its surface. The Vienna paste is left in con-

tact with the skin for a quarter of an hour; and, when it is taken off, a large black eschar is found below it, exceeding by about five millimetres the point where the action of the caustic stopped. There remains then from the external part of the pouch a circular band over one centimètre in breadth. The application of Vienna paste over a large surface is painful; hence, in the case of a child, anaesthesia may be employed. After removing the Vienna paste, the part is well cleaned and the eschar covered with plaster. After three or four days, the patient for the first time complains of some pain, which indicates that separation has commenced. Poultices then replace the plaster. The eschar now hardens at the borders, and the furrow which separates it from the healthy parts appears and gradually enlarges. No pressure should be employed, but the whole process of separation should be left entirely to itself. Pus will gradually show itself at some point of the furrow, and soon at several points. These orifices are generally small, and the pus escapes very gradually; the abscess-cavity meantime shrinking, and the posterior wall approaching the level of the neighbouring integuments; so that, after the fall of the eschar, there is left only a wound already much narrowed and generally covered with fine fleshy granulations.

**GENERAL PERITONITIS CAUSED BY SUPPURATING BUBO.**—A lad aged 19, entered the venereal service of the Charity Hospital, New York, with a bubo which was in the stage of suppuration. He was subsequently transferred to the medical wards on account of disease of the lungs. While under observation there, he developed general peritonitis, and died after about a week. At the necropsy, it was found that the abscess caused by the suppurating bubo had extended down to the peritoneum, and in this manner served as the starting-point of the peritonitis.—*New York Medical Journal*, March 1877.

### PATHOLOGY.

**THE PATHOLOGY OF TETANUS.**—Dr. Bannister, in the *Chicago Journal of Mental and Nervous Diseases* for January, submits the following as his idea of the pathology of tetanus. 1. A peripheral wound, involving the sensitive nervous fibres, and causing an irritative local lesion—a neuritis. 2. Transmission of this irritation, either merely as such or as actual inflammation, through the nerve-trunk and the grey matter of the cord, to the medulla and pons Varoli, and possibly to the higher centres in the optic thalamus and corpora quadrigemina (striata), or perhaps even to the cortical motor centres, of the brain. 3. Reflection of this irritation along motor nerves, at first only the trigemini and accessory, then gradually involving other spinal nerves, and producing tonic contraction of nearly all the muscles of the trunk. This is the condition until death in many cases of the disease, but in others convulsions appear at a late stage. Death may occur from exhaustion, asphyxia, or paralysis of the heart.

**ABSCESS BELOW THE DIAPHRAGM, THE RESULT OF DISEASE OF THE LUNGS.**—A rare case of abscess between the diaphragm and right lobe of the liver occurred in a patient who recently died in the Charity Hospital, New York. A woman, aged 50, entered January 23rd, stating that she had been suffering from pain in the right lumbar region for two weeks. A physical examination showed dulness below the third rib on the right side anteriorly. In the epigastrium a protrusion like a hernia was felt, which was tympanitic on percussion. This tympanitic resonance extended downward and toward the left lumbar region. There was no similar tympanitic resonance over any other portion of the abdomen. The patient died on February 1st. At the necropsy, the lower lobe of the right lung was found consolidated by acute catarrhal pneumonia, and at the base was a small gangrenous cavity of the size of a hazel-nut, which perforated the diaphragm and formed an abscess between the diaphragm and right lobe of the liver. The entrance of air into the abscess through the cavity in the lungs had given rise to decomposition and the evolution of gas, and in this manner furnished signs of tympanitic resonance over the upper portion of the abdomen. The pyloric extremity of the stomach was attached to the abdominal wall. The peritoneum showed no signs of inflammation. The liver was diminished in size from the pressure of the abscess.—*New York Medical Journal*, March 1877.

### MIDWIFERY AND DISEASES OF WOMEN.

**HYDRATE OF CHLORAL IN CANCER OF THE UTERUS.**—Having first well washed out the vagina, by means of a speculum introduce a pellet of lint saturated with a solution of chloral, one part to ten. This should be repeated every two hours. The pain, after two or three applications, becomes less, and the discharge less irritating. (*Philadelphia Medical Times*.)



BRITISH MEDICAL ASSOCIATION:  
SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, APRIL 7TH, 1877.

ON UNCONSCIOUS AND AUTOMATIC ACTIONS  
AFTER EPILEPTIC FITS.

II.

WE now mention some slight post-epileptic actions, which are, we suppose, cases of ideation rising into action—acted epileptic dreams. The cases are recorded by Dr. Hughlings Jackson in a paper on Temporary Mental Disorder after Epileptic Paroxysm in the fifth volume of Dr. Crichton Browne's *West Riding Asylum Reports*. A young patient, besides slight epileptic seizures, had severe ones with tongue-biting. We speak of his slight seizures. On one occasion, his mother said, he had a fit at a place of worship during the sermon, and took off his coat, "sitting like that till he recovered his senses". Another day, he took off his boots in chapel. Once, when seeking orders in a shop, he had a fit and ran out suddenly, leaving his hat. A quarter of an hour later, he was found by his pursuers, to use his words, "asking for my hat at all the shops". But, be it observed, he had not recovered his senses, "nor did I until I got to the railway station ten minutes after". Such actions were only important to the poor fellow himself. After "losing himself", and when walking in that condition, he has been knocked down by an omnibus, and once he nearly walked into the Thames. It is not of their importance, but of their significance, that we are now speaking. This patient made the exceedingly valuable remark, that he was quite safe in these "walking attacks" if let alone. He was, after a fit, not himself, but nearly enough his full self to act with some closeness of adjustment to his then external circumstances—provided they were not suddenly varied—if he were not interfered with so as to require a new adjustment on his part. Witness further the following account of a seizure. "He went into the back parlour, as he felt he was going to have a fit. His mother followed him, and found he had taken a knife out of his pocket and was grasping it, not by the handle, but by the blade. His mother took it away, shut it up, and put it behind the bookcase. He went to the bookcase, got it again, and then kept waving it about; but it was now closed. His mother then got assistance, and the knife was again taken from him."

Besides the degree of the fit, and besides the influence of surrounding circumstances, we have to inquire into (see "On the Comparative Study of Drunkenness") the "natural disposition" of the patient who is suddenly "reduced" in an epileptic fit. Just as, under the influence of drink, a man's "natural disposition" comes to the surface, so will that of a patient in his post-epileptic automatism. Had the patient whose case is under remark been as savage a brute as some men are, who, when overcome by drink, smash their wives' faces and trample on their bellies, he might have stabbed his mother with the knife. He often, after a fit, unbuttoned his waistcoat and trousers, and did so once in the presence of four women—fortunately for him, members of his own family. He was apparently an intelligent man; and, as indirect evidence of this, it is mentioned that his father threatened to turn him out of doors for not earning his living, although it seemed plain by the poor fellow's account that he had tried hard to do it. It is only necessary that he should be convicted of indecent exposure, that he may have the full measure of the calamity to which, under

even the merciful laws of this country, an epileptic is liable. We most gladly admit that there is in England a desire on the part of judges and juries to listen to all relevant facts tending to exculpate an accused man. But what sort of medical facts are thought to be relevant?

We can relate a case still more striking. The patient was subject both to slight and to severe seizures. All the details we give should be considered. The case shows an exceedingly elaborate post-epileptic action, its particular nature depending evidently on just prior circumstances. "My wife and her sister, being present, had been talking about supper, when it was agreed that my wife and I should have some cold fowl, and the sister some cocoa if there were any fire. She went into the kitchen to see, and reported that there was one. Soon after, I began to feel chilly, after being so warm with gardening; and I said I would go down to the fire. I did so; and, after standing there a few minutes, I felt symptoms of an attack, and sat down, I believe, on a chair against the wall; and here my recollection failed, the next thing I was conscious of being the presence of my brother and mother (who had been sent for, as they lived opposite); and I have since been informed by my sister-in-law that she came into the kitchen and found me standing by the table mixing cocoa in a dirty gallipot half-filled with bread and milk intended for the cat, and stirring the mixture with a mustard-spoon, which I must have gone to the cupboard to obtain."

We fear that about such cases the remark will be made by the laity, that they have nothing to do with the matter in hand, the actions not being of a criminal kind. Few people listen to an argument in which the nature of particular cases is inferred from what is general to a number of cases superficially different from, although fundamentally like them. Attention is arrested by the superficial difference, and no further thought is given to the matter. The ignorant gardener will not be troubled with any theories which are intended to make him understand the mustard-plant better by considering it as having the general characters of the cabbage-tribe. His triumphant reply is, "It isn't a cabbage at all". Yet it is possible for us to recognise the likeness of the cocoa-mixing automatism to an outburst of fury ending in murder, and at the same time to rate very highly their unlikeness. The zoologist knows quite as well as the fisherman that a whale is superficially like a fish, although he declares that fundamentally it is more like a dog. Juries would listen patiently to any facts which would show that an epileptic may, when unconscious, violently assault a bystander; but would listen impatiently to arguments founded on doings in cases where no crime was committed. It is a common thing for attention to be arrested by superficial features in an illustration, whilst the principle embodied is overlooked. A school-master tried to teach his boys what faith was by an illustration. He told them that, when they saw an apple on the table, it was not faith to believe it to be there; but that it was faith to believe the apple to be there still when he put a basin over it. "Now, then," he asked, "what is faith?" The prompt reply was, "An apple under a basin". And thus, in the average intelligence, simply because it sees only isolated details, and not the principle the order of these details illustrates, the feeling is aroused that, when a man is being tried for his life, it is childish trifling to talk about cocoa, mustard-spoons, cat's food, and gallipots. It may be admitted that there is something in such cases, but they must not be "carried too far". As George Eliot has said (we quote from memory), the average intelligence is ready to admit that, under most circumstances, the radii of a circle tend to be equal; but thinks that geometry may be carried too far. And so, whilst admitting that there is a tendency in epileptics to act grotesquely when unconscious, yet the principle founded on such actions, that an epileptic just after his paroxysm is irresponsible for what he does, is "carrying the thing too far". Acceptance of this principle is not expected; but patient consideration of it is asked, and of the facts on which it is founded. The popular view itself is a general principle, and many people's confidence in it is not owing to any sort of logical



argument, but rests on that firm rock, "every common-sense person admits it". A physician told us that he saw a poor woman steal something in a shop; and, in his opinion, she did so unconsciously, during or just after an epileptic seizure. He believed it would have been of no use to try to convince the magistrate of her irresponsibility. He did not attend to give evidence; the poor wretch was sent to prison. But, saying nothing on another aspect of his conduct, we think he acted unscientifically. The declaration of his opinion might have been of no immediate use in this one case. The magistrate, however just and merciful, would have taken the "common-sense" view, no doubt. Kleptomania is a joke to most of the laity, and epileptic kleptomania is carrying a joke too far. But we cannot hope that the "every common-sense person thinks so" argument will ever be overcome, except by stroke upon stroke by sincere men who from hard work have acquired special knowledge. We certainly must withstand, at any rate, that section of the public which makes positive virtues out of its negations, which goes by a few facts sticking together by their superficial resemblance, because systematic thinking about complex things is impossible to them. Above all, we must fight those who ruthlessly carry their opinions, founded on superficial thinking about crime, to their logical conclusions. It is a very common thing for inferior men to brag of strength of character, when they only show a want of finer feelings: the kind of people with whom "the lack of grave emotion passes for wit".

Let us return to the trumpery case of cocoa-mixing automatism. We submit that such a case is most valuable; for, with a different temperament or with a change of circumstances, a "crime" might have been committed. Had the patient been of the wife-beating order, he would, when "reduced", more likely have assaulted his sister-in-law than have mixed cocoa for her. It would have been no more purposive-like had he gone to another room for a poker, than going to the cupboard for the mustard-spoon was. It is certain that the nature of elaborate mental automatism after a fit depends partly on just preceding circumstances, as well as on environing circumstances. Had he been reading of burglary, his foolish epileptic "dreams" might have ended, not simply in deep sadness and in mental pain to him and his friends, but in weighting him still further with undeserved misery. There are few things more touching than the simple expression of an epileptic, "If I could only get rid of these fits!" It rouses one's indignation that these calamitous persons should be occasionally treated as criminals.

The reader, who may, perhaps, admit the value of the above related case as illustrating a general principle, may object to the "ifs" in our comments on it. Let us note another case bearing more directly. A woman aged 35 was admitted under Mr. Rivington's care into the London Hospital for a wound in the arm. She had cut herself with a bread-knife in the elbow-flexure, opening the joint. She lost much blood, and yet escaped with her life; but the limb was afterwards useless. She had committed the crime of self-mutilation. This woman had had fits with loss of consciousness and convulsion, and fits without convulsion. She was also subject to numerous fainting fits, as she called them. She would "do strange things; would turn the house upside down; would pull the beds to pieces, and then wonder afterwards who could have been doing it". Here, then, is evidence that she acted automatically when unconscious. Now for the "crime" of self-mutilation. She was about to cut bread for her children when taken ill. She sent her children out of the room, and soon afterwards was found lying in a pool of blood. Was it not much of a chance that she had not cut her child's throat instead of her own arm? She was about to cut bread at the time, and thus had the knife in her hand, or, so to speak, in her thoughts. What would have become of her had she killed her son? She had carefully concealed the fact that she was subject to fits. Although ill that day, she had been well enough to go to a doctor. Her kind of mental state after the occurrence would have been prejudicial to her: she accused others of having injured her, and might have said others had cut her children's throats.

What relevance would the pulling beds to pieces have been thought to have to throat-cutting? There was, to help out her case, some taint of insanity in her family. But, when a fearful outrage has been committed, the laity do not listen calmly to statements about the criminal's grandmother.

Let us remark that the terms "conscious" and "mental automatism" may not be used in this article with full accuracy. It is too difficult a task, in a short article written for a particular practical purpose, to harmonise psychology, anatomy and physiology of the nervous system, and clinical medicine. The writer's view of the relation of psychical states to nervous states may be gathered from his saying that he adopts the part of Mr. G. H. Lewes's philosophy which is, that a "sensibility" attends activity of all nervous centres. It would, however, require a longer article than space allows to give Lewes's views their proper application to the cases here considered.

#### CEREBRAL LOCALISATION.

At a recent meeting of the Société Anatomique of Paris, M. Martin showed a case in which, during life, there had been paralysis of the left arm and of the corresponding side of the face. The President of the Society, M. Charcot, made at the Society some perpendicular sections at the level of the *ramollissement*, and it could be seen that the softening extended, at the expense of the white subcortical substance, to the extent and depth of about one *centimètre*; but the central nuclei were absolutely intact. M. Charcot observed that it appears, according to observations, not as yet very numerous, that circumscribed lesions of the superior parts of the frontal and ascending parietal convolutions give rise to paralysis of the limbs without facial paralysis; it seems that the lower parts must be compromised to give rise to a facial paralysis. Brachial monoplegia seems to correspond to the lesions of the median part of the ascending frontal convolution. M. Landouzy said that in tubercular meningitis, where the meningeal exudations and encephalitis are produced from below upwards, the paralysis attacks always the face. M. Pitres added that in certain cases of cortical cerebral lesions aphasia exists alone, but that, when circumscribed paralysis is associated with the aphasia, it is always a facial paralysis. M. Pitres at the same meeting reported on a cerebral tumour which had during life given rise to brachial monoplegia with facial paralysis, and which, at the necropsy, was recognised as having its seat in the median part of the ascending frontal convolution. The question was to determine whether the lower part of the convolution was not interested, some facts seeming to indicate that this region comprises the motor centre of the arm, and especially of the face. A section showed that the tumour penetrated to a certain depth in the centrum ovale, and that a zone of softening extended to the vicinity of the fissure of Sylvius. This secondary lesion had probably the greatest part in the production of the facial hemiplegia, by destroying the tract of the motor filaments which terminate in the lower part of the median convolutions. In one of the three observations of Hughlings Jackson relating to brachial monoplegia, the necropsy showed a tumour trending on the centrum ovale at the level of the fibres which pass to the portions of the cortex which appear in relation with the movements of the face and the arm.

To understand the full value of these observations, and indeed to carry on the study of this, which is perhaps the most rapidly progressing part of the science of medicine, it is necessary fully to have mastered the researches of Ferrier, detailed in his recent great work on *Localisation of the Functions of the Brain*. Up to the present time, that splendid monograph, which deals with a subject lying at the base of the clinical study of diseases of the nervous system, has been more fruitful of results in the hands of foreign than of British physicians. Ferrier and Hughlings Jackson have furnished the bases for a new departure in the study of cerebral disease, but their works have hardly yet filtered into the minds of our working practitioners and clinicians; abroad, on the other hand, their results are being absorbed and applied at the bedside and in the deadhouse with the greatest activity. In France



especially, Charcot and the whole school of young physicians whom he inspires, are daily adding new series of facts to complete the study of cerebral localisations. No meeting of the Société Anatomique passes without fresh presentations of anatomical pieces and of cases tending to elucidate the subject; and thus far the observations of the bedside and the verifications of the *post mortem* room have afforded a remarkable number of examples confirming the data and conclusions of Ferrier. We hardly remember to have seen the subject touched at our Pathological Society. We recommend it, however, to our young hospital workers, and indeed to every practitioner, as a subject in which every one has it in his power to add to our knowledge facts which, if carefully observed and accurately investigated, will go to the building up of a new and more accurate perception of the pathology of cerebral disease than has yet existed. We are a little jealous of the apathy with which British observers regard the fundamental labours of two English physicians who are doing much to lay the foundations of a new cerebral pathology, and whose labours are being rapidly appropriated and built upon by foreign physicians.

#### THE ADULTERATION ACT: CHROMATE OF LEAD IN FOOD.

Is chromate of lead, used as a colouring for food, a noxious substance *per se*, or does its noxiousness depend only on quantity? The Manchester magistrates have decided this question without resorting to any hair-splitting subtleties. In two cases brought before them last week, it was proved that certain articles of confectionery which owed their yellow colour to chromate of lead, had been sold by the defendants. One ounce of the sweets contained in one case one-fifth of a grain of yellow chromate of lead, and in the other two-fifths of a grain. There was medical evidence that this mineral substance was injurious to health, even in such small quantities as those above mentioned, and that the effects were accumulative. It was not urged in defence, as in the "green peas" case, that small quantities of the mineral could produce no injurious effects, or that it operated beneficially as a medicine! It was simply pleaded that defendants were not aware of the noxious nature of chrome-yellow. Each was fined £5 and costs.

In a third case, a provision-dealer at Liverpool was charged before the Police-court with selling a ham called "sugar-cured American", coated with a composition containing chromate of lead. The motive for covering the ham with this strange composition was to keep off flies and insects generally! Dr. Campbell Brown stated that the chrome-yellow was injurious to health; and, although the colour was not incorporated with the food, yet, in cutting the ham, a portion of the mineral might drop into it, and thus impregnate it with mineral poison. On the part of the defence, it was suggested that the colouring must be mixed with the article of food in substance, in order to bring it within the meaning of the third clause of the Act. Here it was put on the cover or outside. The magistrate admitted the objection and dismissed the case. Provisions might be thus legally preserved from flies and insects by enclosing them in a cover containing Scheele's green; and although a dangerous process, if this decision be correct, it would not be considered to be an adulteration of food as defined by the statute.

The *Allgemeine Medicinische Central-Zeitung* reports the death, at the village of Markowice, near Inowrazlaw, of a woman aged 105. She attended church three days before her death.

At a special meeting of the Oxford Town Council on Wednesday morning, Mr. E. L. Hussey, surgeon, of that city, was unanimously elected coroner, in the place of Mr. W. Brunner, deceased.

The *St. Petersburg Medical Gazette* states that, in a village in the Government of Novgorod, a woman aged 20, a primipara, was delivered of a healthy full-grown female child on January 30th, and three days later of a healthy male. In the interval, she had performed her household duties.

#### F.R.C.S. BY EXAMINATION.

We print in another column a letter from Professor Humphry, in which he explains and comments on the proposed changes in the mode of admission to the Fellowship of the Royal College of Surgeons of England. His letter will—or, at least, ought to—do much to remove a great deal of misapprehension. It shows plainly that the object has been, not in any way to lower the standard for the Fellowship, but, while still demanding proof of the possession of advanced practical and scientific knowledge, to render it more accessible to the younger members, by mitigating some of the regulations as to the place where and the manner in which they have obtained such knowledge. There must be not a few young men who cannot continue to attend the medical schools and hospitals after they have obtained their membership, but who would prove themselves well worthy of the Fellowship, if they were allowed to obtain the necessary knowledge in a less restricted manner than under the present regulations. Another point touched on by Dr. Humphry is well worth consideration: namely, that, under the present system, there is danger of a serious diminution in the ranks of the Fellowship, unless means be taken to recruit it more liberally. In again commending Dr. Humphry's letter to the consideration of both Fellows and members of the College, we have only to add that we should emphatically disapprove of any attempt to depreciate the amount of knowledge required for the Fellowship, the possession of which ought to be the index of an extensive acquaintance with all that pertains to surgery as a science and an art.

#### THE MILITIA SURGEONS.

The Secretary for War has consented to receive a deputation respecting the grievances of the militia surgeons on Monday, the 23rd instant. A series of resolutions on the subject have been passed by the Reading Branch, which will be found at page 437.

#### THE SPREAD OF SMALL-POX.

DURING the present small-pox epidemic, it has been by no means unusual to see, in the daily papers, paragraphs which detail more or less sensational methods by which the people may become affected by the disease. Amongst others, is one relating to small-pox at the House of Correction in Coldbath Fields. In this case, a prisoner died of small-pox, and an inquest was held by Dr. Hardwicke. It transpired during the inquiry that "the warders who went to their families outside always washed themselves and put on fresh clothes before doing so". The intelligent jury are reported to have said that "the men should not leave the prison whilst the disease lasted. It was a question if changing of the clothes was sufficient." We can only suggest that the public have a remedy in their hands. If they only used existing means for the isolation of small-pox patients, we should not hear of nearly fifty per cent. of the deaths from this disease in London occurring in private dwellings. If patients be sent to a small-pox hospital, say, of two hundred beds, where visitors are allowed only to such patients as are dangerously ill, not more than twenty-five visitors would be admitted daily; whereas, if the two hundred patients be treated in their own homes, it has been calculated that they would receive at least six visitors each—in all, one thousand two hundred persons—who would convey the disease, provided that third parties are ever able to do this. But there is a want of satisfactory evidence to show that infectious diseases are conveyed by healthy subjects from a diseased one to persons in sound health. This does not imply that people visiting an infectious patient will not contract the disease from which that patient suffers, and in this way contribute largely to the spread of the epidemic. Considering that visitors to a sick person in a private house do not take any steps to disinfect themselves before they go into the open street, we think it hard that the attendants on patients suffering from infectious diseases should, after taking all due precautions, be debarred from taking that exercise in the open air which is necessary for their health, and should be kept in what is practically close confinement. If this process of insulation of persons



liable, according to general opinion, to convey disease between a sick person and a sound one be carried out, medical practice in any town where an epidemic is raging must cease, since it will be impossible for a practitioner to see any case of infectious disease if he intend to visit other patients.

#### THE PRINCE OF WALES.

WE are pleased to learn, as the result of our latest inquiries, that the Prince of Wales has been progressing uninterruptedly well during the past week. The abscess from which His Royal Highness has been suffering is rapidly filling up, under the influence of perfect rest; and there has been no drawback whatever to recovery. It is the opinion of the Prince's medical advisers that His Royal Highness will be able to undertake his contemplated journey to the Mediterranean early next week.

#### ARMY MEDICAL SCHOOL.

THE summer session of the Army Medical School at Netley was opened on Monday, the 2nd instant. The introductory address was delivered by Inspector-General Macdonald, R.N., F.R.S., the Professor of Naval Hygiene; the chief subject of his address being the present state of knowledge regarding the ingredients of the air and water contained in the surface-soil of the earth at various depths and in different places, and their influence on health. The printed list showed that there were seventeen candidates for commissions in the army medical service, twenty-seven for the Indian, and thirteen for the naval medical service attending the school, together with a surgeon-major of the Bengal medical service. The lecture-theatre was well filled. In addition to the candidates who had recently arrived, the opening was attended by the military and naval staffs of the hospital, and by a number of visitors. Among the latter were Inspector-General Dr. Smart, C.B., the principal medical officer and director of the Naval Hospital at Haslar, and Surgeon-General Bowen, principal medical officer of the southern district. Conspicuous among the candidates for commissions were five natives of India; and it is certainly a very noticeable fact, that these gentlemen should be able, in another country so different in every respect from their own, to distance a number of rivals in open competition as they have succeeded in doing. Among the fifty surgeons who competed in London for the twenty-seven Indian appointments offered, these natives not only gained a position above the twenty-three Europeans who failed to come within the fortunate number, but took fair places in the successful list. The fact affords a sufficient proof that the natives of India are not wanting in ability or industry as regards scientific pursuits, any more than they are well known to be in respect to handicrafts of all kinds.

#### LEPROSY.

MR. PLANCK, Sanitary Commissioner of the North-West Provinces, in a report on leprosy addressed to the Government of India, gives statistics founded on the histories of one thousand five hundred and thirty-one lepers. It appears from this report that local conditions have no influence as a cause of the disease, the places where first attacks occur being spread over the country. "It is a disease specially of men as distinguished from women, is not peculiar to persons of any employment or religion, with the possible exception that persons of sedentary habits are prone to suffer. It affects in about equal proportions the well-to-do and the poor." Mr. Planck considers that his statistics warrant the conclusion that lepers, or those who are to suffer leprosy, are as prolific as mankind in general and live as long. It is so very little contagious that, in eight hundred and fifty-five cases of cohabitation in which one of the persons was a leper, the other became affected in only one per cent. This proportion even may be reduced by making allowance for a possible hereditary tendency. A case, however, is given in which an European officer contracted the disease from a leprosy woman with whom he cohabited. Leprosy is essentially a hereditary disease. Mr. Planck does not believe that any measure of sequestration of lepers, with a view to the

eradication of the disease, is likely to attain its objects in that part of India; seeing that, in the great majority of cases, the disease has been transmitted to the coming generation before any accurate knowledge of its existence in men now living can be attained to. It is not to be supposed possible to sequester an apparently healthy man because his grandfather or father had been a leper.

#### HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

WE understand that a change in the system of nursing in this hospital, which has been strongly urged by the physicians, is likely to be shortly carried out. A joint Subcommittee, formed from members of the General and of the Medical Committees, is to be appointed to investigate this important part of hospital administration and to recommend the necessary reforms. We sincerely hope that this may remove the causes of discontent, which have led to frequent changes of nurses during the past twelve months.

#### EAST LONDON HOSPITAL FOR CHILDREN.

THE new building at Shadwell is now finished, and is being furnished, previous to the formal opening, which is advertised for this month or the early part of next, H.R.H. the Duchess of Teck having graciously promised to perform the ceremony. The building is light, airy, and well adapted for the work to be carried on in it. Three large wards, and smaller ones for cases requiring isolation, afford ample space for sixty-four beds and cots. The out-patient department is adjoining the main building, but completely divided off from it. Arrangements for the proper and efficient conduct of the medical work appear to have been carefully considered; and it is hoped that funds may soon be raised to complete the design of the building by throwing out another wing, and thus raise the total accommodation to one hundred beds. The hospital is a few minutes' walk from the Shadwell Station on the East London and Great Eastern Lines, and it is hoped that a large number of friends of the institution will attend the opening ceremony.

#### OPHTHALMIA IN THE BIRMINGHAM WORKHOUSE.

IT would seem that the guardians at Birmingham are rather behind-hand in dealing with ophthalmia, if a report which has reached us be accurate. It is stated that not only have the cases of this disease in the workhouse been for some time past numerous, but that within the last year or two several eyes have been quite destroyed by it: a result showing, probably, that the type of the disease has been severe. The persistence of ophthalmia as a common complaint in large institutions always points to evils which are to a great extent preventable, and, in our present state of civilisation, ought to be prevented; and the authorities at Birmingham will, we think, do well to ascertain, by the aid of special advice, whether some avoidable causes of the disease are not at the present time acting with full force in their establishment.

#### THE HEALTH OF LONDON.

LAST week, 2,429 births and 2,052 deaths were registered in London. Allowing for increase of population, the births were 113 below, whereas the deaths exceeded by 353, the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which had been equal to 26.6 per 1,000 in each of the two previous weeks, rose last week to 30.3. During the four weeks ended the 3rd of March the death-rate averaged only 22.1 per 1,000, whereas in the four following weeks ended last Saturday, the rate rose to 27.5. The increase in the male death-rate was equal to 27, while in the female rate it was 21 per cent. The largest excess occurred among children aged between one and five years, among whom it was equal to 36 per cent., and was due in some measure to the greater fatality of measles. The 2,052 deaths included 86 from small-pox, 53 from measles, 27 from scarlet fever, 8 from diphtheria, 48 from whooping-cough, 14 from different forms of fever, and 7 from diarrhoea; thus, to the seven principal diseases of the zymotic class, 243 deaths were referred, against 231 and 201 in the two preceding weeks, being equal



to an annual rate 3.6 per 1,000. The 53 fatal cases of measles exceeded the numbers in recent weeks, and were 16 above the corrected weekly average. The 48 deaths from whooping-cough showed a further increase upon the numbers in recent weeks, although they were considerably below the corrected average. The deaths from small-pox, which had been 100 and 76 in the two preceding weeks, rose again to 86 last week; 39 were certified as unvaccinated, 15 as vaccinated, and 32 were "not stated" as to vaccination. Of the 86, 36 were recorded in the Metropolitan Asylum Hospitals, 3 in the Highgate Small-Pox Hospital, and 1 each in the Pancras Hospital and the House of Correction; the remaining 45 cases occurred in private dwellings. The fatality of the disease continues greatest in East London. The Metropolitan Asylum District Hospital contained 993 small-pox patients on Saturday last, including 52 convalescents at Limehouse; the numbers at the end of the five previous weeks had ranged from 898 to 952. The deaths referred to diseases of the respiratory organs, which in the five previous weeks had steadily increased from 303 to 575, further rose last week to 645, which exceeded the corrected weekly average by 231; 427 resulted from bronchitis, and 152 from pneumonia. In greater London, 2,932 births and 2,420 deaths were registered, equal to annual rates of 35.0 and 28.9 per 1,000 of the population. The fatal cases of small-pox in the outer ring, which had been 14 and 7 in the two preceding weeks, rose again to 10 last week. The duration of registered sunshine in the week was 24.8 hours, out of 88.4 hours during which the sun was above the horizon.

#### THE ARCTIC EXPEDITION.

WE notice with great pleasure that the promotion of Dr. Colan as Deputy Inspector-General of Hospitals is gazetted. Dr. Colan's services as senior medical officer of the recent Arctic Expedition were of the most severe character, uniting extreme fatigue and mental anxiety owing to the severe outbreak of scurvy in addition to the necessary hardships of an Arctic expedition. His duties were performed in an exemplary manner, and the result of the recent inquiry has amply exonerated him from any responsibility in respect to the sufferings of the sledge-parties from scurvy, since the lime-juice was omitted in the face of his personal remonstrance, as well as in defiance of the original written instructions of Sir A. Armstrong. The delay in promoting Dr. Colan has been misinterpreted; it was not due to any want of recognition of his services, but, as we explained at the time, to the fact that there was no vacancy in the rank to which his promotion must be made.

#### SUICIDE OF A PHYSICIAN.

THE *Levant Herald* states that Dr. Naranzi, a well-known physician in Pera, and Secretary to the Superior Council of Health, has committed suicide. On returning from a walk, he proceeded to his room, where his servant afterwards found him dead, with a small pocket-pistol by his side, which he had evidently placed in his mouth and discharged. The report of the pistol had not been heard. No paper of any kind was found disclosing his motive for this act. Dr. Naranzi had been sent by the Turkish government on some important sanitary missions to Bagdad and elsewhere relative to cholera and other epidemics, and his reports on the results of his inquiries were considered valuable contributions to this branch of medical science. He belonged to a Greek family, and was born in the island of Zante, but had long been resident in Constantinople.

#### GOETHE ON MEDICAL STUDENTS.

AT Strassburg (says Goethe in his work *Aus meinem Leben*, Book ix), the greater part of my associates at meals were medical students. These, as is known, are the only students who instruct themselves with energy concerning their science and profession beyond the usual hours of study. This lies in the nature of the case. The objects of their labours require the greatest thought and are of the highest kind; they are at once the most simple and the most complex.

Medicine concerns the whole human race, because the whole human race are concerned with it. All that the youth learns points directly to a weighty, indeed dangerous, but in many senses a remunerative profession. He throws himself, therefore, with passion to find out what is to learn and what to practise, in part because the things themselves interest him, and in part because of the pleasant prospect of independence and riches which is opened to him.

#### BROCA'S STEREOGRAPH.

THIS very ingenious and beautiful instrument for taking mathematically accurate drawings of human crania, constructed by Mathieu, the well known surgical instrument-maker of Paris, has lately been presented to the Royal College of Surgeons of England by the President, Mr. Prescott Hewett. It was exhibited, and its use demonstrated, by Professor Flower, at his most interesting concluding lecture on the Comparative Anatomy of Man on Wednesday last.

### SCOTLAND.

It is reported that Dr. J. W. H. Traill has been appointed to fill the Chair of Botany in the University of Aberdeen. There were several candidates.

THE managers of the Aberdeen Hospital for Incurables have determined to take down one wing of the building and to build a larger and more commodious one in its stead. While this is being done, the patients are to be removed to a house adjoining the hospital.

The following statement has been signed by upwards of nine hundred students of the University of Glasgow. "The undersigned students of the University of Glasgow hereby declare that they would see with pleasure Mr. Gladstone's election to the office of Lord Rector, and that they will do all in their power to further his return."

#### THE EDINBURGH MEDICAL SCHOOL.

THE winter session of the Edinburgh Medical School came to an end last week; the University classes closing on the 29th, and those of the extramural lecturers on the 28th ult. The classes in both parts of the school have been larger than usual. The University class of anatomy was, we believe, considerably the largest there has ever been. These large classes seem likely to continue, as we understand that the number of candidates for the preliminary examination at the University has again exceeded those of previous years. The classes begin again on May 1st, when two new lecturers are to be added to the extramural school; Dr. Croom commencing a course of midwifery, and Dr. W. Allan Jamieson a course on diseases of the skin. This latter supplies a want which has long been felt in the instruction of this school, where there has been hitherto, of late years at all events, no course on dermatology.

#### SANITARY PROSECUTIONS IN GLASGOW.

THE Glasgow sanitary authorities continue to exercise a healthy vigilance over adulterations and to prosecute offending tradesmen. Last week, several cases were tried in which butter was adulterated. It was found in more than one of these that the compound contained over seventy per cent. of foreign fats, and consequently less than thirty per cent. of the proper fat of butter. In every case but one, a conviction was obtained and a fine inflicted.

#### ST. ANDREW'S UNIVERSITY.

At a meeting of the Council on the 29th ult., the Principal read the following communication from the University Court. "16th March, 1877. At a meeting of the Court of the University of St. Andrew's University (the Rector in the chair, *inter alia*, the University Court, in consideration of the resolution adopted on the 13th October, 1869, to place the Chemistry chair in the curriculum of Arts, originally brought before them on representation from the General Council, as contained



in the minute of the Court of 13th January, 1868, agreed, before considering any new proposals for the readjustment of the curriculum, to submit the question of the position of the Chemistry chair in the curriculum to the consideration of the University Council, and to intimate at the same time to the Council that the subject had been brought anew under the attention of the Court by a formal communication from the Senatus, and by a petition signed by ninety-eight students praying for the removal of the Chemistry chair from the curriculum of Arts." After some discussion, it was agreed to refer the matter to a Committee, who should report to the next meeting.

#### HEALTH OF LEITH.

THE deaths for the last quarter, ending March 31st, were 292, or equivalent to an annual mortality of 17 per 1,000; 123 of these were of persons under five years of age. Zymotic diseases caused 22 deaths, of which 11 were due to whooping-cough. The births for the quarter numbered 561; 21 of the births were illegitimate.

### IRELAND..

MR. MOFFETT, who had filled the office of Vice-President of Queen's College, Galway, has been appointed President, in the room of the late Mr. Berwick.

THE deaths registered in Dublin during the week ending March 24th were equal to a mortality of 40.3 in every 1,000 of the population. The principal reason for this high death-rate was owing to the extreme coldness of the week, the mean temperature (37.8 deg.) being 5.4 deg. less than the average for the corresponding week of the ten years 1867-76. As a consequence, pulmonary affections were unusually numerous, sixty-six deaths having been caused by bronchitis alone.

#### MAIN DRAINAGE OF DUBLIN.

A SPECIAL meeting of the Corporation of Dublin was held last week, to consider the main drainage of the city in relation to the Bill now passing through Parliament for the drainage of Rathmines and Pembroke townships, when it was resolved to appoint a Subcommittee to communicate with the Rathmines and Pembroke Commissioners and the Port and Docks Board, and all other authorities interested in the scheme, to ascertain whether any just arrangement could be entered into so as to utilise the Rathmines and Pembroke scheme, and to report to the Council as soon as possible.

#### NATIONAL EYE AND EAR INFIRMARY, DUBLIN.

A VALUABLE and interesting report for the past year has lately been compiled by the medical officers of this institution, Messrs. Swanzy and Fitzgerald. During 1876, the eye-operations performed at the Infirmary numbered seventy-nine, which included eighteen cases of cataract-extraction by Gräfe's method, the results being satisfactory, sixteen of the cases operated on obtaining useful vision. A slight change has lately been made in the after-treatment of extraction-cases; viz., the instillation of atropia either on the evening of the operation-day or, at all events, on the day following, should there be reason to believe that any of the cortical substance was left behind and causing irritation. The operation devised by Dr. Berlin for entropium and trichiasis (described in the JOURNAL of last year) was performed eleven times, and with marked success. The authors of the report consider it the most effectual method of dealing with the curvature of the tarsal cartilage consequent on old chronic granular ophthalmia, so often seen in patients in this country. Several cases of amblyopia treated by inhalations of nitrite of amyl are detailed, the results being satisfactory. This method has been recommended by Dr. Steinheim of Bielefeld; and, as regards the *modus operandi* of the treatment, it is suggested that, as the physiological effect of an inhalation of nitrite of amyl is to paralyse the vaso-motor nerves of the head and neck, it is probable that the immediate cause of the improvement in vision is the

increased supply of blood to the impoverished nerve-centres caused by dilatation of the capillaries. The ear-affections treated during the twelve months amounted to two hundred and fifty-two.

#### HEALTH OF BELFAST FOR 1876.

THE report of Dr. Browne, consulting sanitary officer of the borough, presented last Monday to the Town Council, states that the present population of Belfast is 210,311, and that the births registered during the year amounted to 6,900, and the deaths to 4,483. Zymotic diseases caused 533 deaths, showing a mortality of 12.33 per cent. of the total deaths, as against 20.6 in the preceding year. Although 15 cases of small-pox occurred, yet no death took place, and there was a considerable decrease in the mortality of all zymotic affections, with the exception of whooping-cough, which was unusually prevalent. As regards the water-supply, Dr. Hodges reports that it compares favourably with the average composition of unpolluted watersupplied to towns generally; an opinion which we believe to be too favourable, an improvement in this necessity of life being urgently required for the citizens of Belfast.

#### PHARMACEUTICAL SOCIETY OF IRELAND.

AT the examination, held last week at the College of Physicians, for the qualification of Pharmaceutical Chemist, fourteen out of twenty-seven candidates were rejected. At a preliminary examination, which took place on the 2nd instant, one candidate only out of fourteen failed. The members of this Society have instituted evening meetings, which, owing to the energy of the honorary secretary, Professor Tichborne, promise to be very successful. The third of these meetings was held on the 3rd instant, when several interesting communications were made to the Society.

#### HOSPITAL FOR INCURABLES, DUBLIN.

THE election of a Physician to this Institution, in the room of the late Dr. Perceval, took place at the Hospital on Tuesday morning last, the 3rd instant. Mr. Edward Peele, one of the medical officers of the South Dublin Dispensary District and a Demonstrator of Anatomy in the School of the Royal College of Surgeons, was elected. Six candidates came to the poll. Among the unsuccessful ones were three Hospital Physicians—Drs. Finny, Grimshaw, and Duffey—all Doctors of Medicine of the University of Dublin and Fellows of the King and Queen's College of Physicians, of high professional standing. A fourth candidate was an Hospital Surgeon; and a fifth, another well-known dispensary medical officer. The proceedings connected with the election have, unfortunately, given rise to a great deal of comment, and are such as are liable to injure the well-being of a most deserving charity. The electors on this occasion were the Patrons of the Hospital and a Managing Committee composed of forty Governors. Although the election was publicly advertised for the 3rd instant, a preliminary meeting of this body was held on the 31st ultimo, to make arrangements for the election. At this meeting, it was agreed that no gentleman having less than five years' professional experience should be eligible; and the number of applicants for the appointment was, upon a division, reduced to three. Several members of the Committee not being satisfied with this highly irregular proceeding, which was manifestly illegal and *ultra vires*, the election, on the 3rd as advertised, was again thrown open to all the eligible candidates. The result we have already given. Previously to the voting, the Board exempted the gentleman subsequently elected from the five years' restriction, as before adopted, by which one of the original candidates was excluded from competing. Mr. Peele is a Licentiate of the King and Queen's College of Physicians and of the Royal College of Surgeons, Ireland, and will not have been five years in practice until November next. The emoluments of the post have been fixed at sixty guineas *per annum*.

MR. E. G. RUDGE of Abbey Manor has very generously given a site for the proposed Cottage Hospital at Evesham, on a long lease, at a nominal rent of £1 *per annum*. As ground is very valuable in that locality, the gift is highly appreciated.



## MILITIA SURGEONS.

At a meeting of the Reading Branch of the British Medical Association held on April 2nd, 1877, a statement of the grievances of militia surgeons having been read and considered, the following resolutions were adopted.

"That, in consequence of militia surgeons who have served under the late Act of Parliament being deprived of nearly the whole of their incomes by the Royal Warrant, dated War Office, July 19th, 1876, the Reading Branch of the British Medical Association is of opinion that certain measures should be adopted whereby adequate compensation may be awarded them."

"That the honorary secretary be requested to call the attention of the members of Parliament of this district to the conditions of the Royal Warrant dated War Office, July 19th, 1876, and the hardships it necessarily inflicts upon the militia surgeons; and request them to be kind enough to use their influence in Parliament to obtain such compensation for those gentlemen as the nature of the case deserves."

## DEFECTS IN POORHOUSE ADMINISTRATION FROM A MEDICAL POINT OF VIEW.

UNDER the above heading, Dr. Walter Hunter, late assistant medical officer, Barony Poorhouse, Barnhill, Glasgow, reproduces in pamphlet form an article originally written for the *Glasgow Medical Journal*, and which appeared in its issue of October 1876; and, as we find in it a lucid exposition of the evils in workhouse administration to which we have now for many years striven to call public attention, with the view to their removal, we feel justified in reviewing his pamphlet. Sixteen months ago, we drew attention to a very able and exhaustive brochure written by Dr. Strethill Wright, the senior medical officer of this workhouse, and we predicted that the structural and sanitary deficiencies which that gentleman proved to exist would bring down on him the wrath of the Parochial Board, and probably lead to his dismissal. This prediction was verified four months afterwards; and his junior colleague Dr. Hunter, who had shared his views, then resigned his office.

Dr. Hunter first points out that the poorhouse is divided into hospital wards, infirm wards, and turn-out wards, the latter being inhabited by those who temporarily stay therein; and here he draws attention to the fact that these latter wards contain many persons who, by no special fault of their own, have been compelled to take refuge in the house. His experience on this head is fully borne out by every medical officer attached to a large workhouse, and should dispose of the belief extensively entertained by the public, by many guardians, and by certain *doctrinaires*, who assert that the recipients of in-door relief are all worthless persons, and, therefore, that the true plan to stamp out pauperism is to adopt a system of rigid and undeviating harshness. He further points out that these deserving cases are no better treated, as regards diet and warding, than the lifelong profligate and depraved. His remarks on this head are as follows.

"It is monstrous to think that all should be considered alike and treated in the same manner; that the widow and the orphan should be placed in the same category as the thief and the 'ne'er-do-well', and should be compelled to associate with those vicious creatures whose lives have made them familiar with nothing so much as sin and immorality."

Passing to the question of diet, Dr. Hunter quotes the tables in use for infants under two years of age, for those from two to five years of age, for those from five to eight, for children above eight, and ordinary ward adult inmates, and shows that no arrangement is made for variety, and that the continuous use of porridge and butter-milk acts very frequently as a purgative in both adults and children; that this sameness of diet leads to a loathing of the articles of food used, and to an inability to consume and digest them; and that he has frequently noticed that children admitted in good health, after a few days or weeks' residence, suffer from diarrhoea, great thirst, and a general falling off; similarly, he has remarked that children dismissed from hospital plump and well are soon readmitted after a week or two with their diarrhoea, ophthalmia, etc., as bad as ever; nor is this much to be wondered at when we find that the broth and porridge, especially the latter, are insufficiently boiled and are made in too large quantities. He contends, and there is no novelty in his argument, that struma and other diseases are greatly aggravated by insufficient diet, and that the object of the authorities should be, not only to endeavour to maintain the health of the children, but also to improve it, notably as pauper children too

frequently inherit faulty constitutions, and it is only by administering a diet sufficient in quantity and nutritious in its nature and quality that the young and innocent poor can be made the possessors of good health and sound constitutions.

In England, as well as in Ireland, the central boards direct the medical officer to decide what should be the diet of the inmates of a workhouse; and on no point are they more particular than in the feeding of infants, leaving this subject wholly to the medical officers' discretion. Is it not lamentable to learn that the Scotch Board of Supervision has no power of control over parochial bodies such as this Barony Board is proved to be?

Passing from the question of diet to that of clothing, Mr. Hunter shows that the children are much underclothed. Infants under three months are allowed flannels, but, if above that age, they have to go without, and the dress of young infants is a flannel binder, one flannel (barrie) coat, a flannel petticoat, and a cotton gown, only one change of clothing being allowed to each child. The dress of the elder girls is equally scanty; for, with the exception of the shift, each girl has only one suit of clothes. It results from this, that, when any of the garments require washing, it can only be done when the children are in bed, which washing is carried out in the ward where the children sleep. The shift is changed weekly, but the petticoats and stockings are not changed for weeks together. The boys' clothing consists of one cotton shirt, a moleskin jacket, vest and trousers, one cravat, a pair of stockings, boots, and a woollen cap. He also states that no additional clothing is allowed in winter. Passing to the wards for the infants, he shows that at night they sleep with their mothers in the nurseries, and at 7 A.M. are carried from these wards, where the thermometer ranges from 56 to 58 deg. Fahr., to the day-rooms, cold, damp, cheerless wards, where on cold mornings the mercury falls as low as 38 deg. Fahr. "What is this", he very properly states, "but a direct invitation to disease, and a consequent gratuitous increase of the infantile sick-list and mortality?"

The day-nurseries are two in number: No. 1 measures twenty-eight by seventeen feet, and contains 5,783 cubic feet; No. 2, thirty-one by seventeen feet, and contains 6,371 cubic feet. On February 3rd, 1876, Dr. Hunter found in No. 1 eighteen women and twenty-two children; on the 28th of the same month, twenty children and sixteen women; consequently each person had from 145 to 160 cubic feet of air, and this, be it remembered, in wards where the infants were all either on the breast or bottle, and where the atmosphere was further contaminated by the frequent discharges so common in infancy.

We now pass on to note how the infantile mortality is influenced by the operation of these agents. During 1875, forty-six children were born in the poorhouse and thirty-four died, eleven of whom were born, lived, and died in the house; the proportion of total deaths of children born in the Barony Poorhouse under one year to the total births in 1875 was 240 per 1,000; whilst, in the city of Glasgow, the total deaths under one year to the total births was only 160 per 1,000, thus showing in Barnhill Poorhouse the rate of infant mortality is one-half greater than that of Glasgow, where, as is well known, "many such children are born in abject misery, poverty, and wretchedness, and reared by parents to whom the death of the child is often a direct gain". The alarmingly high death-rate at Barnhill sufficiently proves that something is wrong.

We believe that our readers will agree with us when we state that the wrong-doing is attributable to the ignorance of the members of the Parochial Board.

Dr. Hunter also refers to the want of proper control of these children in their being allowed to go in and out of the house at the caprice of their parents, and, as pauper nursing is the rule in this house, to their being left in the sole charge of such paupers; such children having no opportunity afforded them of being trained in moral principles or virtues. It will be thus seen that the children of this poorhouse are badly fed, imperfectly educated, and morally neglected; the authorities of this parish are (by their pseudo-economy), therefore, rearing a succession of pauper recruits.

Passing to the physical condition of the adult paupers in the turn-out wards, Dr. Hunter gives, as the result of his observation, that, with the exception of the mothers of illegitimate children, there are very few indeed to whom the poorhouse test is applicable. This is the experience of every intelligent observer who has tested the condition of workhouse inmates, and is notably true in our large towns; but unfortunately it is not the conclusion arrived at by many guardians and Poor-law inspectors, and certain would-be reformers, the latter of whom hardly ever open their mouths in public, except to show how truly ignorant they are of the physical condition of the recipients of in-door poor relief. In support of his argument, Dr. Hunter goes on to state that frequently it has occurred to him that such and such an inmate



ought not to have been in the house; but, on carefully examining him afterwards, he has found to his surprise that such inmate has been suffering from disease, which rendered work a physical impossibility; and he truly observes that the diet allowed these unfortunates is quite insufficient and incapable of improving their health.

Passing to the points which he suggests for an amendment of the evils he describes, he writes: "That, whilst the extension of the boarding out system would meet the views of some, he would prefer to see the children remitted to schools conducted on the industrial system, and that, in the case of children whose parents are morally and physically incapable of bringing them up properly, the parental tie should be severed, and that such children should be wholly removed from their misguidance." As regards the care of the deserving poor, he urges the introduction of a rigid and judicious classification, which should enable these to be wholly separated from enforced association with the depraved and worthless; that these should be supplied with a health-giving diet, and, if of exceptionally good behaviour, should be distinguished by a separate dress and good conduct badge; but these are topics which, though ably handled and admirably reasoned out, are hardly subjects for discussion in the columns of a medical journal.

In bringing our review to a close, we congratulate Dr. Hunter on the ability he has displayed in the production of his pamphlet, and we believe it will be of much service just now, when the Government, in redemption of their pledge, are about to bring forward once more the Scotch Poor Bill, as it will prove, even to those members who opposed Lord Gordon's Bill last session, that an absolute necessity exists for strengthening the hands of the Board of Supervision, if the wretched system of medical and general poor relief which prevails generally in Scotland is to be amended.

## ASSOCIATION INTELLIGENCE.

### COMMITTEE OF COUNCIL: NOTICE OF MEETING.

#### ALTERATION OF DATE.

A MEETING of the Committee of Council will be held at the Office of the Association, 36, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 18th day of April next, at Two o'clock in the afternoon.

FRANCIS FOWKE,  
*General Secretary.*

36, Great Queen Street, London, W.C., March 28th, 1877.

### BATH AND BRISTOL BRANCH.

THE fifth ordinary meeting of this Branch will be held at the College Green Hotel, Bristol, on Thursday, April 12th, at 7.30 P.M.: H. F. A. GOODRIDGE, M.D., President, in the Chair.

EDMUND C. BOARD, *Honorary Secretary.*  
Clifton, March 28th, 1877.

### MIDLAND BRANCH.

THE sixth and last monthly meeting of this Branch will be held at the house of the President, on Friday, April 20th.

Coffee at 7.30 P.M.

A paper on the Progress of Surgery during the last Thirty Years, by Joseph White, F.R.C.S. Edin., President of the Branch.

L. W. MARSHALL, M.D., *Hon. Local Secretary.*  
Nottingham, March 26th, 1877.

### NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch will be held at South Shields, on Wednesday, April 25th.

Dr. Eastwood will propose, "That it is the duty of the General Medical Council to prosecute unqualified medical practitioners".

Dr. Eastwood will present a petition to be signed in favour of the Habitual Drunkards Bill, 1877.

The following papers have been promised.

1. Dr. E. C. Anderson: Objection to the use of the term "Typho-Malarial Fever". That it is not a hybrid of the enteric and malarial forms of fever, but a manifestation of two separate concurrent diseases, one of which may cease to exist in the system and the other pursue its course.

2. Dr. E. C. Anderson: Notes upon a Case of Rheumatic Fever, in which, after apparent complete recovery, the patient suffered from a

relapse. Former attack treated with large doses of bicarbonate of potash, the latter with the salicylate of soda.

3. Dr. J. C. Reid: Milk, as a Therapeutic Agent.

Gentlemen who are desirous of reading papers, introducing patients, exhibiting pathological specimens, or making other communications, are requested to give notice to the Secretary.

G. H. PHILIPSON, M.D., *Honorary Secretary.*  
Newcastle-upon-Tyne, March 27th, 1877.

## CORRESPONDENCE.

### THE EXAMINATION FOR THE F.R.C.S.

SIR,—The new regulations for the Fellowship, which are still under the consideration of the Council of the College of Surgeons (the part relating to the examination for members of ten years' standing having been withdrawn), are, as you may remember, the outcome of a resolution which I proposed in the Council two or three years ago.

The object of that resolution was to throw open the professional examinations for the Fellowship (the existing examinations without any modification or lessening of them) to the members of the College, so that every member of the College might have the opportunity of obtaining the Fellowship provided he could show that he possessed the requisite knowledge, without there being any question as to the curriculum he had followed, or the mode in which he had obtained his knowledge.

My reasons for urging this were, and are, as follows.

1. I think that the Fellowship ought to exert a much wider range of influence than it has hitherto done, or than under the old regulations it could be expected to do; an influence not confined, as it necessarily has been, almost exclusively to students, and to those students who, from the first, are aspirants to the Fellowship, who are early trained for it, and whose circumstances enable them to undergo the extended curriculum required, but an influence which should radiate more largely over the members, and especially over the younger members of the College. Without any disparagement of the members, it will be admitted that a stimulus of this kind is needed to induce them to continue the prosecution of their professional education in anything like a definite and systematic manner. Many have the time to do it; but they need the inducement. Few of us can, or do, persevere in work without some external stimulus. The desire to obtain the Fellowship would act as such; and, even if it operated upon only a comparatively small number of the members, the benefit that would result from their being induced to maintain and advance their knowledge of anatomy, physiology, pathology, and surgery, to take advantage of the museums, schools, hospitals, or unions that may be within their reach, and to study carefully the private cases that fell under their care; to feel, in short, and act as students still, would prove of inestimable advantage to themselves, to surgical science, and to the community. This most beneficial influence which the Fellowship might have is, in great measure, indeed almost entirely, prevented by regulations which require two years in hospitals and schools, and one winter's dissections, in addition to the certificates necessary for the Membership, besides the more extended preliminary examination, and other things.

2. These regulations would absolutely have prevented myself from becoming a Fellow (Cambridge did not then offer the opportunities which it now does); and they do prevent others who, as in my own case, are compelled, immediately on obtaining the Membership, to turn to the means of gaining a livelihood. Owing to peculiar circumstances I was, at a very early period, made a Fellow without examination; and, having enjoyed and profited by the privilege for many years, I am desirous that the members should have the opportunity of looking forward to the same honour and influence provided they can show, which of course I could not, that by continuance in well doing they have deserved it. I am desirous, therefore, that the members—the younger members more particularly—should have not only the stimulus to the higher scientific and practical education requisite for the Fellowship examinations, but also the opportunity of thereby winning the direct and indirect advantages which the Fellowship brings, and which contribute their share to promote the enjoyment and usefulness of professional life.

3. Hitherto the ranks of the Fellows have been recruited by the statutable election, without examination, to the Fellowship of members who obtained the diploma before 1843. This has served to create and maintain the numerical weight of the elective body of the College, and to connect with it the more eminent surgeons of the country who are of sufficient standing. But this source of supply is fast diminishing



and will soon cease; and, if the supply be limited to the twenty or thirty who annually, under the old regulations, pass the examinations, I need scarcely say that the elective body will dwindle to a number too small to constitute a fair and sufficient representation of English surgery. For this reason it is right and prudent, in the interests of the College as well as of its members, that the area of supply should be widened, and that every member who deserves the Fellowship should have the opportunity of obtaining it without being debarred by regulations as to curriculum which many of them cannot comply with. Till this is so, the members of the College will have just ground of complaint that they have not, and cannot obtain, their legitimate influence and status in it.

4. A compulsory curriculum may have its advantages in the early period of professional study; but a member of the College of Surgeons may surely be left to obtain his information where and in what manner he pleases. The smaller and the fewer his opportunities are, the greater will be his merit in collecting the amount of knowledge required to face the examinations for the Fellowship.

5. There is, be it remembered, no idea of altering the examinations in his behalf. He will be subjected to the same tests, scientific and practical, as those who follow the old regulations, which it is intended should still remain in force. Instead of the standard being lowered, it is felt that the difficulties in the new path will be greater than those in the old; that the effort to retain anatomical and physiological knowledge till after the Membership, or to acquire it then in sufficient amount to pass the first examination for the Fellowship, will more than compensate for the additional preliminary examination and curriculum required of those who, following the old regulations, will be able to present themselves for this examination in the third year of their professional study, and will be required to undergo one examination only in these subjects instead of two. Most persons will, I think, agree that the two examinations for the Membership and the two for the Fellowship (these last being both passed after the Membership)—which is the ordeal of the new regulations—are at least equivalent to the extra subjects in the preliminary examination and the extra curriculum of study, with the two examinations for the Fellowship (one of which may be passed in the third year of professional study), which is the ordeal of the old regulations. Any one commencing his professional education would undoubtedly select the latter as the easier route, if his circumstances enabled him to do so. The majority of those who, as students, aspire to the Fellowship, will follow this; and in many respects it is the better route. But there are numerous equally deserving students whose circumstances do not admit of this more expensive course, or who, for various reasons, are unable to follow it, who would nevertheless do honour to the Fellowship, and who ought to have the opportunity of presenting themselves for the examinations.

6. True, members of eight years' standing are already admissible to the Fellowship examination; and the principle for which I am contending has to this extent been conceded. The concession, however, has not been sufficiently liberal to be of much value. Members actively engaged in the practice of their profession—as, after eight years, they are or ought to be—can scarcely be expected to keep pace with or overtake the quickly advancing tide of physiological and pathological knowledge in such a manner as to justify them in incurring the risk of examination. Moreover, they are by this time, for the most part, fixed in their respective positions; and one of the advantages which the Fellowship affords to younger members—viz., that of shaping their course in life and enabling them to compete with better prospect for the more desirable posts—has for them ceased to exist. The new regulations meet this, to some extent, by enabling the members to present themselves for the examinations at an earlier period, when time for study is more at their command, when study of this kind is more beneficial, when aptitude for the ordeal of examination is greater, and when the inducements to come forward are stronger.

It was a keen perception of the difficulties which members of the College have in obtaining the Fellowship—a feeling that these difficulties will not be sufficiently lessened by the new regulations to which I have referred, and which, as I have pointed out, will make the route no easier than the old regulations—a feeling that some additional provision should be made for the admission of a larger number of the members to the Fellowship, and that the Fellowship would be elevated and strengthened rather than lowered and weakened thereby—which induced some members of the Council, who had seriously considered the subject, to propose a modification of the examinations in the case of members of the College of more than ten years' standing. That proposal has been withdrawn, in deference to the strong expression of feeling against it on the part of the Fellows. The present is a question, not of altering the professional examinations, but the curriculum in the case of members who wish to present themselves for the ex-

aminations, so as to enable those who can show that they have the required knowledge to reap the advantage of it.—I am, etc.,  
Cambridge, March 31st, 1877. G. M. HUMPHRY.

SIR,—In your remarks on the F.R.C.S. by examination in the JOURNAL for March 31st, I am glad to notice a slight disposition on your part to side with the regulation relating to members of ten years' standing, which took the Council of the Royal College of Surgeons so long to produce, and which has come to so untimely an end.

The chief outcry against the annulled Section VI was its injustice to existing Fellows, especially the younger ones, and the outcriers were all Fellows; but the most curious fact is this: that those whom the regulation most deeply concerned, viz., the members of ten years' standing, have not uttered a word on their own behalf, or attempted, by the slightest pressure, to counterbalance the action of the opposing Fellows. This apparent carelessness about their own interests was, no doubt, due to their regarding this outburst of feeling as a momentary affair; and, though the opposition grew rapidly to large proportions, it excited wonder, not fear, and, moreover, there was a feeling of confidence in the Council of the College; and, knowing the customary steady and cautious movements of that body, whether forwards or backwards, they delayed to act. Most surely they have rested on a broken reed. The Fellows coerced the Council, and the Council, with an easiness amounting to weakness, has put out the first little gleam of wise reform that has appeared for many a year.

It is well to keep a check on that "impetuous" Council of the Royal College of Surgeons. It is well that it should have a thorn in the side, a messenger of Satan to buffet it; but it was not well to goad it too fiercely. It should have been borne in mind that the Council has been three or more years in bringing out this improved regulation, and there must have been some little wisdom in the reform, at least enough to induce the Fellows to refrain from hurrying the Council to rashness. The Council, in its dealing with this matter, reminds me strongly of the fable of the "old man, his son, and the ass". It unfolds a thrilling picture of the alarming consequences of an over-readiness to try to please everyone and a want of steadfast purpose in pursuing the right. Musicians sometimes compose a chant that can be sung backward or forward, with the effect of producing equally pleasing music. The Council has attempted the same vagary, but they have produced a sad discord.

The sudden outcry on the part of the Fellows was only what might have been expected, and they would most likely in a short time have reverted to the opinions of those few who, with cooler heads and more generous hearts, publicly sided with the annulled section, and who did not sign the memorial. Had there been time for more free discussion, there would have been an opportunity of hearing what others besides the Fellows had to say on the subject; but the matter has been expelled with such unjust haste, that it will be long before the Council of the College will have courage to bring forward the subject again.

It should be borne in mind that the Fellowship is not merely an ornamental diploma. If it were, its loss could be well borne; but it is the only passport in many cases to hospital appointments and other branches of usefulness and pleasure which cheer the weary routine of ordinary practice. But, under the present state of things, however desirable the Fellowship may be, let him who lacked wisdom or opportunity to obtain it in the days of his studentship eschew the coveted honour, lest he be tempted to return to the Cyclops' den to fetch away the trifles he has left behind.—I am, yours truly,

A MEMBER, M.B., B.S.

#### DEATH FROM THE ADMINISTRATION OF NITROUS OXIDE GAS.

SIR,—In the *Times* of Good Friday last, there appeared a notice, taken from the *Manchester Examiner*, of a death under nitrous oxide gas. The following was the verdict of the coroner's jury: "Died from syncope, during the administration of nitrous oxide gas for the extraction of teeth, while labouring under fatty degeneration of the heart."

The details of so unusual an event would be highly interesting to the medical profession, to enable them to judge of the safety or danger of the anæsthetic used. To form a correct opinion, we should at least know how long the inhaler was applied, the order and manner in which the movements of the heart and respiration became affected, and what had been swallowed previously.

The verdict was probably inaccurate in stating that the syncope occurred during the administration of the gas, as no symptoms of danger were noticed until after the extraction of the second tooth.

The most probable explanation of this sad case is that the extractions were difficult, and that the patient, on recovering from the effect



of the gas, was susceptible to the shock of a severe operation; and that this shock, and not the gas, was the cause of the syncope, which structural disease of the heart rendered fatal. Unfortunately, it appears that no third person was present, and we cannot expect the necessary evidence from the operator, whose attention was otherwise directed.

Those whose opinions of the effects of nitrous oxide are formed by inferences from Reid's *Experiments on Asphyxia*, and some cases of cardiac distress, first complained of after inhaling gas, will blame the latter. Those who daily witness the continuance of the circulation, in spite of the blood being black from the gas, and the speedy and cheerful recovery from it, will conclude that so unusual a result must have depended upon the peculiarity of the patient, whose heart was found in a state sufficiently diseased to account for sudden death.

I am, etc.,

J. T. CLOVER.

3, Cavendish Place, April 2nd, 1877.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### POOR-LAW MEDICAL RELIEF IN THE ROYSTON UNION.

NUMBER 5 District of the Royston Union, Herts, is evidently not a very desirable appointment; for it has been vacated four times during the last two years. This circumstance is not very much to be wondered at, when we state that it contains a population of 2,931 persons distributed over an area of 14,219 acres, and that the stipend of the medical officer amounted last year to the munificent sum of £39. Undeterred by the repeated resignations, the Guardians again advertised for a medical officer on the same liberal terms, but no applicant presented himself. Under these circumstances, as the poor could not be left without at least nominal medical attendance, the Board has been obliged to modify their arrangements, which we learn have been effected by temporarily appointing Mr. D. B. Balding, Medical Officer of No. 2 District, surgeon to the workhouse and coroner for the county, who is to be paid on the same scale as government grants to medical practitioners for attendance on sick soldiers when an army surgeon is not available. We trust that this or something better may long hold in No. 5 District of the Royston Union; for anything more discreditable than the stipend paid to the late incumbent could hardly, we should trust, be paralleled elsewhere in the kingdom.

### DRUNKENNESS OR EPILEPSY.

SIR,—In the Westminster union there are two police stations, which receive persons who have been arrested in parts of Marylebone, St. George's, the Strand, and the Westminster unions. During the last four and a half years, either I or my qualified assistant has been called at all hours of the day and night to attend on cases of real or alleged sickness which have been brought from one or the other of these stations to the workhouse. To cases of the former class I do not object; to the latter I do, as in the majority of instances the very smallest observation would prevent the blunder of confounding hysterical drunkenness with epilepsy, or noisy drunkenness with insanity. The mistakes that have been made have generally been committed either by the police acting without advice, or by the inexperienced assistants of medical gentlemen, who, in the absence of their principals, have been called to these stations. I have remonstrated with the police and have had an audience with the Commissioners, and the Board of Guardians have complained to the Home Secretary, but hitherto to very little purpose, as the following case will show.

On the 22nd ultimo, on going into the Westminster Workhouse, at 7.15 P.M., I was requested to see a woman brought by a policeman from the Middlesex Hospital, with a certificate that it was a case for the workhouse. On seeing her in the receiving ward and examining her, I recognised that it was a case of drunkenness, and nothing besides. I therefore returned to the gate, and, finding the constable still there, asked him where he had found her. He said he saw her fall down in the street in what appeared to him to be a fit; that he picked her up and took her to the hospital, where she had been examined, and that then he brought her to the workhouse. At that moment the relieving officer came up, and I asked him whether he had seen the woman. He replied that he had; that she came at 5 P.M., and said she was in great pain, as she was doubly ruptured, and the bowel was down. The district medical officer not being available, he had sent her into the receiving ward, and asked the head nurse of the infirmary to examine and see whether her statement was correct. She had done so, and reported that there was no rupture; and, the woman being very drunk, he had refused her admission. I then said to the constable, "All that is the matter with this woman now is drunkenness; you must take her to the station." I adopted this course, as I have found by experience that if they be admitted to the house the police decline having anything more to do with them. About an hour and a half afterwards, the master informed me that she had been brought back by the constable, with a certificate, in the handwriting of the divisional surgeon, Dr. Waters, that she was an epileptic, and had an irritable heart, etc. I saw her again, and the only difference I observed in her was, that her drunkenness had now become more garrulous. She then went to bed. The next morning, at my customary visit, the master informed me that she was quite well, and had applied for her discharge, but that he had detained her, as he thought I ought to see her. On seeing me, and hearing that I was the medical officer, she apologised for her conduct, con-

fessed she had been drunk, and asked to be allowed to leave. This took place in the presence of the clerk of the union. I refused to permit her to go away, and again sent to the police station and requested them to take her away, at the same time forwarding the facts of the case to the magistrate, Mr. Newton, and stating that in my opinion drunkenness would never be effectually dealt with if such characters went unpunished. The next morning, the magistrate requested me to attend at the police-office. I went, accompanied by the workhouse officials who had seen this woman. I found Dr. Waters there. The constable, having been examined, deposed that he first saw the woman leaning against some railings; that as he approached she cried out, and fell down in what appeared to him to be a fit. Dr. Waters here said that it was clear she then had a fit; he further said that he had again examined her that morning, and found that her heart was beating irregularly and irritably, and that the woman was very ill. The magistrate then asked why I did not admit her. I replied that she was drunk, and that there was nothing else the matter with her. Without hearing my witnesses, the magistrate censured me publicly, and ordered the relieving officer to at once send the woman into the house. On my return to the workhouse, the master informed me that he had ascertained that the woman had left the Islington Workhouse on the 21st ultimo. On further inquiry, made at my request, he learned from the master at Islington that she had been an inmate some months; that she voluntarily left the workhouse on the previous Wednesday; that her husband had resolved never to live with her again on account of her violent temper and drunken habits; that this character had been confirmed by her two sisters; that she was not an epileptic; and that if she had had a fit, she had, in his opinion, assumed it. Although it was asserted by Dr. Waters that she was very ill, this woman did not return to the house until Monday evening, the 26th, that is between fifty and sixty hours after the magistrate's decision. The next morning I carefully examined her, and could find no trace of disease. Her pulse was only 70; the heart was quite natural; there was no rupture, but there was a slight impulse on the right side when she was told to cough. She was also examined by a graduate of the London University, who came to the same conclusion. I had intended to have her examined by some high authority, but she shortly afterwards took her discharge, and she has not been since seen.

The next day, I went to the Middlesex Hospital, and saw the resident medical officer who had examined her. He stated that he had most carefully investigated her condition, and had come to the conclusion that there was nothing the matter with her, but that she was very drunk. I then told him that it was alleged that she was an epileptic, and had had a fit just prior to her being taken to the hospital. He said the statement made by the constable, and the woman's appearance, did not convey any such idea to him; but as the constable told him she was destitute, he had written a certificate that it was a case for the workhouse.

I have since brought the matter before the Board of Guardians, who have directed their clerk to forward this additional information to Mr. Newton; and, as I cannot afford to be shown to be deficient either in judgment or common humanity, I hope you will find room for this letter.—I am, sir, yours obediently,

JOS. ROGERS, Medical Officer, Westminster Workhouse.

### THE LEEDS WORKHOUSE.

SIR,—The following notice appeared in the *Yorkshire Post* on the 23rd of February.

"Leeds Union.—The Leeds Board of Guardians are about to appoint an assistant medical officer for the workhouse and industrial schools of this union; salary, £80 per annum, to be increased £10 per annum until it reaches £100, with board, residence, and washing. Applicants must be single men, with a good knowledge of dispensing, and must possess a double qualification, according to the regulations of the Local Government Board: age not to exceed thirty years. The duties may be known on application to Dr. Hamilton, by letter addressed to him at the workhouse. Applications, with four recent testimonials, to be sent to me before noon on Wednesday, the 7th March next. Applicants to be in attendance at the Board Room, East Parade, at four o'clock on that day. No travelling expenses will be allowed.—By order, HENRY LAMPEN, Clerk to the Guardians.—Leeds, February 23rd, 1877."

On inquiry, it was found that they were sending away their non-resident dispenser, to whom they had been giving a salary of £80 per annum, and the doubly qualified man was expected to do all the dispensing (i.e., for five hundred patients daily), in addition to his proper medical work. Thus the only additional expense to the union would be the board and lodging of this assistant medical officer, which in so large an institution would be merely nominal. The 7th of March arrived, and there were no applicants, and the following appeared in the paper on the 8th instant.

"Leeds Board of Guardians.—Yesterday, at the meeting of the Leeds Board of Guardians—Mr. Humble in the chair—the clerk (Mr. Lampen) reported that advertisements for an assistant medical officer and dispenser at the workhouse had been issued, but that there were no applicants. This was in consequence of a sort of trades-union among the young medical men of the town, who thought it was derogatory to the profession and undignified that any of their number should dispense medicines. He was informed, however, that some of the most eminent medical men in Leeds, at one time of their lives, had not thought it beneath them to do similar work. It was resolved that Dr. Hamilton, the medical officer, should write to Glasgow and Dublin for a man to fill the post, and that the salary should be £100 per annum."

Can it be wondered that no doubly qualified gentleman applied? Truly the ignorance of guardians and their clerks as to the status and legitimate uses of medical officers is deplorable.—I remain, yours obediently,

F. E. A.

Leeds, March 1877.

VACCINATION.—Mr. E. S. Machin, of Erdington, Birmingham, has received from the Local Government Board a grant of £6:10 for efficient vaccination. This is the second grant awarded to him.—Mr. Edward Stephens, Medical Officer, No. 1, Ilminster District, Chard Union, has, for the second time, received a grant of £11:11 from the Local Government Board for the efficient state of the vaccination in his district.—Mr. Walter Lattey has received a Government grant of £8:16 for efficient vaccination: this being the second time.—The Local Government Board has awarded Dr. H. F. Marshall of Deritend, Birmingham, a grant of £54:3 for successful vaccination in his district.



## UNIVERSITY INTELLIGENCE.

## UNIVERSITY OF OXFORD.

**MEDICAL FELLOWSHIP.**—Mr. Charles William Mansell Moullin, M.A., has been elected to the Medical Fellowship in Pembroke College.

## MEDICAL NEWS.

**APOTHECARIES' HALL.**—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, March 20th, 1877.

Byers, Decimus William, Horseay Street, Holloway  
Callender, John Hawkes, South Shields  
Clifton, Cyrus Arthur, Northampton  
Culpin, Millice, Midmay Park, N.  
Emmerson, John Bolton, Jarrold Hospital  
Revell, Richard Carter, Saltash, Cornwall  
Rochford, Walter Mungay, Leamington Terrace, Acton  
Welchman, Henry Palmer, Fore Street, Lichfield  
Whitcombe, William Philip, Birchfield, Birmingham  
Willcocks, Frederick, Scarsdale Villa, Kensington

The following gentlemen also on the same day passed their primary professional examination.

Ambler, Horace Edward, Middlesex Hospital  
Bisdee, Alfred James, St. Mary's Hospital  
Flewitt, Walter, General Hospital, Birmingham  
Johnson, William, St. Bartholomew's Hospital

## MEDICAL VACANCIES.

THE following vacancies are announced:—  
**COUNTY AND COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY.**—House-Surgeon. Salary, £125 per annum, with lodging, fire, and lights. Applications to be sent in on or before May 2nd.  
**DOVER UNION.**—Medical Officer for the Second Division of St. James's District. Salary, £40 per annum, and fees. Applications to be sent in on or before the 12th instant.  
**GLOUCESTER COUNTY INFIRMARY.**—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to be sent in on or before the 21st instant.  
**LUDLOW UNION.**—Medical Officer for the Stokesay.  
**MACCLESFIELD GENERAL INFIRMARY.**—Senior House-Surgeon. Salary to commence at £100 per annum, with board and residence. Applications to be sent in on or before the 14th instant.  
**ORMSKIRK UNION.**—Medical Officer for the First District and Workhouse.  
**STAMFORD UNION.**—Medical Officer for the Hadleigh District.  
**TEIGNMOUTH, DAWLISH, and NEWTON INFIRMARY.**—House-Surgeon. Salary, £50 per annum, with board, lodging, and washing. Applications to be made on or before the 26th instant.  
**WAYLAND UNION.**—Medical Officer for the Walton District.  
**WESTERN GENERAL DISPENSARY,** Marylebone Road.—House-Physician. Applications to be sent in on or before the 9th instant.  
**WEST HAMPHETT UNION,** Sussex.—Medical Officer and Public Vaccinator for the Singleton District. Salary, £70 per annum, and fees. Applications to be made on or before the 9th instant.

## MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.  
\*LEVINGE, E. G., A.B., M.B., appointed Assistant Medical Superintendent of the Bristol Lunatic Asylum, *vice* T. V. De Denne, L.R.C.P. Ed., resigned.  
\*SCOTT, John H., M.B., C.M., Demonstrator of Anatomy in the University of Edinburgh, appointed Professor of Anatomy and Physiology in the University of Otago, New Zealand.  
WALKER, FRANCIS, M.D., appointed Assistant-Physician to the East London Hospital for Children.

## BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be paid in stamps with the announcement.

## DEATHS.

\*PRICE, William, J.P., M.R.C.S. Eng., at his residence, Glantwrch, Swansea Vale, aged 74, on March 24th.  
\*THOMAS, Benjamin, F.R.C.S., at his residence, 1, Goring Place, Llanelli, aged 62, on April 2nd.

**TESTIMONIALS.**—Dr. Trimble, who for some years has occupied the position of medical officer to the dispensary district of Castlebellingham, county Louth, where he was held in high esteem, has removed to Walton-le-Dale. Before leaving Ireland, his friends, in acknowledgment of his kindness and universal attention to the poor, presented him with a testimonial consisting of a time-piece and claret jug.—Dr. Thomas Gurney, the senior physician to the City Dispensary, has been presented with an illuminated address and a handsome time-piece by the patients under his care at the above institution, in testimony of their regard and affection.

## OPERATION DAYS AT THE HOSPITALS.

**MONDAY.**..... Metropolitan Free, 2 P.M.—St. Mark's, 6 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.  
**TUESDAY.**..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.  
**WEDNESDAY.**.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.  
**THURSDAY.**.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.—Charing Cross, 2 P.M.  
**FRIDAY.**..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.  
**SATURDAY.**.... St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

**MONDAY.**—Medical Society of London, 8.30 P.M. Adjourned discussion on Animal Vaccination; after which, a Clinical Evening.  
**TUESDAY.**—Royal Medical and Chirurgical Society. 8 P.M.: Ballot. 8.30 P.M.: Mr. T. Holmes, "On direct Wounds of the Ureter"; Dr. James Andrew and Dr. Dyce Duckworth, "On a Case of all but Universal Paralysis in a Child following exposure to Heat, with complete recovery".  
**WEDNESDAY.**—Hunterian Society (London Institution). 7.30 P.M.: Council Meeting. 8 P.M.: Mr. Jacobson, "On Incision of Hydrocele Antiseptically as a means of Radical Cure in Certain Cases"—Epidemiological Society, 8.30 P.M. Discussion on Mr. Lawson's and Dr. E. McClellan's papers on Cholera.  
**FRIDAY.**—Clinical Society of London, 8.30 P.M. Mr. Maunder, "Double Valvular Osteotomy, as a substitute for Excision of the Knee-joint (a living subject)"; Mr. Christopher Heath, "A Case of Subperiosteal Resection of the Shaft of the Tibia"; Mr. Christopher Heath, "A Case of badly united Fracture of the Bones of the Leg treated by the Excision of a Wedge with Linnhart's Chisel"; Mr. Clement Lucas, "Excision of the Lower Half of the Ulna for a Myeloid Tumour (a living subject)"; Dr. Cayley (for Mr. Henry Morris), "Excision of the Lower Ends of the Radius and Ulna for a Myeloid Tumour".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

We would suggest to correspondents who do not wish their names published, that they should use some distinctive *pseudonym*. "A Member," "An Inquirer," and such like terms are often applicable to several persons.

## ETYMOLOGY OF A LICENSE.

SIR,—Under this heading, I find "regulations for midwives and nursetenders". Now, according to plain English construction, a *nursetender* must be one who tends nurses; but the College employ the word as synonymous with *nurse*. And let me ask whether the charter of incorporation styles this institution the King and Queen's College. Surely King's and Queen's would be the proper title. Each noun requires the final *s* as the sign of the genitive. Yours faithfully,  
March 21st. D.

ERRATUM.—In the note on the Carlisle Place Orphanage at page 307 of last week's JOURNAL, column 1, at line 4, for "rolls and biscuits," read "Robb's biscuits."

## A GOOD CUSTOMER TO THE DRUGGISTS.

In a recent breach of promise of marriage case, Florence Sarah Icaane, the Rev. Thomas Oldacres lately tried at the Leicester Assizes, Mr. Mellor, for the defendant, contended that such an old man could never have thought of marriage. He suffered from rheumatism, lameness, and a number of other physical ailments, for which he took five pills a day. In fact, during the last thirty years he had been so afflicted, that he had taken no less than 54,750 pills.



CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

#### MEDICAL ETIQUETTE.

SIR.—May I ask you to insert this letter in your JOURNAL, so that you or your readers may inform me if it be medical etiquette or good fellowship? My wife was confined on the 15th of last month; on the 16th, the baby showed decided symptoms of cyanosis; and on the 17th, grew so bad that in the afternoon I called on the other medical man in practice here to come and see my little one with me, explaining that I feared it could not live a couple of hours, but that, for satisfaction, I should like to get another opinion. On asking him to come, his answer was, "Well, no, I would rather not; I should much prefer you to get some one else; you understand?" "I certainly understand; you decline to come and see my dying child with me. I will go and ask Dr. L." (a retired medical man living here). As I went down his steps, he called after me, "If your child be really dying, and you do not think it can last till you get Dr. L., I will come, but I much prefer not." "Thank you", I said; "I will go for Dr. L." I did so. Dr. L. came at once, and expressed great surprise at my opponent's treatment. Now, sir, not more than three or four days before I had offered to help this man in any way I could, should he require it, and this was the return he made me. The child died on the 19th. I may say it is not the first time I have had to complain of his treatment, as he saw in the afternoon one of my patients (without saying a word to me about it) whom I had visited the same morning. As we are both young men, I should like to know if this be the way members of our profession treat one another as a rule.—I remain, sir, yours truly,  
L.R.C.P.E., etc.  
March 26th, 1877.

\* \* We should be sorry to think that such conduct as that described by our correspondent was at all usual in the medical profession.

ERRATA.—In Mr. Burdett's paper on Hospitalism in Cottage Hospital Practice, in last week's JOURNAL, page 352, the following printer's errors have inadvertently occurred in the table, viz.: Fowley, for "primary thigh, 1 death," read "legs 1"; Jarow-on-Tyne, for "primary forearms, 2," read "arms 2"; Kendal, for "primary forearm, 1 death," read "forearms 1".

#### VISITORS TO HOSPITALS.

SIR.—Can you or any of your readers inform me whether relations or friends are permitted to visit patients in hospitals for infectious diseases, such as small-pox, scarlatina, or cholera? It is painful to refuse the admission of relatives, but having charge myself of a hospital for the reception of persons labouring under small-pox, etc., I made it a rule from the first not to admit relatives or friends to see the patients, as it would be impossible to prevent the spread of infection without such restrictions.—I am, sir, your obedient servant,  
A PHYSICIAN.

\* \* At the hospitals under the control of the Metropolitan Asylums Board visitors are allowed to any patient whose life is in danger; and this practice is supported by the opinion of one of the inspectors of the Local Government Board, who has said that "It is impossible, or at any rate it would be very objectionable, to exclude visitors absolutely from a hospital when their friends are dying. To do this would simply discredit the whole system of hospital isolation". In this opinion we entirely concur.

T. D. (Ennisforth).—We do not know who Dr. Josef Herman is; nor do we remember to have seen the *Naturarzt*, in which he publishes his writings, quoted in any of the foreign medical journals which we receive.

#### THE DUBLIN POOR-LAW MEDICAL OFFICERS.

SIR.—Your Dublin correspondent, in his article on St. Patrick's Day, greeted the South Dublin City Dispensary medical officers in a style which surprised your readers and subscribers here. If a Poor-law guardian choose, as his wont is, to decry the value of the laborious and riskful services of a body of highly educated gentlemen, it is surely no reason why your JOURNAL and your Dublin Medical Correspondent should re-echo, and that in an exaggerated form, such an *ad captandum* accusation. The application for increased pay had been passed by the Dispensary Committee, who would not have done so had blame been attachable to the medical officers. An increase had just been granted to the medical officers on the North side of Dublin, with the sanction of the Local Government Board.—Faithfully yours,  
A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.  
Dublin, March 27th, 1877.

MR. E. W. BERRIDGE.—We are unable to give further information respecting the cases of poisoning by *anathe crocata* at Stockton-on-Tees than that which our correspondent has seen.

#### MATERNAL IMPRESSIONS.

SIR.—On the 5th of this month, I delivered a patient of a healthy female child, who had the precise mark described by Mr. Dudley Saunders in the JOURNAL for March 24th. It had a mark on the upper lip, and a very slight notch, as though the child had been the subject of a very successful operation for single hare-lip. The mouth and palate were quite normal. The mother of the child is a fine healthy woman, though she has suffered from two attacks of puerperal mania, and she says that she has been a good deal disturbed by a neighbour's child who has been the subject of hare-lip. I do not express any opinion on the question of "maternal impressions"; I merely record a fact.—Your obedient servant,  
J. HYDE HOUGHTON, Surgeon to Guest's Hospital.  
Dudley, March 26th, 1876.

#### NOCTURNAL CRAMP.

A MEMBER writes:—I am very glad to find that J. E. C., M.D., has found some benefit from Howard's bicarbonate of soda. He has lain many nights studying cramp in his own person. It proceeds, he says, from excessive acidity, not only of the stomach but of the whole bowel track; and when it seems to have reached its height, the extensor tendons have nearly dislocated the great toe. Then it is that relief is at once obtained by taking half a drachm to two drachms of the soda. Before he found this remedy useful, many things had been tried. In less than thirty seconds the cramp disappears, leaving a soreness that soon passes away. It has been prescribed by him in numerous cases, and the result has been always satisfactory.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

#### FATTY DEJECTIONS.

DR. BROWN (Clifton) recommends Otcogenarius to try the following. Purified ox bile 2½ grains, extract of *nux vomica* ¼ grain, vitalised phosphates (Perry's) 5 grains, pancreatic emulsion (Dobell's) 60 grains. These should be well mixed together and taken two or three times a day, just after meals. As to diet and other hygienic aids, Dr. Brown defers to the judgment of the patient's medical attendants, combined with his own observations and experience, simply suggesting that his condition may possibly be due in some degree to deranged function of liver and spleen, associated with senile decay or neural degeneration.

#### HYDROBROMIC ACID.

SIR.—Will any of your readers kindly inform me if they have used the hydrobromic acid, and with what result? I tried it in one case of phthisis to relieve the severe cough; it failed to do this, and caused severe abdominal pain.—Yours,  
Cambridgeshire, March, 1877.  
W. EASBY, M.D.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Scarborough Daily Post; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; The Hull Criterion; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The High Peak News; The Metropolitan; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Middlesex Advertiser; The Rock; The St. Andrew's Gazette; The West Cork Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Warrington Express; The Croydon Chronicle; The Northampton Herald; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Richmond and Twickenham Times; The Western Morning News; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; etc.

\* \* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. T. Lauder Brunton, London; Dr. James Russell, Birmingham; Dr. George Johnson, London; Dr. Gore, Dublin; Dr. MacLagan, Edinburgh; Dr. Percy Boulton, London; Mr. Christopher Heath, London; Dr. Mayer, Antwerp; Mr. Trevor Fowler, Epping; Dr. Francis Warner, London; Dr. Clement Godson, London; Mr. Rushton Parker, Liverpool; Dr. Eaton, Cleator; M.D. Ed.; A Member; Mr. Edward Stephens, Ilminster; Dr. A. Collie, Homerton; Mr. Hugh Robinson, Preston; Dr. J. Milner Fothergill, London; Mr. T. S. Warren, London; Our Dublin Correspondent; Mr. E. P. Hardey, Hull; Dr. Grimshaw, Dublin; Fair Play; Dr. Thomas Trollope, St. Leonard's-on-Sea; Dr. Cayley, London; Dr. Mackey, Birmingham; W. L.; Dr. Kelly, Rotherhithe; The Secretary of the Royal Medical and Chirurgical Society; Dr. Joseph Rogers, London; Dr. Bond, Gloucester; Mr. H. E. Waddy, Gloucester; Dr. W. M. Campbell, Liverpool; Mr. E. S. Worth, Millbrook; Mr. Lennox Browne, London; Mr. James Dixon, Dorking; Dr. Egan, Dublin; Dr. Levinge, Athlone; Dr. Procter, York; Good Friday; Dr. Boyd Musket, New Brighton; The Registrar-General of England; Dr. G. M. Humphry, Cambridge; Dr. Berridge, London; The Secretary of the Clinical Society; Dr. Ballard, London; The Registrar-General of Ireland; Staff-Surgeon Coates, Esquimaux; Dr. William Carter, Liverpool; Beta; Dr. A. S. Taylor, London; Dr. Joseph Seaton, Sunbury; Dr. J. H. Aveling, London; Dr. Shingleton Smith, Clifton; Our Edinburgh Correspondent; Habberly; T. D., Ennisforth; Dr. Macdonald, Cupar Fife; Dr. Douglas MacLagan, Edinburgh; Mr. S. M. Bradley, Manchester; A Correspondent; Dr. J. Braxton Hicks, London; Dr. Gowers, London; Dr. W. Fairlie Clarke, Southborough; Mr. Albert Speedy, Dublin; Mr. Hamilton Craigie, London; Mr. J. Banas, Rotherham; Dr. G. H. Philipson, Newcastle-upon-Tyne; Mr. W. Rivington, London; Mr. Hodgkinson, Manchester; Dr. Joseph Bell, Edinburgh; Dr. T. Spencer Cobbold, London; Mr. G. Eastes, London; Dr. Edis, London; Mr. C. S. Loch, London; Dr. Rawdon, Liverpool; Dr. H. F. Marshall, Birmingham; Dr. J. G. Swayne, Bristol; Mr. T. M. Stone, London; Mr. E. Nettleship, London; Dr. Dobson, Netley; Mr. J. R. Thomas, Llanelly; Dr. Thin, London; Dr. Rutherford, Edinburgh; Mr. D. Mitchell, Lakenheath; Dr. Duffey, Dublin; M.D.; Dr. W. Ainslie Hollis, Brighton; The Secretary of Apothecaries' Hall; Dr. W. J. Little, London; The Secretary of the Epidemiological Society; Mr. Teevan, London; M.R.C.S. Eng.; etc.

#### BOOKS, ETC., RECEIVED.

Second Annual Edition of the Classified Directory to the Metropolitan Charities for 1877. London: Longmans, Green, and Co. 1877.  
Headaches: their Nature, Causes, and Treatment. By William Henry Day, M.D. London: J. and A. Churchill. 1876.  
An Introduction to Human Anatomy. By William Turner, M.B. Part II. Edinburgh: Adam and Charles Black. 1877.



## THE LUMLEIAN LECTURES

ON

## THE MUSCULAR ARTERIOLES:

THEIR STRUCTURE AND FUNCTION IN HEALTH  
AND IN CERTAIN MORBID STATES.*Delivered at the Royal College of Physicians of London.*

By GEORGE JOHNSON, M.D., F.R.S.,

Fellow of the Royal College of Physicians; Professor of Clinical Medicine and  
Senior Physician to King's College Hospital; etc.

## LECTURE I.

*The Structure of the Arteries and Arterioles.—The Vaso-Motor Nervous System.—The Physiology of the Circulation.—Influence of the Heart, the Large Elastic Arteries, and the Muscular Arterioles.—The Phenomena of Asphyxia or Apnœa illustrated by Post Mortem Appearances and by Experiments.—Nitrous Oxide Anæsthesia: the Symptoms and their Physiological Explanation.*

MR. PRESIDENT AND GENTLEMEN,—In this course of Lumleian Lectures, which, by the favour of yourself, Sir, and the Censors, I am to have the honour to deliver, I propose to discuss certain questions relating to the structure of the minute blood-vessels and the forces concerned in carrying on and regulating the circulation of the blood. Upon this subject modern researches have thrown an entirely new light; and I shall endeavour to show that the increased knowledge of the physiology of the circulation which has been acquired within the last quarter of a century has rendered necessary a revision and correction of some pathological doctrines which had gained more or less general acceptance.

The chief anatomical discovery relating to the organs of circulation made during the period to which I refer was Henle's demonstration of the muscular elements in the middle coat of the arteries. John Hunter and others, it is true, had on theoretical grounds assumed that the middle coat of the arteries contains muscular tissue; but it was Henle (*Wochenschrift für die gesammte Heilkunde*, 1840, No. 21, p. 329) who first described the fusiform muscular elements encircling the arterial tube between the outer and the inner coats, and who showed that these have the same characters as the unstriped muscular tissue of organic life.

There are obvious structural differences, corresponding with important diversities of physiological function, between the large and the small arteries. The chief anatomical distinction between the large and the small arteries is to be found in their middle coat. The middle coat of the largest arteries is composed almost entirely of elastic tissue, with a very slight admixture of muscular fibres. As the arteries diminish in size, the proportion of muscular tissue increases, until, in the smallest arteries, the middle coat is composed entirely of muscular tissue. These smallest arteries are commonly designated "muscular arterioles", to distinguish them from the large elastic arteries. The muscular arterioles, varying in diameter from the one-hundredth to the one-three-thousandth of an inch, have their middle coat composed of muscular fibre-cells, without the slightest admixture of connective or elastic tissue. The muscular fibre-cells, which, when separated, are seen to be elongated and spindle-shaped, with an oblong nucleus in the centre, are arranged in a circular manner round the arteries, forming contractile muscular lamellæ. The circular muscular coat in arteries between about the one-hundredth and the one-three-hundredth of an inch in diameter possesses two or three layers of muscular fibres. In the smaller arteries, the muscular coat consists of only a single layer of fibres, whose elements become shorter and shorter until, in the smallest arteries approaching the capillaries, the muscular elements separate from each other and at length completely disappear.

The muscular coat has on its inner surface the tunica intima, and on its outer the tunica adventitia. The tunica intima consists of two layers: an inner epithelial layer, and a shining membrane which Kolliker calls the *elastic inner coat*. The tunica adventitia consists of connective tissue and fine elastic fibres with elongated nuclei, having their long diameter parallel with the axis of the vessel. The tunica adventitia is generally as thick as, and often thicker than, the muscular coat; and it is readily made to swell up under the influence of certain reagents. My colleague Dr. Beale and other microscopic observers have demonstrated the presence of minute nervous ganglia

and extremely delicate nervous fibres ramifying upon the minute arteries and the capillaries.

During the last quarter of a century, the physiology of the vaso-motor system and the relation between the nervous and the vascular apparatus have been the subject of laborious research by numerous and very able investigators; and the result has been a large addition to our positive knowledge of the forces which are concerned in regulating the movement of the blood through the minutest subdivisions of the vascular system. M. Vulpian, in his two recently published volumes (*Leçons sur l'Appareil Vaso-Moteur*, Paris, 1875), has given a very lucid and complete history of these investigations. An able summary of the physiology of the vaso-motor system appeared in the *British and Foreign Medico-Chirurgical Review* for October 1876; and the whole subject of the vascular mechanism has been treated with great ability by Dr. Michael Foster in his recently published *Handbook of Physiology*.

We have already seen that in the year 1840 Henle had demonstrated the muscular tissue of the middle arterial coat. About the same time, Stilling (*Recherches Pathologiques et Medico-Pratiques sur l'Irritation Spinalis*, Leipzig, 1840) was led to the conclusion that there are certain nerves which influence the movements of the blood-vessels. For these nerves he invented the term *vaso-motor*, and he looked upon them as analogous to the *musculo-motor* nerves. But the starting-point of our present positive knowledge of the vaso-motor nerves was the year 1851, when M. Claude Bernard published his first conclusive experiments (*Comptes Rendus de la Société de Biologie*, 1851, p. 163). In his first memoir, Bernard showed that after division of the cervical sympathetic, but more especially after removal of the superior cervical ganglion, in the horse, the dog, or the rabbit, there is an increased afflux of blood to the ear and the whole of that side of the face, and with this an elevation of temperature and an increased sensibility. In a second communication, made this time to l'Académie des Sciences (*Comptes Rendus de l'Acad. des Sciences*, Mars 29, 1852), he described in more detail the facts recorded in his first paper. It was not until towards the end of the year 1852 that Bernard published his explanation of the phenomena which he had discovered. Meanwhile, public attention having been directed to these researches, in the interval between the publication of Bernard's second and third memoirs, Dr. Brown-Séquard had published in America (*Philadelphia Medical Examiner*, August 1852) the interesting results at which he had arrived. This able experimenter confirmed Bernard's observation of the dilatation of the blood-vessels and the elevation of temperature resulting from division of the cervical sympathetic. He then went on to show that the galvanic stimulus applied to the cut end of the peripheral portion of the nerve caused a constriction of the blood-vessels and a lowering of the temperature. He thus proved that the elevation of temperature resulting from division of the sympathetic is directly due to the increased afflux of blood consequent on paralysis of the arterioles. In Bernard's third memoir, published in November 1852 (*Comptes Rendus de la Société de Biologie*, Nov. 1852, p. 168), he also records the observation that the increased blood-supply which results from the paralyzing influence of dividing the sympathetic is at once arrested by galvanising the divided end of the nerve, when the parts which were previously red and congested become pale and comparatively bloodless.

Since this great field of research was opened up by Claude Bernard and Brown-Séquard, numerous experimenters have laboriously entered upon it, and the result has been the accumulation of many interesting facts and the construction of a tolerably consistent though not as yet an entirely complete theory of the vaso-motor system.

Time would not permit me now, even if it were necessary or desirable, to enter into the minute details of this extensive subject. I need only refer to such ascertained facts and principles as have relation to some pathological phenomena which we shall presently have to discuss. The vaso-motor nerves may be said, in a general way, to belong to the great sympathetic; but, by means of communicating branches, they are also connected with the spinal nerves and with the spinal cord. In fact, there is reason to believe that all the vaso-motor fibres are derived from the cerebro-spinal axis, from which they pass out chiefly by the anterior roots of the spinal nerves; and that the chief centre of vaso-motor nerve action is the medulla oblongata, near the floor of the fourth ventricle. Injury to this part of the nervous centre or division of the cord in the upper cervical region, cutting off the communication between the centre above and the vaso-motor nerves, causes general relaxation of the arterioles and a fall of blood-pressure throughout the body. On the other hand, electrical stimulation of the centre excites general contraction of the arterioles and an increase of blood-pressure.

The nerves which, when divided, cause arterial paralysis, and when stimulated excite arterial contraction, have been designated *arterio-*



*constrictor* nerves. There are other nerves having a different, and in some respects, an antagonistic function: these are designated *vaso-dilators*. Of this class of nerves, the *chorda tympani* is a conspicuous type.

The *chorda tympani* is a branch of the facial nerve, which joins the lingual branch of the fifth nerve, and is distributed to the tongue and the submaxillary gland. Bernard discovered that electrical stimulation of the peripheral end of the divided nerve causes great dilatation of the blood-vessels of the submaxillary gland, and a rapid and profuse secretion of saliva.

Many experiments of various kinds have proved that the vessels may be made to contract or to dilate by an influence conveyed through incident nerves to the centre, and thence reflected through other fibres to the arterioles. Thus when a sensitive nerve, such as the fifth, or a mixed nerve like the sciatic, has its central end stimulated, a reflex contraction of the arterioles occurs throughout the body, and the blood-pressure rises. On the other hand, Ludwig and Cyon discovered that one branch of the pneumogastric, when its central end is stimulated, has a reflex influence on the vaso-motor nerves, which causes a general relaxation of the arterioles and a consequent fall of the blood-pressure. This nerve, therefore, is called *the depressor nerve*.

There is now a very general agreement amongst physiologists with respect to the influence which the heart, the large elastic arteries, and the muscular arterioles respectively exert upon the circulation. The force which propels the blood through the systemic arteries is derived entirely from the contraction of the muscular walls of the left ventricle of the heart. The elastic walls of the large arteries, distended by the injecting force of the ventricle, contract and force the blood onwards during the diastole of the ventricle. This forcible resiliency in the walls of the arteries is as obviously derived from the muscular contraction of the heart as the elastic power of an archer's bow has its source in the contracting muscles of the arm which bends the bow. The resiliency of the arterial wall, reacting upon the blood during the diastole of the ventricle, gradually converts the interrupted jet of blood from the heart into a continuous current in the minute arteries and capillaries. The muscular arterioles, under the influence of the vaso-motor system of nerves, regulate the blood-supply to the various organs and tissues. The action of the muscular arterioles is, as I have ventured to suggest (*Medico-Chirurgical Transactions*, vol. 51, p. 60), that of stopcocks. By the contraction of the muscular walls, their canals are narrowed, the blood-stream is in a corresponding degree lessened, and the pressure of blood in the larger arteries is increased. On the contrary, relaxation of the walls of the arterioles enlarges their canals, permits a fuller stream of blood to pass, and lowers the blood-pressure in the arterial trunks. The minute muscular arteries, therefore, through their stopcock action, exert a regulating but not a propelling influence upon the blood-current.

The influence of the heart, the larger elastic arteries, and the muscular arterioles respectively upon the circulation, may be demonstrated by the very simple apparatus which I have here.\* A pump is made of a hollow India-rubber ball, with two orifices, to one of which is attached a tube six inches long, and to the other an elastic India-rubber tube about four feet long, at the distal end of which is attached a metallic stopcock. The central orifice of each tube is guarded by a bullet valve. The end of the short tube is dipped in a basin of water, while the elastic ball is alternately compressed and relaxed by the hand. The intermitting jet of water from the hollow ball, representing the heart, is gradually converted into a continuous stream by the tube acting thus like the large elastic arteries, and the size of the continuous jet from the metallic orifice is regulated by tuning the stopcock. If, now, I substitute for the elastic tube one with rigid walls, the stream of water from the orifice of the stopcock is no longer continuous, but an interrupted pulsating jet; so, if the opening in the stopcock be large enough to allow the water to escape as fast as the pump drives it into the tube, the flow will be interrupted. This wide-open state of the stopcock represents a greatly dilated condition of the muscular arterioles, when the pulse may extend through the capillaries, even into the veins. For the conversion of the intermitting jet from the pump into a continuous stream from the stopcock, it is requisite that the orifice in the latter should be so small as to allow the fluid to accumulate in and distend the elastic tube, the resiliency of which continues to drive on the fluid, while the pump, representing the heart, is dilating to receive a fresh supply.

It is evident then that, while the contraction of the large arteries, which are mainly elastic but partly muscular, aids the heart in propelling the blood onwards towards the capillaries, the contraction of the arterioles, whose middle coat is entirely muscular, antagonises the heart

and the larger arteries; but their stop-action, under the guidance of the nervous system, regulates the blood-supply to the nervous tissues and organs in accordance with their physiological requirements.

There is no evidence of a *peristaltic* muscular contraction of the arteries, as some writers—amongst others, MM. Legros and Onimus—have supposed. Any one who has carefully watched the circulation in the web of the frog's foot, or in other transparent parts of a living animal, must have observed that, so long as the circulation is active, the blood-stream in the terminal arterioles is as continuous and uniform as it is in the capillaries, and there is no appearance of an alternating contraction and relaxation of the arterioles.

The true capillaries have no muscular fibre in their walls, and there is reason to believe that they have no power of active contraction. They become distended and dilated when the muscular arterioles are relaxed, and they return to their original size when the arterioles contract and lessen the blood-stream; but this contraction of the capillaries is probably the result of simple elastic resiliency after distension, and not of an active vital contraction. The capillary obstruction which occurs during the progress of inflammation is of course quite different from a normal physiological impediment.

I now pass on to the consideration of some pathological phenomena which, while on the one hand they receive a more or less complete explanation by the aid of the physiological principles to which I have referred, on the other hand tend to confirm the generally received physiological doctrines relating to the circulation.

The phenomena of what is commonly called *asphyxia*—death, that is, by suffocation or suspension of the respiration—could not be completely and satisfactorily explained before the structure and functions of the muscular arterioles had been revealed. I propose now to devote some time to the consideration of these phenomena, and I shall afterwards endeavour to show that the disturbance of the circulation which results from the suspension of the respiration, is strictly analogous to the hindrances and disorders of the circulation which occur in other morbid states, and especially in connection with certain forms of renal disease.

The immediate cause of death from suffocation is the arrest of the circulation through the lungs. The obvious and indisputable evidence of this is found in the fact that, when the chest is opened immediately after death, the right cavities of the heart and the large branches of the pulmonary artery are found to be greatly distended with blood, while the left cavities are flaccid and comparatively empty. This elementary fact in the pathology of *apnoea* (a term which I use in preference to *asphyxia*, which literally means pulselessness) was first demonstrated by our own illustrious Harvey. Harvey says, "I have several times opened the breast and pericardium of a man within two hours after his execution by hanging, and before the colour had totally left the face, and in presence of many witnesses have demonstrated the right auricle of the heart and the lungs distended with blood—the auricle in particular—of the size of a large man's fist, and so full of blood that it looked as if it would burst. This great distension, however, had disappeared the next day, the body having stiffened and become cold, and the blood having made its way through various channels." (Second Disquisition on the Circulation of the Blood, *Sydenham Society's Translation*, p. 127.)

The great distension of the right cavities of the heart with the relative emptiness of the left cavities, so clearly and accurately described by Harvey, has sometimes been denied by recent writers on *apnoea*, it may, therefore, be well to give some additional evidence of this fundamental anatomical condition.

Dr. Massey of Nottingham, about ten years ago, published the following report of the appearances found in the chest of a man four hours after his execution by hanging (*Lancet*, November 9th, 1867). "On removing the sternum and cartilages of the ribs, the lungs were not to be seen, but were found to occupy a very small space at the back part of the chest, resembling the contents of a fetal thorax, the pericardial sac alone being seen. The colour of the lungs was of a darker hue than natural, especially at the bases. On cutting out the lungs, a quantity of black liquid flowed. The structure was natural, but there was loss of crepitaney, and but very little air was contained in them. The right auricle of the heart was gorged at the greatest state of distension with blood, and the inferior cava was in the like condition. On opening the auricle, a great quantity of black fluid blood gushed out. The right ventricle also contained a large amount of blood. The left auricle and ventricle were completely empty."

In October 1867, a dog weighing fourteen pounds and a quarter, was killed in my presence by a ligature on the trachea. The animal continued to struggle convulsively for five minutes. As soon as these movements had ceased the chest was opened. The pericardium was

\* This apparatus was designed by Dr. Rutherford (*Lancet*, Oct. 12th, 1872).



so filled and stretched by the distended heart that it was at first supposed that the pericardium had been opened so as to lay bare the heart. The right cavities of the heart were full and tense, the left comparatively empty and flaccid. In particular, the two auricles presented a marked contrast, the right auricle stood out in a globular form and had a tense and elastic feel like an India-rubber ball distended with air, while the left auricle was flaccid and its surface wrinkled. A ligature having been placed round the large vessels, the heart was removed and its cavities opened, when two ounces of blood gushed out of the distended right cavities, while two drachms and a half only flowed slowly from the left side. After division of the large vessels, twelve ounces of blood escaped into the cavity of the chest, chiefly from the venæ cavæ and the pulmonary artery. The lungs collapsed to an extreme degree; they were pale and non-crepitant.

It will be seen that the condition of the heart's cavities, and in particular the great distension of the right auricle, as described by Harvey and by Dr. Massey in men executed by hanging, is identical with that which I observed in the dog killed by a ligature on the trachea.

The great distension of the right cavities of the heart, with comparative emptiness of the left, is very generally admitted and believed to result from some impediment to the passage of the blood through the lungs, consequent on the suspension of respiration. The question then arises, What is the mechanism of the process by which the flow of blood through the lungs is impeded and finally arrested? It was formerly supposed that the arrest of the circulation through the lungs might be explained by the cessation of the respiratory movements. It is, of course, indisputable that the movements of the ribs greatly influence the amount of blood within the chest, and especially in the large veins. In inspiration, the blood is sucked into the venæ cavæ and the superficial veins in the neck may be seen to collapse; while, in expiration, the intrathoracic trunks are compressed, and the jugulars and other affluent veins are distended; but the hypothesis that the arrest of the blood-stream through the lungs is due mainly to the immobility of the chest is completely disproved by the fact that when an animal is made to breathe nitrogen-gas unmixed with oxygen, although the movements of the chest continue as in ordinary respiration, the passage of the blood through the lungs is arrested as speedily and completely as when the chest is motionless. It is evident, then, that the arrest of the pulmonary circulation is in some way caused by the suspension of the chemical changes in the blood and the respired air which are effected by the inhalation of oxygen.

One great step towards the elucidation of this problem was made by Dr. John Reid. He experimented in the following manner upon dogs. A tube with a stopcock was placed in an opening in the trachea, and a mercurial dynamometer was introduced into the femoral artery for the purpose of measuring the blood-pressure within the arterial system. Dr. Reid expected to find that when air was excluded from the lungs by turning the stopcock, and when, consequently, unœrated black blood began to pass into the systemic arteries, there would be a steady decrease of the blood-pressure there. He found, however, to his great surprise, that for a period of about two minutes after the animal had ceased to struggle, the mercury stood higher in the dynamometer, and the arteries were more tense, than when the animal was breathing freely. After this high pressure had continued for about two minutes, it began to decline rapidly, in consequence of the increasing impediment to the flow of blood through the lungs.

Referring to the temporary increase of pressure in the systemic arteries, Dr. Reid says: "This was so unlooked for, at first sight was so inexplicable and so much at variance with my preconceived notions on the subject, that I was strongly inclined to believe that there must be some source of fallacy; but, after repeating the experiment more than twenty times, and invariably with the same result, I was at last compelled to admit its accuracy. I then began to surmise that this arose from an impediment to the passage of the venous blood through the capillaries of the systemic circulation." We shall presently return to this suggested explanation of the phenomena; meanwhile, it is to be observed that, in experiments performed as Dr. Reid performed his, the observation of the blood-pressure is liable to be more or less interfered with by the struggles of the animal, which, while they continue, have the effect of increasing the arterial pressure.

In some experiments afterwards performed by Mr. Erichsen (*Edinburgh Medical and Surgical Journal*, January 1845), the struggles were prevented by the animal being pithed; and, this disturbing element being thus removed, Mr. Erichsen obtained results which were entirely in accordance with those of Dr. Reid—namely, that with the suspension of the respiration and the consequent passage of black blood into the systemic arteries, there is, for a time, an increased blood-pressure within those arteries, the result of some resistance in the terminal vessels; then, after a period of two or three minutes, there is a rapid de-

crease of pressure, in consequence of the impeded and finally arrested passage of the blood through the lungs.

But the most complete and entirely satisfactory experiments tending to throw light upon the phenomena of apnoea are those which have been performed upon dogs under the paralyzing influence of curara. I am indebted to my friend and former colleague Dr. Rutherford, now the distinguished Professor of the Institutes of Medicine in the University of Edinburgh, for the opportunity of witnessing some experiments performed in 1873, the results of which I will endeavour as briefly as possible to describe. I may state at once that the results, although in some respects more complete and conclusive than those obtained by Dr. John Reid, are entirely in accordance with his observations.

Into the trachea of a dog a tube was introduced and connected with a bellows for the performance of artificial respiration. The voluntary muscles were then paralysed by the injection of curara, and the animal was kept alive by artificial respiration. The sternum and portions of the ribs were removed and the pericardium was opened, so as to expose the whole of the anterior surface of the heart. One common carotid artery was divided, and a dynamometer-tube connected with a kymograph was introduced into the proximal end. In making all these preparations, much time and labour and great skill were required. Artificial respiration was now suspended, and immediately the colour of the left auricle changed from crimson to purple, and the kymograph indicated a continuous increase of pressure in the systemic arteries. After the increase of pressure had continued for about a minute, the left cavities of the heart became much distended; the auricle, in particular, became expanded into a tense globular ball with a smooth surface. In the next period, the pressure in the arteries began to fall, and, about the same time, the right cavities of the heart, which had hitherto remained of the normal size and form, began to expand, while the distension of the left began rapidly to subside. Meanwhile, the right cavities became more and more distended, and now the right auricle assumed the appearance of a round tense ball, while the left auricle had become nearly empty and flaccid. The right ventricle also became so distended that it projected above the level of the left.

This was the condition of the heart's cavities when the animal died by the final arrest of the circulation; but, more than once, when the circulation was nearly at a standstill, artificial respiration was resumed, and then all the phenomena rapidly changed. The blood at once passed freely through the lungs, the distension of the right cavities of the heart subsided, and the systemic arterial pressure became first excessive and then normal, when the blood had become thoroughly oxygenised and its passage through the terminal vessels was no longer resisted.

We now return to the consideration of the mechanism of the process by which, first, the systemic and then the pulmonary circulation is impeded when the respiration is suspended.

Dr. Reid maintained that the obstruction occurs in the capillaries, in accordance with Dr. Alison's doctrine. He says: "He (Dr. Alison) has shown that this phenomenon is to be referred to an interesting general law of physiology, that has hitherto not received the attention which its importance demands, by which the movement of nutritious juices is influenced by the chemical changes, or, as he terms them, the vital attractions connected with the chemical changes constantly going on in the capillary vessels between those juices and the surrounding tissues by which nutrition and secretion are effected. That such a moving power exists, regulating the movement of the blood that flows through each individual organ, independent of any impulse from the living solids, cannot be doubted. Before arterial blood can be transmitted freely through any tissue or organ, it is not only necessary that the contractions of the heart be performed with a certain amount of force, but that the actions of nutrition and secretion be also in operation; so, in the same manner, before the blood can be transmitted through the lungs, it is not only necessary that the right side of the heart should retain its contractility, but that the chemical changes between the blood and the atmospheric air should proceed. This doctrine is still further illustrated by the fact which we have ascertained, that when the blood in the systemic circulation becomes decidedly venous and unfit for carrying on the process of nutrition, it passes less freely through the capillary arteries into the veins."

In another part of his essay, Dr. Reid expresses his conviction that the irregular afflux of blood to different organs and tissues "cannot be explained by contractile movements of the smaller arteries or capillaries", and he appears to consider that the best explanation of the phenomena has been afforded by Professor Draper, who shows, he says, "in an apparently satisfactory manner how the arterial blood should be drawn into the systemic capillaries, so long as the chemical changes between it and the surrounding tissues proceed, and how the venous blood,



which has no chemical affinities for these tissues, should be driven onwards along the veins to the heart. If this occur in the systemic, the reverse will occur in the pulmonic circulation; for the venous blood has a strong affinity for the oxygen of the atmospheric air that occupies the air-cells upon which the pulmonic capillaries are ramified, while the arterial blood has none, and the venous blood is drawn into these capillaries and drives the arterial blood before it towards the heart."

I have quoted this explanation of the phenomena at some length, because it was the best that could be suggested before the discovery of the structure and functions of the muscular arterioles and of the vaso-motor system of nerves. We are now in a position to substitute for the hypothesis of *vis à fronte*, drawing the blood onwards or retarding its progress, a simple physical explanation of all Dr. Reid's facts, which he himself would have been amongst the first to accept as conclusive. We substitute for mysterious hypothetical attractions and repulsions or suspended attractions, the simple demonstrable phenomena of arterial contraction and relaxation under the influence of nervous agency, and we see how completely this explains the obstruction first in the systemic and then in the pulmonic circulation during the progress of apnoea.

The respiration being suspended, unoxxygenised black blood at first passes freely to the left side of the heart and the systemic arteries and capillaries. Arrived there, either by its direct stimulation of the muscular arterioles or, more probably, by a reflex influence through the vaso-motor nerves and centre, the arterioles are excited to contract, and, by this action of the arterial stopcocks, the blood-pressure in the arterial trunks is increased and the left cavities of the heart become distended and dilated, as seen in the exposed heart of the living dog. The circulation through the systemic arterioles is thus impeded, but not arrested; some black blood passes through the capillaries without undergoing the usual chemical changes, and in this abnormal state it arrives through the veins at the right side of the heart and the pulmonary vessels. Reaching the pulmonary arterioles and capillaries, it excites there the same arterial contraction and resistance as had before occurred in the systemic vessels. The resistance offered by the contracting pulmonary arterioles, while on the one hand it tends to empty the left side of the heart and so to lessen the blood-pressure in the systemic arteries, on the other it causes that great distension and dilatation of the right cavities, more especially of the auricle, which are invariably found to exist when the chest is opened soon after death from apnoea, and which, in Dr. Rutherford's experiment, was plainly seen to occur during the lifetime of the animal.

Some additional facts which were observed during the progress of this experiment are worthy of remark. It was noted that the increased arterial pressure, which commenced as soon as black blood began to pass into the systemic vessels, had existed for some seconds before the left auricle and ventricle began to dilate, and continued for some time after the dilatation of those cavities had reached its height; then, while the distension of these cavities persisted, the arterial pressure began to fall, and it was just at this time that the right cavities, which had heretofore retained their normal size and form, began to be distended and dilated.

The question arises, What was the immediate cause of the diminished arterial pressure which began while the left cavities were still distended? It might possibly be due to diminished contraction of the terminal arteries, but this is not a probable explanation. It was more probably a result of diminished power of the left side of the heart consequent on overdistension of its cavities. It is not unlikely that the heart's contraction may be in some degree enfeebled by the circulation of black blood through its nutrient vessels, but this obviously does not explain the dilatation first of the left cavities and subsequently of the right: a phenomenon which can be accounted for only by excessive contraction, first of the systemic and then of the pulmonary arterioles. We have additional evidence that the weakening of the left side of the heart and the consequent diminution of the arterial pressure, are due to overdistension of the cavities, in the fact that, when, in consequence of the increasing resistance to the circulation through the pulmonary vessels, the blood-supply to the left side of the heart is diminished, the contraction of their muscular walls speedily restores the left cavities to their normal size.

It is manifest from the phenomena which we have been considering—the great distension, first, of the left cavities of the heart, then of the right, and the final rapid arrest of the circulation through the lungs, notwithstanding the forcible contraction of the right ventricle—that the active contraction of the systemic arterioles throughout the body is more than equal to the contractile power of the left ventricle, and the force of contraction in the pulmonary arterioles is more than equivalent to that of the right ventricle.

It is evident that the immediate cause of death from apnoea is the

arrest of the current of blood in the lungs, and this is confirmed and illustrated by the curious fact which was first observed by Buffon, that the young of certain warm-blooded animals—for example, the dog, the cat, and the rabbit—may, within a few days after their birth, be immersed in water of moderate temperature for a period of sometimes half an hour before life is extinct. The explanation of this interesting phenomenon is without doubt to be found in the fact that, in these animals, the foramen ovale and the ductus arteriosus remain patulous for a few days after birth, so that, when, in consequence of the exclusion of air from the lungs, the pulmonary circulation is impeded, the blood passes directly from the right to the left side of the heart and to the aorta, the same as during foetal life, and the circulation consequently continues much longer than in older animals, where, the foramen ovale and the ductus arteriosus being closed, all the blood has to pass through the pulmonary vessels and is thus subjected to their regulating and retarding influence.

With reference to the exact seat of the impediment which arrests the flow of blood through the lungs, I may remark that the extreme anæmia of the minute tissue of the lungs, when examined immediately after death in cases of acute apnoea, is evidence that the stoppage occurs before the blood has reached the capillaries. If, in accordance with the hypothesis of Alison and Reid, the blood were attracted into the capillaries and retained there, in consequence of its not having undergone the normal chemical changes, the capillaries would be in a state of engorgement, and not in that nearly bloodless state in which they are actually found to be.

In the phenomena which attend the inhalation of *nitrous oxide gas*, when given as an anæsthetic, we have a very interesting confirmation of the results obtained by experiments on animals, and, on the other hand, the records of physiological experiments enable us more completely to understand and interpret the facts of nitrous oxide anæsthesia. On several occasions, I have availed myself of the opportunity afforded me by the courtesy of the authorities at the Dental Hospital to watch the phenomena which attend the inhalation of the gas, and I will now briefly describe them.

In most cases, during the first few seconds the pulse and the breathing are quickened, as a result probably of emotional excitement. In the next stage, the breathing becomes slow and shallow and the pulse full and firm. Then, after a period which varies in different cases from forty to eighty or ninety seconds, the pulse suddenly becomes almost, or even quite imperceptible, the features become livid, the pupils are widely dilated, there is a state of general muscular rigidity; in short, all the phenomena of the first stage of an epileptic fit are present. The mouth-piece being removed, the morbid phenomena quickly pass away, the features regain their normal colour, the pulse returns, and for a few seconds has again a full and throbbing character, but quickly regains its normal condition.

The explanation of the phenomena appears to be sufficiently obvious. It is admitted on all hands that, at the temperature of the body, the nitrous oxide gives up no oxygen to the blood or the tissues. The gas becoming rapidly diffused and replacing the oxygen in the lungs and in the blood, black unoxxygenised blood passes into the systemic arteries, and excites, through the vaso-motor nerves and centre, contraction of the muscular arterioles. The resistance thus offered to the passage of unærated blood through the terminal arteries explains the temporary fulness and tension of the radial pulse. The unoxxygenised blood, passing through the systemic capillaries without the usual interchange of materials between it and the tissues, returns to the lungs in an abnormal condition, and there excites contraction of the pulmonary muscular arterioles. The resistance thus offered to the passage of blood through the lungs explains, on the one side, the systemic arterial emptiness with feebleness or even complete disappearance of the pulse, and, on the other, the systemic venous fulness with lividity of the skin. The epileptiform condition is explained by the sudden and extreme diminution of the blood-supply to the brain, the blood at the same time being unærated.

If the inhalation were continued, death would occur from the complete arrest of the pulmonary circulation and consequent overdistension of the right side of the heart, and this is the mode in which death occurs when an animal is killed by the continued inhalation of the gas. A year ago, my friend and colleague Mr. Hamilton Cartwright assisted me to kill two rabbits with the gas. In both animals, convulsions preceded death; and, the chest being opened immediately after death, the heart was found still beating. The right cavities and the systemic veins were greatly distended with blood, while the left cavities and the aorta were comparatively empty and flaccid; the blood on both sides of the heart being equally black. The lungs were anæmic and collapsed to an extreme degree.



It will be seen that the phenomena observed during life and the appearances after death from the inhalation of the nitrous oxide gas are precisely similar to those which result from suspension of the respiration in the human being and in the lower animals.

It is evident, from the many thousands of cases in which the gas has been given and the extreme rarity of a fatal accident from its use, that, in the hands of a skilled and careful operator, no great risk attends the employment of this anæsthetic; but it is also obvious that, to a patient with a feeble fat heart, the distension of the right cavities which accompanies the disappearance of the radial pulse and the general lividity of the features must be attended with some degree of risk, and the danger must be increased when, the muscles of the trunk and limbs being convulsed, the pressure of the contracting muscles upon the veins drives the blood forcibly towards the right cavities of the heart, and so adds to their distension.

## THE CROONIAN LECTURES

ON

### THE DIFFERENCE BETWEEN THE SEXES IN REGARD TO THE ASPECT AND TREATMENT OF DISEASE.

*Delivered at the Royal College of Physicians of London.*

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#### LECTURE III.

I OCCUPIED the last lecture in discussing those complaints which seemed to depend chiefly on disturbances of the ganglionic system, directly or indirectly. There is one other disease which seems to be dependent on a similar state. I mean

*Exophthalmic Goitre, or Grave's Disease.*—In some kind of mutual relationship with the conditions we last considered, we find other diseases, regarding which, recent observations have led to the belief that they arise from disturbances of the sympathetic nerves. And here we find, as we have already done, where the sympathetic is troubled, that women are more prone to its disturbances.

Now, in exophthalmic goitre or Graves's disease, we find, as you are already aware, that females are affected largely in excess of males. Accompanied, as it is very commonly, with anæmia and disturbances of the menstrual function, we can recognise in it a depression and perhaps irritation of the sympathetic system. Maunsell mentions that, out of fifty cases, forty-two were females.

But it is not only in exophthalmic goitre that the excess is so much on the side of females. In simple *bronchocle* we find the same, and also in the other forms occurring chiefly in the young and during pregnancy; while compound bronchocle was met with in one hundred and five females to fifteen males out of one hundred and twenty cases.

I have thus very briefly touched upon the affections in which the sympathetic or ganglionic system is affected. We must now consider those in which the cerebro-spinal system is principally involved.

I have already shown the great frequency of *Talipes equinus* among male new-born infants. I have alluded to the greater number of deaths of male infants, and to the fact that congenital idiocy is most prevalent in first-born males. With regard to *insanity*, the difference between the sexes in number is not very marked. But the relative frequency in the sexes varies in different countries. In the tables given by Dr. Jarvis (*Comparative Liability of Males and Females to Insanity*, etc. Utica, 1850), we find that males predominate in the asylums of America, England, Scotland, Ireland, and France; females in those of Belgium, Norway, Paris, and the pauper classes of England and Wales. In Naples, there were two females to one male; while in Milan this proportion was reversed.

As to the causes of this difference in the two sexes, I cannot do better than quote his words: "In as far as men, from their habits, their position, and their exposures, are more frequently intemperate; in so far as they have more of the sexual passion and less delicacy of sensibility, and are therefore more given to masturbation and sensuality; in as far as they are more involved in business, more interested in property and in politics, in schemes of aggrandisement and in pursuit of knowledge, and are therefore more frequently bankrupt, or disappointed, or overwrought with labour and anxiety; in as far as they are employed with machinery, and with powder, or more frequently travel

and go over dangerous places, or are involved in strife and bodily quarrels, and therefore meet with accidents; falls, blows on the head, etc., than women, there are more male than female lunatics. But, in as far as females have more sensibility and stronger affections, and more active sympathies, and therefore suffer more intensely from grief, and loss, and sickness of friends, and more from a cause almost peculiar to themselves, in the want of domestic sympathy, and in the ill-treatment of intemperate and unkind husbands or children, or other kindred; in as far as females are more sedentary, and are therefore more frequently dyspeptic, or suffer secondary irritation from the sympathy with the reproductive system, and therefore more ill-health; and inasmuch as they are more timid, and are therefore more exposed to fright—females are more liable to insanity than males."

Dr. Meyer of Berlin shows how deeply the sympathetic system is involved in the disturbance, if we may consider that menstrual anomalies are indication of such. Out of 6,000 insane women and girls, there were 1,138 or 18.97 per cent. without, while there were 4,862 or 81.03 per cent. with, menstrual derangements. The excess of menstrual disturbances was more notable in the better class than in the poor, in the proportion of 94.87 per cent. in the former to 67.02 per cent. in the latter.

It would be difficult to estimate how far functional irregularities acted directly or indirectly, or how far the mental disturbance produced effect directly on the functions, or indirectly by interference with appetite, digestion, or exposure, etc. In either case, no doubt, there is a general tendency in the majority to derangements both of cerebro-spinal and ganglionic systems, and each plays to a variable but appreciable extent, in the several cases, into the hands of the other.

The *diseases of the brain*, except those I have mentioned, occur very nearly equally in the two sexes. One disease, epilepsy, in which one would have expected an excess on the side of the females, because it is most frequent at and about the period of puberty, is equally frequent in both sexes. But, as is well known, woman in the pregnant state is exposed, not rarely, to attacks of *eclampsia*. \*How far this bears any relation to epileptiform convulsions in the male, it is difficult to say. It was, in the pregnant female, formerly supposed to be owing to the uræmic state; but it has not so simple a pathology, as this uræmia does not previously exist in many cases. Vascular excitement and tension have something to do with it; and the reflex irritation of the pregnant uterus, and often of the intestinal canal, must be taken into account amongst the probable factors.

In investigating this matter, I found that the urine, passed just before the convulsion, in half the cases in which I could secure it, had no albumen, though all subsequently had it. I think it is not unlikely that this may be found in some of the supposed uræmic convulsions in the male; for Dr. Moxon saw a case of a lad who had violent convulsions, and the first urine was free from albumen, but shortly afterwards it was found in considerable quantity. But I must not detain you longer on this, to obstetricians, interesting and important condition.

The *diseases of the spinal cord* are much more frequent in the male. Thus, in Dr. Brown-Séquard's 177 cases of all kinds of spinal disease, 128 occurred in males and only 49 in females. In locomotor ataxy, this is strongly pronounced. But there is one condition, on which I wish to make a few remarks, that finds its victims among females. This has been called *spinal irritation*, and has been classified as a distinct disorder. Without attempting to decide whether sometimes there is a primary centric cause, I would wish to record the opinion, derived from long and careful attention to the subject, that in the majority of cases there is an eccentric origin, and that principally of the internal organs, which by their disorder cause a reflex irritation on a corresponding part of the spinal cord, and then an extension to the nerves which pass out behind; sometimes only to those supplying the surface over the vertebrae; sometimes extending to those which pass to the front, when it has the form of neuralgia more clearly marked. I take it that it exactly corresponds to the sacral pain in women in labour or suffering from uterine disorders.

This pain, besides the aching over the sacrum, as I have before shown, is accompanied by a distinct tenderness of the skin, limited to a space generally of two or three inches in diameter, most commonly in the centre, sometimes on one side. When touched it is tender, sore, and is relieved by anodynes; in other words, the nerves of the skin are reflexly sensitive and in a state of irritation. Pressure, as is well known, lessens it; and nothing shows its origin better than its complete subsidence on the cure of the internal cause; though, in long-standing cases, it is some time before all this effect has passed off, and a slight return of the cause will more quickly set up pain than at first; from which fact, I think we shall be right in assuming that the part of the spinal cord in connection with the disorder becomes itself affected in some manner;



but whether it goes so far as to produce paralysis, as asserted by Dr. Brown-Séquard, I will not here discuss.

However, if we apply these facts to the so-called "spinal irritation", I think we shall find abundant evidence that derangements of the internal organs are the cause of the greater number of these cases. The close association of these internal disorders, each with a distinct locality of spinal irritation, has been pointed out by Dr. Radcliffe. (Reynolds's *System of Medicine*, vol. i, page 692). Is not this very much in accordance with what we find constantly—and I have already dwelt upon it—that woman is more liable to derangements of the viscera and sympathetic system; and thus the irritation is extended to the spinal nerves with which they are supplied?

To the disease called *cerebro-spinal meningitis*, which I here place for convenience among the cerebro-spinal complaints, the male seems the more liable in general, and particularly in some epidemics.

With regard to the *digestive organs*, there can be no doubt that the functional disturbances are much more frequent in females. I endeavoured to point out many of the causes for this in my last lecture. Neuroses of all parts abound: dyspepsia, gastrodynia, vomiting, spasmodic contraction of the intestines, colic, consciousness of the peristaltic action, imperfect function rendering them liable to constipation, impacted feces, etc., tending to hæmorrhoids.

The majority of these troubles in women are the outcome of a general depression of the vital force, or the effect of reflex irritation from other parts, or most commonly dependent on both, each of which reacts on the other. Hence to treat these cases as local disorders, as, for instance, the dyspepsia by stomachic medicine, without also attending to the causes, is unscientific; so also to endeavour to relieve the constipation by simple purgatives, and the colic by antispasmodics only.

Women, as a rule, rather underfeed themselves habitually, or eat un nourishing food; and thus gradually arrive to a state of general atresia, more or less marked; and this is a fruitful source of functional disturbance. There are many reasons for this: carelessness, want of healthful exercise to give appetite; reflex irritations giving rise to more or less constant nausea. A common cause exists in the fact that, having to look after her own food, having but little desire for it, or having nausea, she does not take trouble to get it; or, in our English mode of living, having to carve for a large family, she does not help herself till the food is cold and not inviting. It is fortunate, then, if she do not seek to replace the solid food by stimulants. I have known very many cases of alcoholism produced by the constant nausea consequent on uterine disturbances. One case occurs to me, where a young married woman had adopted this habit from the constant and intense nausea and vomiting during pregnancy, and from the same thing upon every menstrual period. This nausea was most distressing, with utter loathing of food and prostration upon the slightest uterine disturbance, and she found that stimulants relieved it.

In men, these functional disturbances are more rare; but, amongst those engaged in the restless and anxious business of the world, they are generally of the forms most common in women. However, a considerable number of men, also some women, suffer from the effects of gross feeding and from the too free use of stimulants, coupled with want of exercise; the treatment of these latter, therefore, with general tonics is not so much indicated, as the reduction to simple food and healthful exercise, with such correction of symptoms as the case may require.

Although to the graver diseases of the digestive organs the liability of either sex is the same, yet there are two in which the male is the more frequently attacked; and so notable is this that, in *intussusception of the bowels*, twice as many males suffer; and again, in *typhlitis*, the proportion of males is much greater, for out of fifty cases alluded to in Dr. Bristowe's article in Reynolds's *System of Medicine*, forty-two were males and eight females. No explanation has yet been given for this.

On the other hand, woman is more exposed to *acute atrophy of the liver* than man; especially is she liable to it during pregnancy. Cases of this condition are at any rate rare, and the duration short, thereby rendering the knowledge of its pathology difficult of attainment.

*Gall-stones* occur in males more frequently than in women, in the proportion of two to one. This is probably owing to the richer food and greater amount of alcohol consumed by the male.

Let us now pass on to the *vascular system*. Broadly, we may say that this system is more delicate in females than in males. Naturally, the heart is smaller. For instance, the weight, upon the average, in adult males is 9 ounces 8.74 drachms, while in adult females it is 8 ounces 13 drachms—the difference being about eleven drachms. The diameter of the aorta is less in females; and I think there is no doubt that, in accordance with the general condition of the tissues, the smaller vessels in females are more fragile: as, for instance, is shown in the greater tendency to ecchymosis after injuries. With regard to diseases

of the heart, there is a marked difference. In hypertrophy, men suffer twice as frequently as women; while, on the other hand, atrophy or diminution occurs rather more frequently in females.

Again, dilatation, taken in general, is more frequent in men; but this seems to be owing to the more violent exercise which the various callings of men require.

Dr. Hilton Fagge calls attention to a fact having some bearing on practice he had noticed in the *post mortem* room of Guy's Hospital, namely, that, out of twenty-three hearts with valvular disease where a history of rheumatism was obtainable, there were seventeen males and only six females; and he argues that, as rheumatism attacks both sexes nearly equally, probably the females had recovered more surely than the males, and he suggests that it might be owing to the less severe exercise after a rheumatic attack. Hence, he throws out a hint for consideration in practice, whether more prolonged rest should not be enjoined upon all such patients.

*Angina pectoris*, whatever may be the cause, is much more common in males. According to the tables of Sir J. Forbes, eighty-eight males suffered against eight females. Possibly, this may be rather above the average.

These are the principal points of difference in the vascular diseases of the sexes; but there is one clinical condition much more frequent in woman, which cannot be passed over; because, being the excess of a physiological phenomenon in frequent, or we may say constant, action, it has a large and general application. I allude to that state of the vessels which tends to hæmorrhages, or sometimes only to effusions of serum. I alluded in my first lecture to menstruation, saying that there was every evidence to make us believe that a condition of vascular excitement or arterial tension existed throughout the system, and suggested that, this finding a ready exit in the denuded surface of the uterus, hæmorrhage occurred, and thus the tension was relieved. But, supposing this process was interfered with, then the tension would remain; and if any other part of the body were in a similar state denuded, or the skin or mucous membrane delicate, the tension of the venules becoming too high, their walls would give way, and thus we should have a vicarious hæmorrhage. Without dilating on this highly interesting subject too much, one can readily conceive that, if there be already a congested or denuded state of the bronchial tube, hæmorrhage would be more likely to take place here than elsewhere, and thus tension would be taken off. We know that hæmorrhages from the lungs do recur at the menstrual epoch. I have known it to occur monthly from the bladder, which was in a state ordinarily of chronic inflammation. The same cause doubtless occurs in all those cases of periodical hæmorrhages.

But it is not necessary that the menstrual secretion should be deficient; it may be that the tension is in excess, and the vessels of some part weak, which, giving way, permit the hæmorrhage, which we then call supplementary. There seems to be a tendency to periodical recurrences of arterial tension, not only in women, but in men and in the lower animals; not always necessarily monthly. In women, a second or intermediate menstruation occurs, about half way between the normal menses, with much disturbance. I have seen this in the healthy, and often in neurotic patients.

Besides, there are other paroxysms of a similar kind following various excitements, which are relieved by oozings of blood; so that there is hardly any part of the body which has not been the seat of these hæmorrhages. This may serve to explain the occurrence of bleeding from the eyes, nipples, and skin, especially under the ecstatic erethism; though generally, if not always, there is at the same time a local stasis of neural origin. This is a very interesting subject, and clearly requires and would repay more research. The sphygmograph will vastly help us in it. In the last Lettsomian lectures, Dr. Wiltshire has given an excellent discussion on these matters. He mentions an instance when bleeding took place from the penis of a man every three weeks, and other dispositions of the kind in men.

But, besides these cases, there also exists in females a greater tendency to local congestions (blood-stases). I do not mean those bleedings from mechanical causes, for instance, from the stomach and bowels from obstruction of the portal vein; nor those which occur from a vitiated state of the blood, as in Bright's disease, purpura, jaundice, etc.; but those which seem, so far as can be made out, dependent on disturbances of the vaso-motor nerves from emotional or reflex stimulation. The engorgements of the breasts and of the uterus from mental emotions may be instanced among many. Men are subject to blood-losses from these influences, but not to so great a degree nor so frequently.

The opposite of this state of general vascular excitement is to be seen in the diseases I have already alluded to, namely, anæmia and chlorosis and their allies. Possibly, the functional paralyses, not unfrequent in women, are owing also to a kind of local anæmia affecting



the nervous structures in correspondence with the affected parts. The case I mentioned in my last lecture would be readily explained on this supposition. The sensitiveness of the vaso-motor nerves, as well as the sympathetic, would lead us to expect that we should find woman more liable to the phenomena which follow both contraction (irritation) and dilatation (relaxation) of the vessels; and this is borne out by everyday experience. The majority of the cases where errors occur in these functions never come on the *post mortem* table, and probably, if they did so, we should find nothing, the action being vital, leaving no sign.

There is one other phenomenon which it might be well to consider a moment. I mean the *growth of the heart* which takes place during pregnancy. This now established fact is doubtless the result of sympathetic excitement communicated from the uterus, and enables it to meet the new requirements. It is a purely healthy process; but it would be interesting to know how far this growth may occur in the presence of large tumours in either sex; and again, how far the opposite, viz., amputation of limbs, would be attended by shrinking of the heart.

One cannot pass this subject without alluding to the changes which occur in the state of the *blood* during pregnancy. There can be now no doubt that this fluid is in a decidedly different condition from that of the non-pregnant state. The blood of non-pregnant women differs somewhat from that of healthy man, being more watery; but when men are of the leucoplægmic type, their blood is but little different from that of women. But as soon as woman becomes pregnant, the change slowly commences and gradually increases till she arrives at full term. So far as investigations have ascertained, the changes are as follows. It is more watery, its serum deficient in albumen, the coloured corpuscles less, in the proportion of 111.8 against 127.2 in the non-gravid state. The fibrin, on the contrary, is increased, and that undefined "extractive" also. Hence is explained the liability to thrombosis, which is so well known.

There is also a substance passed out from the kidney during pregnancy, which has been called "gravidine," or "kiestine" when altered by keeping. Probably, this previously exists in the blood. There are probably other changes with which we are little acquainted.

It is this state of the blood which renders the woman so liable to contract the formidable blood-changes well known in the puerperal state; it is this which intensifies all the zymotic diseases, when they invade the lying-in woman.

Is it a change found only in the pregnant and puerperal person? Are there no phenomena similar in the male? It may be so; for, at any rate, kiestine has been noticed in the non-pregnant woman by myself; and by others in men. One has a parallel in the susceptibilities to blood changes in some men who, apparently in excellent health, succumb to pyæmic and septicæmic conditions in a few days.

The process of pregnancy is simply physiological, and is doubtless carried on according to the same principles as the other processes of the body. But it is so enormous a change, and takes place so rapidly, that we are apt to think we find in it new and unique phenomena. In this exaggerated action and its errors, may we not find a magnified view of less but similar conditions in the non-pregnant woman and the male; a more distinct and clear exposition of what is in them ambiguous, both in physiology and pathology.

While on the subject of the blood, I must mention the well-known diseases *rheumatism* and *gout*. Rheumatism, taken generally, attacks, as I have already said, the two sexes nearly equally, rather more males than females; but gout more decidedly selects males for its victims, at least in its articular forms. Dr. Garrod (Reynolds's *System of Medicine*) considers that the occurrence of the menses during so long a period of the woman's life is doubtless a great safeguard against the disease, and, as a rule, whenever it appears in the female it is after the cessation of this function. But Darwin (*Descent of Man*, part 2, chap. 8) also suggests a further explanation; for, in speaking of "hereditary transmission," he says: "That characters which appear late in life in one sex are transmitted exclusively to the same sex. Gout generally falls under this rule, for it is generally caused by intemperance after early youth, and is transmitted from the father to his sons in a much more marked manner than to his daughters." But, doubtless, the more intemperate habits of men and their grosser living, tend very much to the development of this complaint, in addition to the above reasons.

*Diabetes mellitus*, not unfrequently associated with gout and rheumatism, is much more frequent in males than in females. The origin of diabetes is still undetermined; but the opinion that it is dependent on disturbance of the cerebro-spinal system will receive some support, from the fact that disorders of that system are more frequent in males.

[To be concluded.]

## TERMINATION OF THE CASE OF MISS HARRIET MARTINEAU.

By THOMAS M. GREENHOW, M.D., Chapel Allerton, Leeds.

SINCE the publication of the autobiography of Miss Harriet Martineau, it has become incumbent on me to say a few words to the profession on the termination of her case, which, thirty-two years before her death, excited so much interest and attention.

First of all I may observe, what will be obvious to all readers, that section III, vol. ii, page 191, contains *little fact and much imagination*; and that, as was shown by the *post mortem* examination, instead of her being cured by mesmerism or any other agency, although the distressing symptoms were greatly relieved by the palliative treatment exclusive of mesmerism pursued while she was at Tynemouth, no cure was effected, but temporary suspension of suffering took place from natural causes connected with local disease. But, before giving a report of the proofs ascertained after death of what she had suffered so much discomfort from during life, I may refer to her constantly expressed conviction that her disease was of a fatal malignant nature, and could only terminate in early death, and to the fact that, in 1855, eleven years after I had seen her, she consulted two eminent physicians in London, Dr. Latham and Sir Thos. Watson, by whom she was assured that she was free from heart-disease; she nevertheless maintained and asserted her conviction that she would soon die from that cause. In proof of this circumstance, I need only refer to the letter from Sir Thomas Watson,\* which appeared in the *BRITISH MEDICAL JOURNAL* for July 8th, 1876, and in many newspapers.

With these preliminary remarks, I shall now relate the substance of the report of the *post mortem* examination made by Mr. King, by whom Miss Harriet Martineau was attended during the later years of her life, and furnished to me by my friend Mr. Higginson of Liverpool. She died on June 27th, 1876, at the age of seventy-four, twenty-one years after Dr. Latham and Sir Thomas Watson had declared her free from disease of the heart. Of the history of her health since she ceased to be under my observation, thirty-two years before her death, I know nothing except from occasional imperfect reports.

**POST MORTEM EXAMINATION.**—Forty-two hours after death a *post mortem* examination was made by Mr. King. He says: "On opening the abdomen, the muscular tissue I cut through showed decided signs of fatty degeneration, and a vast tumour became apparent at once. I could pass my hand round it and turn it completely out of the cavity, where it hung by one pedicle, which was found to be attached to the broad ligament close to the cornu uteri. The broad ligament and the Fallopian tube were spread over the surface of the tumour, to which they were adherent, and the tube admitted a wire to be passed through to the extent of three inches or more till it reached the pedicle. The tumour was pear-shaped, with the narrow end within the pelvis. In the longer diameter, from the upper to the lower extremity, it measured twelve; in the lateral direction, ten inches. On cutting into the tumour, about half a pint of brown fluid escaped; the remainder of the contents consisted entirely of a mass of greyish-brown soft stuff. I can only compare it to bread soaked in tea, dotted here and there with white hardish pieces, exactly like half of apple-pies, generally two halves being together. I have had the sac preserved in spirits. On sewing up the incision, Mr. Higginson found that it would contain 110 ounces—10½ imperial pints. The larger circumferences measured 30 inches, the smaller 28 inches. The pedicle had the appearance of having been cut pretty close to the uterus. The interior was still lined with abundant flakes of white and rather glistening substance, which did not grease the paper nor melt under heat, but gave off a slightly grizzled smell. Under the microscope, crystals of cholesterine were sparingly found, and granular matter. The disease was in the left ovary. The uterus was small and unaffected. The right ovary was normal. The liver was elevated into the chest by pressure from below, but otherwise appeared normal. The kidneys showed nothing remarkable. The intestines nearly entirely occupied the upper cavity of the abdomen, the stomach being much pushed up, and to the right overlapping the liver a good deal. The diaphragm was much arched, by which the cavity of the chest was much diminished. There must of necessity have been considerable interference with the action both of the lungs and heart from pres-

\* Sir Thomas Watson says: "I have been in the habit of illustrating my lecture by looking the heart affected to such an extent, which, if carefully handled, may remain long undetected, but which has escaped or almost escaped me more easily than it would seem. But in Miss Martineau's case there was no such obvious risk, and I therefore attributed to her that her life was in no immediate danger."



sure." Mr. King says that circumstances did not admit of his examining the chest, but "I conclude that the heart sympathised in the general fatty degeneration of muscular tissue, and during life I was convinced that fatty degeneration existed". "As to the mode of death, this was unquestionably due to failure of the heart's action, which had for some time (about eighteen months) been gradually weakening; and, during the last few weeks of Miss Martineau's life, that organ had failed very markedly."

I have carefully examined, with my friend Mr. Higginson, this very large cyst, which undoubtedly had its origin in the left ovarium. The surface was traversed by blood-vessels, and to it was adherent the broad ligament of the uterus with its fimbriated extremity, and the Fallopian tube, this remained pervious, and admitted a wire to be passed through to the extent of three inches, when it came into contact with the pedicle, which was attached to the fundus, or perhaps more properly to the left cornu uteri.

From these data I shall endeavour to deduce a pathological history of the case, which will reconcile the symptoms experienced by the patient with the progress of organic disease.

The first question that presents itself for solution is, How did the displaced ovarium arrive at its situation near the uterine extremity of the Fallopian tube just before it entered the cornu uteri?

In answer, may it not be inferred that it had passed through the tube itself, which remains pervious? and, we know, as in cases of extra-uterine pregnancy or the formation of tuberculous matter, the Fallopian tube will admit of almost any degree of dilatation, it might easily enough admit the passage of the compressed ovarium, and in process of time regain its original calibre.\*

If this inference be correct, the passage of the ovarium through the Fallopian tube must have been a slow process, and attended with much suffering, experienced in the early stages of disease. In this respect, it would bear some analogy to the passing of gall-stones or of calculi through the male urethra.

The dislocated ovarium in the first stage of its morbid growth, by its weight and connection with the fundus uteri, dragged the uterus down into the lower part of the pelvis, and so produced the retroversion observed when Miss Martineau was at Tynemouth, and by its fixed position between the rectum and the bladder occasioned the distressing symptoms then experienced. But as the displaced ovarium gained greater dimensions, it would gradually raise the uterus from its imprisonment in the lower part of the pelvis, and in this way the patient was relieved for a considerable time from the pain and discomfort it had caused. It was this temporary relief which led to the conclusion, not unnaturally, that she was cured. At this time, it is probable, that the growth of the ovarian tumour was not rapid; but, as time went on, its size became so great as to reproduce symptoms of oppression, the history of which is imperfectly known to me, and death has at length revealed the pathological condition which has been described.

In 1841, when Sir Charles Clarke saw Miss Harriet Martineau, careful examination led us to conclude that the retroverted uterus was itself enlarged, and that it would eventually gain such dimensions as to raise it from its fixed position and so afford relief to the patient. But we were convinced that no malignant disease existed in the uterus. The displaced ovarium was at that time behind the fundus uteri, and probably gave the impression of abnormal enlargement of the uterus itself. Or, it is possible, that such enlargement actually existed, and that in the subsequent progress of disease the ovarium might gain nourishment at the expense of the uterus, thus inducing the small size of that organ at the time of death. It is not easy to define the changes produced during the lapse of thirty-two years. Whether some years ago, while the constitution retained some vigour, and the tumour had not yet attained its great size, it might have been successfully removed by operation, so as to effect a *real cure* of the disease, I had no opportunity of judging.

Such is a brief sketch of the conclusions at which I have arrived after careful reflection on this interesting case: interesting, not only

in reference to the eminent lady who was the subject of it, but, perhaps, as affording a contribution of some value to the class of diseases of which it is a remarkable example. Perhaps, too, it may serve in some degree to explain some of the peculiarities of character which were apparent during her remarkable career.

## THE ADVANTAGES OF EARLY OPERATION FOR THE CURE OF HARE-LIP.

By HENRY G. RAWDON, M.D., M.R.C.S.,

Surgeon to the Liverpool Infirmary for Children.

In the following remarks, I propose advocating the practicability and desirability of operating for the cure of hare-lip very soon; I mean within a few hours after birth. It is no doubt true that this has been occasionally done; but the practice has, as yet, neither received the sanction of our surgical authorities nor has it been fairly tested by experience. As a matter of fact, most surgeons prefer postponing the operation till after the third month. This means that infants suffering from hare-lip are most frequently so feeble and imperfectly nourished, from the first ten days or so after birth till they are over three months old, that an operation cannot be undertaken without unjustifiably hazarding life.

It is perhaps not so well known as it might be, that the mortality attending the rearing of these unhappy little ones is very considerable, more particularly in large towns, where the attempts to hand-feed are too often very injudicious. If the fatality in these cases be so great as I am inclined to believe, at least among the poorer classes in towns, it is obvious that the cause is the absence of the natural nutriment: breast-milk. Consequently, we may safely conclude that if such infants, by early operation, can be placed in a position to obtain their natural nourishment, the cause of fatality will be removed. The practice of early operation, however, can only be recommended when there is a reasonable hope of the infant being afterwards able to take the breast; therefore, where there is no prospect of this end being attained, as in cases complicated with extensive cleft palate, the operation cannot be urged.

An argument in favour of the practice I propose, is the fact that infants, born with this class of deformity, are for the most part strong and in really good condition at birth, and continue so for a week or two, until the attempt to bring them up by hand, even when judiciously managed, begins to tell, and they more or less rapidly fall away, and often have a great struggle for life in the earlier weeks.

Does it not, therefore, appear a prudent thing to take advantage of the inherent vitality of the new-born infant, and operate within twenty-four or thirty-six hours after birth?

It is scarcely necessary to state that there is seldom difficulty in preventing the milk from leaving the mother, during the few days the lip will require to form a sufficiently firm union for the infant to begin to take the breast.

I have lately had two cases under my care, which tend to support the practice I recommend. In the first, which occurred in private practice, I operated, November 2nd, 1876, about twenty-three hours after birth. In this case, both hard and soft palates were completely cleft, therefore, I did not recommend operation, as sucking would necessarily be impossible; however, as it was the wish of the medical attendant, and the parents were extremely anxious it should be attempted, I operated. The fissure was on the left side, and into the nasal cavity. The intermaxillary bone projected very considerably, and required to be cut across on the right side and bent into position. The lip had also to be well freed from its bony attachments on each side. The bleeding was not excessive, and was well controlled by small pads of rolled lint pressed upon the cut surfaces for a few minutes. I used three silver sutures and one entomological pin (the hare-lip pin recommended by Mr. Stokes of Dublin). This latter I removed the following day, when I found union perfect, and in two or three days afterwards I removed the silver sutures. The child bore the operation remarkably well, and the result was extremely gratifying. I have lately been informed it is thriving as fairly well as can be expected, considering it is brought up by hand.

The second case was a feeble and imperfectly nourished infant, five weeks old, which came under my care at the Infirmary for Children, October 18th, 1876. The fissure was on the left side, exposing the nasal cavity, and the anterior half of the palate was cleft to a considerable extent. To my surprise, I found that the mother still retained her milk, and that with assistance by pressure the child was able to obtain a certain, but obviously insufficient, amount of nourishment. The cleft in the palate was very wide, and the intermaxillary bone extremely

\* My friend Mr. Higginson is inclined to give the probability of the passage of the ovarium through the Fallopian tube; but pathology describes many instances of the rupture of the tube, and the pedicle, which appears to have a wide orifice, and is capable of admitting a finger, in the cornu uteri, the tube being open to the point of rupture, and the division of the pedicle having taken place. The ovary is thus to have the uterus on one side and the tumour with the remainder of the Fallopian tube and broad ligament on the other, seems to render it highly probable that the ovarium of its normal size forced its way through the Fallopian tube into the cornu uteri. I am inclined to regard this as a very rare occurrence, and not to be expected in other cases with a history of retroversion of the uterus, and a displaced ovarium. The general history of the case remains unaltered, and the result, of suffering; secondly, of temporary relief (supposed cure); thirdly, of renewed illness, associated with collateral symptoms and so ending in death.



prominent, necessitating its being divided on the right side and pressed down into its place. The steps and mode of operation were similar to those in the preceding one. In this case, I feared that the immediate effects of the operation, and the interference with the infant's limited supply of breast-milk, might jeopardise its recovery; but I was careful to direct that all the milk drawn from the mother should be given to the child. The result was happily very satisfactory, for on the sixth day the infant was able to suck. It now sucks perfectly, and is thriving well. The cleft in the palate, I am able to state, is quite closed, no doubt by the continuous pressure of the united lip.

The first case adds one more to the few recorded instances of newly born infants successfully operated upon for hare-lip. The second shows that, within a few days after operation, an infant is capable of sucking. Indeed, the good results attending these two cases have encouraged me to bring the question of early operation before the profession.

### FAILURE OF SALICIN AND SUCCESS OF COLD PACKING IN HYPERTYREXIA, IN A CASE OF RHEUMATIC FEVER.

By CLEMENT DARUTY, L.R.C.P. & S.EDIN.,

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IN a recent paper, by Dr. Cavafy, on the "Antipyretic Action of Salicylate of Soda", the following paragraph occurs: "I am not aware of any published cases in which salicylate acid or its soda salt has been employed in cases of fever, rheumatic or other, in which the temperature has reached or exceeded 107 deg.; but my reason for bringing the above case under the notice of the profession is, that it seems to show that we are now in possession of a most valuable remedy for hyperpyrexia, which is usually treated by the cumbersome and tiresome method of cold baths." Having had lately a case in my practice which bears upon this point, I think the occasion suitable for giving my notes of it. On October 14th last, I was called to see an out-patient, Jane L., aged 18, unmarried. I found her to be a strong well-developed young woman, of a dark complexion, complaining of agonising pains in her knees and hip-joints; hot skin, with a small amount of perspiration of slight acid reaction; and an axillary temperature of 101 deg. Fahr. She gave a history of sleeplessness, restlessness, and vomiting of food, after exposure to cold a few days previously. I diagnosed the case to be one of rheumatic fever, which was borne out by the subsequently shifting character of the pains, which afflicted all her joints in turn. Ten grains of compound ipecacuanha powder were ordered, to relieve pain and induce sleep, which she had not enjoyed for several nights; while, in addition, twenty grains of acetate of potash were ordered every four hours. On seeing the patient the following day, I found that she had slept for some hours, the pains were less acute, but the temperature and condition of the skin were much the same.

On October 16th, the temperature being still high, and the pain rather worse, I determined to try the effects of salicylate of soda, of which fifteen grains were ordered every four hours.

On October 17th, considering that the patient had had a fair trial of salicylate of soda, of which she had now taken about two drachms, with the only effect of raising the temperature, she was ordered to be removed to the hospital, where the case could be more closely watched under more favourable hygienic conditions than in her wretched home. Hot fomentations were applied to the painful swollen joints (the shoulder-joints were now the parts most affected). The salicylate of soda was continued, and a mixture of bitartrate of potash, lime-juice, and water was given as a drink, and ten grains of compound ipecacuanha powder towards evening, which had a good effect in relieving the pain and procuring sleep, as the night-nurse on duty reported a tolerably quiet night.

On October 18th, the temperature had risen this morning to 104.2 deg. Fahr. from 103.6 deg. Fahr. on the previous evening. Salicin was now tried in place of salicylate of soda, fifteen grains being given every two hours; but although benefit was hoped for from the change, the temperature stood at 103 deg. Fahr. at eight o'clock P.M., a very slight improvement on that of the previous evening. Cotton-wool had now to be substituted for the hot fomentations, as the patient could not bear even the slight movement necessary for changing them, so extremely painful were the joints.

On October 19th, the temperature was 104.6 deg. Fahr. The dose of salicin was increased to twenty grains every hour, without the slightest good effect, for at two P.M. the thermometer registered 107 deg. Fahr., while the pain was excruciating and the skin burning hot. Salicylate of soda and salicin having thus proved utterly

ineffectual in the reduction of temperature, while the state of the patient had become critical, I determined to have recourse to cold-packing. A bed was covered with a sheet of Macintosh cloth. Upon this was spread a blanket, wrung out of very cold water, in which the patient was closely enveloped; and another blanket, prepared in the same way, was laid over her. The pain seemed to be relieved almost immediately, as she said that she felt "nice", and in an hour the temperature had fallen three degrees. As the blankets had now become warm, fresh cold ones were substituted; and at 4.30 P.M., two hours after the first application, the temperature was as low as 101.6 deg.; at 5.40 P.M., it had still further fallen to 101.2 deg. The cold-pack was now discontinued, and the patient transferred to a dry warm bed, a hot bottle being applied to her feet. She soon fell into a sound sleep, and at 7.10 P.M. the temperature was 100.6 deg. At 8.40 P.M., unfortunately, it had risen to 101.6 deg., reaching 102.3 deg. at ten o'clock.

October 20th. The patient had passed a tolerably good night, and took her beef tea and milk well, but the temperature had risen to 105.6 deg. The skin was very warm, and the joints red and swollen, but not painful. Salicin was again administered in twenty-grain doses every hour, in the hope of at least preventing any further rise in temperature; but at noon, the temperature was 105.8 deg.; and at 3.50, 106.8 deg., while the patient was imploring a reapplication of the cold. I, therefore, decided to acquiesce in her wishes; and at 4.5 P.M. the cold-pack was reapplied, with the beneficial effect of reducing the temperature to 102.2 deg. in about one hour, while at 6 P.M. it was as low as 100.6 deg. The cold pack was then discontinued. After about an hour, the temperature began to rise, and at 11.30 P.M. reached 104.4 deg., notwithstanding which, the patient felt well and free from pain, and slept well through the night.

October 21st. Temperature at 8 A.M., 104.1 deg., from which it gradually fell to 103.2 deg. at night. After this date, the case presented no special point of interest, the temperature gradually falling day by day till it reached the normal on November 2nd.

Throughout the case, there was no cardiac complication. The patient is now perfectly well.

Having had very good results in some other cases from salicin and its salts, I watched this case with special interest, as it seems to prove that the medical man must not trust to one course of treatment, but be prepared to fall back upon others which may appear too heroic for ordinary use.

### THE ADVANTAGES OF ETHER AS AN ANÆSTHETIC: WITH A DESCRIPTION OF A NEW INHALER.

By LAMBERT H. ORMSBY, M.B. Univ. Dubl., F.R.C.S.I.,

Surgeon to the Meath Hospital, Dublin.

THE power of various substances to produce insensibility has long been known; and in all ages certain narcotic preparations have been employed to produce a more or less unconscious state so as to lull the pain during the performance of surgical operations. It is needless here to enumerate the different anæsthetics employed; their advantages and disadvantages are all doubtless well known. But what seems to interest the profession most on the subject in the present day is the vexed question, What substance have we that combines—1. Safety to the patient; 2. Rapidity in action; 3. Ease of application and portability; 4. Economy of first cost? On each of the following heads, I would wish to make a few observations.

1. As regards the anæsthetic safest to the life of the patient, few operating surgeons cannot but be aware of the startling fact that week after week, in the columns of the various medical journals, their attention is arrested by a paragraph headed "A Death from Chloroform"; and, taking into consideration the number of deaths attributable to the use of that drug that are never recorded which occur in private practice, a high percentage of mortality must of necessity exist. And even surgeons of lengthened experience who are wedded to the use of chloroform, and who believe that there is no danger in it when properly administered, because they were fortunate enough never to be present at a fatal result during the administration of the drug, must, however, have seen hair-breadth escapes, when dangerous syncope, pallid cheeks, imperceptible respiration have resulted, and the patient only recovered from the jaws of death by the use of artificial respiration, galvanic battery, ammonia, inversion, and other means resorted to during those apprehensive moments: a time of the most painful anxiety to the surgeon, to say nothing about the delay in the operation, the appearances to the attendants, friends, etc. Such consequences,



I say, occur sufficiently often to allow all to be conversant with the fact that, no matter whether a stethoscopic examination of the heart reveals that organ to be free from organic disease, still there is danger; and, from the number of deaths recorded from time to time, the most bold and skilful operator cannot be blind to the fact that in many cases the anæsthetic drug he uses is more dangerous to the patient than the knife he efficiently wields in the interest of surgery. From all that has been written and said on the dangerous effects, my opinion is, that surgeons are not justified, without very good reason, in using such a drug that has been proved to be the most dangerous of all anæsthetics. This fact, I am aware, has been proved by means of statistics, and we all know that statistics occasionally lead to erroneous conclusions in the abstract; but they are the best means we have of forming an approximately correct idea, coupled with an individual recollection of some hair-breadth escapes and fatal terminations resulting from the use of chloroform; and the following statistics, which were proved by the late Professor Morgan of Dublin to be correct, show the relative danger of each agent.

	Deaths.	Inhalations.
Ether .....	4 to	92,815 or 1 in 23,204
Chloroform .....	53 to	152,260 or 1 in 2,873
Mixture of chloroform and ether .....	2 to	11,176 or 1 in 5,558
Bichloride of methylene.....	2 to	10,000 or 1 in 5,000
Nitrous oxide .....	Not given.	

From the above table, we learn two facts: 1. That chloroform is the most dangerous anæsthetic (of those in ordinary employment) that we could use; 2. That ether is about eight times safer, and proved by the same table to be the safest of all anæsthetics used in prolonged operations.

As regards the advantages of ether, I may mention that I have given it with success to patients varying in age from three months to eighty years in both sexes, and for surgical operations of the most varied nature, comprising deligation of arteries, amputations, delicate ophthalmic and prolonged dental operations. I have kept a young man of twenty-two under the influence of ether, for my friend and colleague Mr. Porter, Surgeon to Her Majesty the Queen in Ireland, for three hours and forty-five minutes, during a prolonged and bold operation for the successful removal of a large pulsating aneurism of the scalp. For my colleague Mr. Macnamara, I have kept a patient for one hour and ten minutes under the influence of ether, during the successful deligation of the subclavian artery in its third stage for aneurism. In this patient, the respiration was considerably impeded by the disease, and yet the ether acted perfectly, with the happiest results.

2. What anæsthetic is rapid enough in action to be universally adopted? In over a hundred ether-inhalations that I have taken the trouble to tabulate, I find the average time requisite for complete anæsthesia to be produced was two minutes, sometimes less, sometimes more, but in nearly all under three minutes. Few chloroformists can boast of better results. I have administered nitrous oxide gas, and taken it myself; and its action, I am willing to admit, is very rapid and very pleasant, but its effects pass away just as quickly, and are quite inadmissible for prolonged operations of any kind, dental or otherwise.

3. What anæsthetic is convenient as regards portability and application? None more so, I answer, than ether. When kept in a properly stoppered bottle, it is safely carried, occupies a small bulk, and is not liable to spoil; while the inhaler that bears my name can be carried in a remarkably small space, sufficiently convenient in size to be carried in the pocket of the administrator. This, I may mention, is of some importance, for the bulk and unportability of some inhalers have been the insuperable obstacles that prevented them from being more generally adopted. In private practice, this was the great objection to the late Mr. Morgan's inhaler; notwithstanding such disadvantages, however, it has been extensively used in Ireland, England, and America. There is one point, however, which must be borne in mind, that writers in favour of ether have not sufficiently alluded to, and that is the great inflammability of the ether-vapour when brought into contact with flame; and I have seen surgeons who have had to operate at night use reluctantly chloroform instead of ether for that reason. This danger is well to remember; but, with ordinary care, no untoward result may be anticipated, for, by using an inhaler that prevents the ether from escaping, the danger is at once obviated; also, the flame must be brought in actual contact with the condensed vapour before it will ignite.

4. What anæsthetic combines economy of first cost with the three preceding advantages? Many of the efficient forms of ether-inhalers that have been suggested have received less attention than they deserved, owing to their complication, the quantity of ether consumed in each inhalation, and lastly their price, which varies from four to ten guineas, to say nothing about the unportability of the apparatus. Ether is sold

on an average at 4s. to 5s. per lb. wholesale, or by retail at sixpence an ounce. The quantity used may, in many cases, be nothing to large institutions; but, in the Army Medical Department, and other places where every sixpence of expenditure is tabulated, this may be of some importance. In the *impromptu* manufactured contrivance, with a towel made into the form of a cone with a hollow sponge in its centre, I have seen six or seven ounces of ether poured again and again during one inhalation with imperfect results, air over-diluting the vapour, and the ether at the same time running over the patient's face while the operation was performed and completed, when the patient was merely intoxicated, not anæsthetised.

I maintain, that the one principle that should be kept in view in successful ether-inhalation is to shut air off as completely as possible, and allow the patient to breathe and rebreath the air already in the lungs. At each respiration, about 25 to 35 cubic inches of air are expired into a thin India-rubber bag, which holds a little more than the ordinary tidal air, so as to make an allowance for any extraordinary expiration. In this bag the condensed ether-vapour is enclosed, which is very soon warmed by the heated air from the lungs, and the vapour is thus prevented from producing any irritating effects on the larynx and air-passages, such as coughing, etc., which cold ether is known to produce. With such an apparatus, which I have been using for the last nine months, I have, with a single ounce of ether, been able to produce complete anæsthesia in less than two minutes; and with children I only use half an ounce of the drug to produce the same effect.

Annexed is a woodcut, which gives a fair idea of the inhaler during administration.

This inhaler has been adopted in many of the leading hospitals in



*Description of Inhaler and Directions for Use.*—It consists of: No. 1. An India rubber flexible bag, covered over with a network to prevent undue expansion during expiration. No. 2. A soft metallic mouthpiece, which allows of adaptation to any face, the soft metal being able to be bent into any shape; along the border applied to the face it is lined with India-rubber tubing, in order to fit more closely, and thus prevent the ingress or exit of air. No. 2 represents a simple sliding valve, so as to admit air if required, or allow its escape if necessary. In the body of the inhaler there is a cone-shaped wire-cage, into which fits a similarly shaped hollow sponge, into which one ounce of anhydrous anæsthetic ether, specific gravity 0.723, is poured, and the inhaler is then ready for administration. If it be necessary to give more ether in a prolonged operation, at fig. 2 there is a tube passing down to the centre of the sponge, into which the ether can be poured without raising the mouthpiece from the face. At first, it is advisable to allow the small aperture at fig. 2 to remain open for a few moments, when it should be closed, so as to allow the patient to breathe and rebreath the same ether charged air, until complete anæsthesia is produced.

Dublin, viz., the Meath Hospital, the City of Dublin, Dr. Steevens's, and by Mr. Stokes of the Richmond Hospital. When last in London, by the kindness of Mr. Christopher Heath (and I take this opportunity of returning him my best thanks), I was permitted to demonstrate its use on a patient of his at University College Hospital, and have since received the following letter from Dr. H. Radcliffe Crocker, Administrator of Anæsthetics to the Hospital.

“University College Hospital, London, January 12th, 1877.

“Having had an opportunity of seeing Dr. L. Ormsby administer ether with his inhaler in a case at this hospital, I have much pleasure in stating that, while extremely simple, portable, and easily managed, it was thoroughly efficient in its action, the patient being rendered completely insensible in two minutes, without coughing or unpleasant symptoms, while only a single ounce of ether was consumed in an operation occupying about ten minutes.

“H. RADCLIFFE CROCKER.”



This inhaler has been made by Messrs. James Coxeter and Son, Grafton Street East, London, and they deserve my best thanks for the efficient manner in which they have carried out my directions as regards its manufacture, besides bringing it out at a very moderate price.

## LESION OF THE SYMPATHETIC ON ONE SIDE OF THE HEAD.

By FRANCIS WARNER, M.D.Lond., M.R.C.P.,

Assistant-Physician to the East London Children's Hospital; late extra Acting Physician to the Children's Hospital, Birmingham; etc.

DR. BURNEY YEO'S interesting case of one-sided development of exophthalmos, and the discussion thereupon at the Clinical Society, suggested to me to publish the following case, where a lesion of the vaso-motor system, probably intracranial, produced excessive excitability on one side of the head.

Elizabeth R. came under my care on February 26th, 1876, as an out-patient at the Children's Hospital, Birmingham. The mother, a very intelligent woman, complained that the girl was subject to "fainting attacks and some cough". The patient was a healthy looking girl, rather pale, aged 11. She did not bear the aspect of the nervous temperament, but the mother considered her "rather nervous". When questioned, the girl complained of "headaches" and also a "feeling of numbness at the top of the head". The mother then said that she had noticed that, on excitement, *the right side of the face flushed up to the middle line* much more than the left side. The neck had not been noticed to flush. The following history was obtained.

The girl was apparently healthy and well till aged six years. Then, one day, after a hearty dinner, she went upstairs, and, on returning in a few minutes, was *suddenly convulsed*; she had general twitchings all over the body, no loss of consciousness; she knew all that was passing, and remembered it now. This convulsion lasted an hour. After this attack, there was no drowsiness, no vomiting, but she was fatigued. She was kept quiet a few days, but nothing more happened. In two or three days, the mother noticed the frequent flushing of the right side of the face, the left remaining pale. This she pointed out to the surgeon attending, and she had observed the same tendency ever since. She never had any convulsions but this.

She never had any "fainting attacks" previously, but since had been liable as follows. She was at times unable to speak; sometimes could not open her eyes; never struggled; the hands remained warm; she never bit her tongue. Before these attacks, the mother thought she was more liable to flushing of the right face.

On examination, when looking straight forward, the right pupil was widely dilated, the left of moderate size. The iris of the left eye was light brown, in the right uniformly much darker in colour. The mother had noticed this change of colour as something that had happened during the last few years. Both pupils reacted to light, but the right was much more sluggish; there were no signs of iritis; each eye reacted normally to atropine and Calabar bean. The power of accommodation was distinctly less in range in the right eye as compared with the left, but was not much impaired. There was no affection of any branches of the motor oculi nerve. The fundus was healthy and the circulation was equal in each eye. In these ophthalmic details, I had the advantage of co-operation with Mr. Lloyd Owen.

While talking to and examining the child, the right side of the face and ear distinctly flushed more than the left; and this difference was observable to the median line of the nose and forehead; to touch also the right was warmer than the left. There was no perceptible difference in the tongue on the two sides. The right hand felt warmer than the left. Both radial and carotid pulses were distinctly smaller to the touch on the right than on the left side, but the amount of this difference varied on different occasions.

There was slight drooping of the left eyelid; this the mother had always noticed in the child. There was no enlargement of the spleen. The thyroid gland was normal; the heart was healthy in every respect and acting well; the urine was normal.

The patient remained under observation about three months without undergoing any change to be noted. She was able to run about, but had occasional attacks as follows. One morning, her mother found her in bed not asleep, but apparently sleepy; she was unable to speak or move for some minutes, and the eyelids twitched much; when she got up, she complained of feeling giddy. Such attacks in the daytime never caused her to fall down.

As to treatment, she took bromides and belladonna, at other times

tonics, without any apparent effect. There appears here to have been a localised lesion of the sympathetic centre, a greater susceptibility of excitement in one set of vaso-motor nerves, and this lesion appears to have been a sequel of a series of convulsions six years before the time of observation.

## THERAPEUTIC MEMORANDA.

### TINCTURE OF ACONITE.

MR. HERBERT JONES has, in the BRITISH MEDICAL JOURNAL of March 3rd, 1877, published an interesting case bearing upon the use of the above tincture. I would supplement his valuable remarks by a few observations. "It is interesting to observe that the effect of this drug differs. It has been known to contract the pupil. In my case, the pupils remained widely dilated for nearly three days, showing that its power over the nervous system varies"—are his words. As he here stops short, I presume to offer a partial explanation of the varying conditions of the pupil. By the case which he cites, the drug was taken in one enormous quantity, and, as a consequence, *extreme symptoms* and almost mortal depression supervened. Of course, the pupil was widely dilated; not, I apprehend, from any specific agency of the medicine, but from its sudden depressant action, almost overwhelming. Now the same exactly holds good of opium and morphia, which in small doses will produce contraction of the pupil—a contraction that will continue even to death if the person be poisoned slowly; whereas, if by a suddenly overpowering large dose, the entire system is depressed, and, along with other manifestations of this condition, the dilated pupil obtains.

In April 1876, I had under my care in the hospital a girl aged 23, an epileptic, who showed an astonishing resistance to the power of aconite tincture, though prepared by one of the first chemists in London, and dispensed by our very careful dispenser. Here is the prescription:—*R* Tincture aconiti  $\bar{\text{viii}}$ ; potassii bromidi  $\bar{\text{xii}}$ ; syrupi  $\bar{\text{iv}}$ ; aquæ ad  $\bar{\text{vi}}$ . Sumat  $\bar{\text{iv}}$  ter die in aquâ. An aconite suppository (half a grain) was ordered to be used every night at bedtime. No aconitism was produced, though this treatment was continued for weeks; nor was the epilepsy cured.

G. DE GORREQUER GRIFFITH, Senior Physician to the Hospital for Women and Children, etc.

### TREATMENT OF RINGWORM BY CHRYSOPHANIC ACID.

HAVING only just seen the correspondence in the BRITISH MEDICAL JOURNAL on the above subject, I beg to state that I have had large opportunities of studying the treatment of Burmese ringworm, sometimes called "Malabar itch" (which, I presume, is the form of the disease alluded to by Dr. Foulis). Having served for some time in Rangoon, where it is remarkably prevalent at certain seasons, I there not only treated numerous patients suffering from it, but also had a most obstinate and troublesome attack of the disease myself.

I have only found one *certain* remedy, that being Goa powder. Cassia alata I have found useful in some cases, more particularly in the early stages, where the disease is circumscribed; but in other cases it is practically useless, and moreover possesses the disadvantage of losing its specific action during the rains, the very season when most required.

With regard to chrysophanic acid, I have never had an opportunity of using it by itself; but, as I believe that it has never been accurately determined whether Burmese ringworm is the effect of a vegetable or an animal parasite, I am unable to say how it acts (if it be the active ingredient) in Goa powder. Burmese ringworm has no marked effect on the hairs of the affected locality. In some cases where the powder was not procurable, I have found tincture of iodine, and also a fifteen to twenty grain-solution of nitrate of silver, of use. Burmese ringworm appears to affect men more than women or children, as I can only call to mind one woman among many male cases in the course of two wet seasons, and have never seen children affected. It is quite non-contagious, and apparently is communicated by the bath-water (at that time of year very unclean, and containing large quantities of vegetable matter in suspension), acting on a skin already rendered prone to irritation by being constantly bathed in the profuse perspiration of a hot, damp, and relaxing climate.

C. J. L. BUSHE, M.B., Army Medical Department, Malleapooram.



## REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN  
THE HOSPITALS AND ASYLUMS  
OF GREAT BRITAIN.

## BETHLEM ROYAL HOSPITAL.

A CASE OF GENERAL PARALYSIS: FITS: DEATH: EFFUSION INTO  
SPINAL CORD.

(Under the care of Dr. RHYS WILLIAMS.)

FOR the report of the following case we are indebted to Dr. G. H. SAVAGE.

The following is a case of great clinical interest as well as of pathological importance. The patient was young, single, and sober in every way. He was of great energy. He had a sister suffering from chronic mania; he himself had had an attack of acute mania and had recovered, there being at the time no suspicion of general paralysis. The patient was Henry J. C., aged 31, a commercial traveller, single. Of late he had been known to have been very sober, and in 1874 he was also reported to have been well conducted in every way. In August 1873, he was depressed for a time; his employers had pushed him to an extreme degree, and this depression was attributed to overwork. From August 1873 to March 1874, he varied, at times being sleepless and depressed, at others fanciful and imagining people made remarks about him. He then became slightly exalted, bought some costly wine, and fancied he was Jesus Christ. No doubt his last two initials suggested this. The patient admitted self-abuse from the age of thirteen till manhood, when for a short time he gave himself over to sexual excess. Of late, he had been too busy and had become somewhat religious, so that recently there had been no sexual abuse. In March, he was admitted into Bethlem. He was typically maniacal, his hair being "electrical", his eyes bright, his complexion sallow. He shouted and rushed about all day, and was noisy and destructive all night. He was filthy in his habits, and spat constantly at doctors and attendants. The following medicines were tried without any good result: bromide of potassium and Indian hemp; succus conii in half-ounce doses; tincture of belladonna in half drachm doses; tincture of digitalis in drachm doses; and morphia in half-grain doses. The excitement was intense till June, when he began to sleep better and his hair became smooth; and he then slowly and steadily improved. After a month at the convalescent home and two months at home, he was discharged, being as well as ever he had been in his life. There was not then the slightest sign of paralysis. From December 1874 to September 1876, nothing was heard of him. He obtained employment, and was careful and energetic as ever. Five days before admission, he suddenly became excited and had extravagant ideas. On admission, he was stout and well nourished. His pupils were small and irregular; his tongue was tremulous; speech halting and thick; skin oily and sallow. He was sleepless and destructive at night. For the first two months, he lost flesh, and the paralysis of the facial muscles became more marked; and, though he had exalted ideas, he no longer talked freely of them. In December, he was much better and attended the weekly dances, where he was rather demonstrative and amorous. In the next month, a change occurred; he became quiet and dull, and lost flesh rapidly. If questioned, he said he could not explain his indolence and apathy, but felt as if something were going to happen. He complained of no pain, and no signs of lung-disease could be detected. His circulation became feeble, and his appetite bad. Till February 10th, he rapidly lost ground. On the morning of that day, at 10.30, he had a fit; he fell down unconscious, but had little or no convulsions. At 11 he had another; and in this there was complete insensibility, with clonic convulsions of both upper and lower extremities, no biting of tongue, and no sterter. His temperature was 98. (During the previous night, he had wet his bed.) The fits recurred, and he had eight before 1 P.M. In the afternoon, he became semi-conscious again; but in the evening similar fits occurred; his breathing became sterterous; his temperature rose at 9.30 to 108.5, and he rapidly died.

A *post mortem* examination was made thirty-four hours after death. The calvarium was thin, hard, and congested, with the dura mater adherent throughout. The brain itself was the softest Dr. Savage had ever yet met with, it being almost a pulp and very hard to remove whole. The brain weighed forty-nine ounces and a half. The subarachnoid fluid was in excess. The vessels at the base were atheroma-

tous. On opening the spinal column from below, a large quantity (several ounces) of dark fluid blood escaped from between the arches and the dura mater of the cord. On opening the spinal canal upwards, at the lower and middle cervical regions was found a large dark-coloured clot surrounding the cord. The cord was somewhat wasted, but there was no marked softening. There were atheromatous changes in the aorta, and the larger vessels were all deeply stained in their inner coats.

## ST. GEORGE'S (HANOVER SQUARE) DISPENSARY.

REAPPEARANCE OF THE CATAMENIA FROM MENTAL SHOCK SEVEN  
YEARS AFTER THE CHANGE OF LIFE.

(Under the care of Dr. SUTHERLAND.)

E. S., aged 40, the wife of a painter, began to be unwell at thirteen, and ceased at thirty-two. No catamenia at all had appeared since that time (seven years ago), until the night before she applied for advice, when an unmistakable appearance of the courses took place. She attributed this unusual occurrence entirely to a mental shock which she sustained four weeks before the discharge appeared, caused by her husband falling from a ladder and being suddenly killed. Before the catamenia appeared, she suffered from severe epistaxis and from vomiting, which she also attributed to the impression produced by her husband's untimely death.

Her symptoms were those of an ordinary attack of hysteria, a well-marked globus being present. She improved rapidly under a course of iron, ether, bromide of potassium, and camphor.

Six weeks later, the patient menstruated a second time, the discharge being excessive. Two months after the second menstruation, the patient reported that there had been no further discharge.

The case is somewhat remarkable, as the interval of time between the occurrence of the mental shock and the reappearance of the catamenia was prolonged. In other cases, where the function of an organ is brought into action by psychical causes, the interval of time between the action of the cause and the production of the effect is usually short. Saliva is secreted instantaneously at the sight of food; urine or feces is ejected at the moment the emotion of fear is excited; and milk has been felt to be secreted immediately after a powerful impression has been made on the mother. But in all these cases the function has been called into play almost at once; whereas, in the case mentioned above, four weeks elapsed between the mental shock and the appearance of the catamenia. It would seem that the uterus received a nervous impression, the effect of which remained latent until the regular time for the courses came round. When that epoch arrived, the function reasserted itself, although it had not been established for seven years. Another point worthy of notice is that epistaxis and vomiting were observed at intervals between the death of the husband and the reappearance of the menses. The reason why nature discharged her-elf first by these two outlets, and afterwards by the uterus, appears to be that epistaxis and vomiting are not, but that the uterine function is, periodical.

## BIRMINGHAM GENERAL HOSPITAL.

EIGHT CASES OF ACUTE RHEUMATISM TREATED BY SALICYLIC  
ACID: NOTICE OF A CASE OF RHEUMATIC HYPER-  
PYREXIA TREATED BY THE SAME MEDICINE.

(Under the care of Dr. RUSSELL.)

THE following report of eight cases of acute rheumatism treated by salicylic acid seems to possess special interest, by exemplifying the difficulty of drawing an accurate conclusion as to the action of remedies, under certain circumstances, in a disease so indeterminate in its course and duration as acute rheumatism. The group of cases is curious, as having, with one exception only, been in the hospital at the same time—having, indeed, constituted the whole of the cases of acute rheumatism under my care at that period. It is certainly unusual to meet with seven cases of this disease at one time, presenting so nearly the same clinical history and running so brief a course. It will be observed that in all the cases the temperature began to decline immediately with the first dose of the medicine, and underwent a rapid fall to the normal standard in from fourteen to sixty hours; whilst the joint-symptoms were brought to an equally rapid termination.

Whilst attributing to the salicylic acid an important share in producing so favourable a result, it is also probable that the rheumatic attack was destined to be of short duration in these patients, and that the resisting force of the disease was, therefore, unusually low. At the time these patients were under care, a ninth case was admitted, in



which the decline of temperature set in at as early a period as in the other cases. The patient was treated with camphor mixture alone. The decline of the symptoms went on steadily, but occupied twice as long a period in being accomplished as in any of the other cases, though the temperature had not been so high.

Of the eight patients, seven were adults; the eighth was twelve years of age. The number of former attacks of rheumatism was two or three in five of the patients; the present was the first attack in three. The duration of the disease on admission was from two days to fourteen in six patients, from three weeks to six in two. All the patients presented the ordinary form of rheumatic inflammation of the large joints, with acid perspiration and urine of high specific gravity depositing urates, excepting in one case in which there was a deposit of phosphates. In three patients, there was a mitral *bruit*; and in one a faint rub was heard for a single day.

In three cases, the treatment was commenced on the second evening after admission, the evening temperature being stationary or rising. The dose was ten grains every two hours in two cases; fifteen grains in one. In fourteen hours (during the night), the temperature fell from 104 and 103 deg. respectively to 100 deg., and during the next twenty-four hours to 99 deg. In the third case, the fall was from 103.4 deg. in the evening to 99.6 deg. during the ensuing fourteen hours.

In a fourth patient, the temperature was highest in the morning, standing at 103.6 deg. on the second and third days; in the evening of the third day, it registered 102.6 deg., when a dose of fifteen grains was ordered every two hours. A steady fall to 99 deg. took place during the following thirty-six hours. In the fifth case, a decline from 101.2 to 99 deg. took place in fourteen hours, twenty grains every two hours having been commenced on the fourth evening. The temperature had stood at 102 deg. on the three preceding evenings.

In the case of the three other patients, the medicine (ten grains in two, twenty grains in one) was commenced on the evening of admission. The temperature fell from 102 to 99 deg. in thirty-six hours in one case. In the second case, the longest period occupied by the decline in any of the patients was exhibited, sixty hours having elapsed before a fall from 103.4 to 99 deg. was accomplished. In the third case, in which twenty grains had been given, the decline was from 103 to 100 deg. in twenty-four hours, and 99 deg. was not reached till the end of thirty-six hours further.

As regards the permanence of the decline, in one instance the temperature rose again by one degree for two days, with high-coloured urine, but without renewal of rheumatic inflammation; and then declined permanently. In one other, the relapse of temperature was of two degrees for three days, but without return of rheumatism and with light-coloured urine. In both instances, the fall back took place after suspension of the medicine. In the last mentioned case, the acid was resumed; the temperature fell immediately and continued normal for two days, when the acid was withdrawn, and the temperature run up to 100 deg. the same evening; thence, however, it steadily and permanently fell.

Whilst certain of these patients were under treatment, a ninth case, in a man aged 32, was admitted under me with his first attack of seven days' duration. The evening temperature was 101.4 deg. He had no treatment; but, though the fall of temperature progressed steadily, it was not till the sixth day that the degree of 99 was reached.

The decline of the affection of the joints, the pain and heat, was in every case strictly cotemporary with that of the temperature. The relief was complete and permanent, though an acid condition of perspiration and of saliva persisted.

Of the eight cases, a relapse occurred in two. In one, nineteen days after the previous attack, the acid was again prescribed, and the temperature fell from 101.6 to 99 deg. in the course of the night; and, though it again rose to 100.2 deg. on the following evening, next morning it fell permanently. In the second patient, the disposition to renewal of the disease was more decided; it first showed itself eighteen days after recovery, but was mixed with an attack of tonsillitis. No medicine of importance was given for four days, the temperature twice attaining 102 deg. in the evening. On the fifth morning, it continued at 102.2 deg. Ten grains were ordered at midday, to be continued every three hours. The temperature on the same evening marked 100.2 deg., and 99.4 deg. next day, falling one degree lower during the next night.

Unpleasant symptoms occurred from the acid in four cases; in only one, however, to any important amount. Two patients vomited once; a third appeared depressed. In the fourth case, the patient had taken ten grains every second hour for two days; but in the third night he vomited after a dose, and afterwards felt much nausea, the pulse rising. Unfortunately, he attempted to renew the medicine next morn-

ing. In the afternoon, Dr. Bindley found him with a pulse 124, very yielding; the body streaming with perspiration; and with some tremor of limbs. During the night, his nose bled. When I saw the patient on the following day, very obvious evidence remained of the depression he had undergone, in a pulse of 120 of very low tension, a somewhat dry and tremulous tongue, and some tremor of the limbs. The surface of the trunk was thickly spotted with sudamina. In twenty-four hours more, the unpleasant effect of the medicine had passed away.

NOTE.—The following particulars of a case of rheumatic hyperpyrexia will form a not uninteresting addition to the foregoing cases. After visiting a patient at Evesham, I was requested by my friend Mr. Slater of that town to see a young lady aged about 15, suffering from acute rheumatism, in whom the usual symptoms of hyperpyrexia had developed themselves the same morning. At 3 P.M., when I saw the patient, the temperature was 105 deg. The joint-affection remained only in the left wrist. The heart was free, but there was effusion in the large bronchial tubes; and there had been much lividity—now, however, subsiding. It was agreed that salicylic acid should be given at once, whilst convenience for a bath was being obtained. The following is Mr. Slater's account of the subsequent period. Temperature at 3 P.M., 105 deg. At 3.30, twenty grains of the acid were taken. The temperature at 4.30 was 104.6 deg.; the dose was repeated. The temperature at 5 P.M. was 103 deg. The bath, therefore, was deferred, the patient complaining of feeling cold. The dose was repeated at 6.30 P.M., but was immediately vomited. The temperature at 7.30 was 100.5 deg.; but the pulse was too rapid to be counted, respiration was noisy and laboured, and the patient could scarcely be kept in bed. Brandy was administered, and hot poultices were applied to the chest; and at 10 P.M. the symptoms had improved; temperature was 102.5 deg. At midnight, however, the temperature was 104.6 deg.; a dose of the acid was repeated. At 2 A.M., the temperature was again 105 deg.; the dose was repeated; but the patient died at 4 A.M., the temperature falling before death, and not rising afterwards.

## NOTES ON BOOKS.

PURVES'S *Clinical Ophthalmic Outline Diagrams*.—Messrs. Smith, Elder, and Co., have published printed sheets for note-taking of ophthalmic cases, prepared by Dr. Purves of Guy's Hospital, whose ophthalmic skill is of the first order, and who has conferred here a great boon on all ophthalmic surgeons and students by these sheets, which will very greatly simplify the labour of note-taking, while they give system, accuracy, and completeness to the notes.

SALT AND SON'S *Illustrated Catalogue*. Sixth edition.—This catalogue is remarkably complete and well illustrated. It contains over six hundred illustrations, and affords a valuable amount of information to practising medical men as to varieties, forms, and uses of surgical instruments and appliances. It is a production in all respects creditable to the firm.

THE February issue of the *Revue Philosophique*, a new French journal of mental philosophy—is a very interesting number. Among the "Analyses et Comptes Rendus" will be found a clear and minute digest of Ferrier's *Fundamentals of Psychology*, a model of the lucid reasoning which makes science in French so attractive. The editor pays Dr. Ferrier a high compliment on the score of his familiarity with psychological questions: "Bien différent de la majorité des médecins français, pour qui toute la psychologie est dans Condillac, ou qui essayent de justifier leur ignorance en déclarant que sur ces matières on ne peut rien savoir de scientifique." There is likewise an important essay upon Spencer's Theory of Education, the writer of which, though not very sanguine of immediate success, regards the science of pedagogy very hopefully. He remarks on the coincidence between the theoretic system of Herbert Spencer and the practical reforms which Pestalozzi has carried on with so much success—both, like Rousseau's tentative essays in the same direction, based on the principle of a return to Nature. M. Compayré is humorous on the subject of physical education. Spencer's view, that "the dominant races are the best fed," is "tel qu'on pouvait l'attendre d'un Anglais." Other important papers in this number are, an account of a new disciple of Schopenhauer by Hartmann, and a most interesting and trustworthy programme of philosophical lectures in all the Universities of France, Germany, Switzerland, Russia, and Austria.

BEGUESTS.—Margaret Eliza Sanders has bequeathed £500 to the Hospital for Incurables; £100 to the Adelaide Hospital; and £100 to the Molyneux Blind Asylum, Dublin.



BRITISH MEDICAL ASSOCIATION:  
SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

BRITISH MEDICAL JOURNAL.

SATURDAY, APRIL 14TH, 1877.

CHANCERY LUNATICS.

THE inquiry into the lunacy laws has recommenced with increasing interest, and several points of the greatest importance to the medical profession have been investigated; the manner in which the highest medical officials are overridden by lawyers being one of them. Dr. Lockhart Robertson having stated that the most important reports of the Lord Chancellor's medical visitors were frequently set aside and made of no avail by the Masters in Lunacy, Dr. Bucknill explained the *rationale*—or, rather, the *irrational*—of the process. The statute of William IV, cap. 36, enacted in 1833, that the medical visitors should superintend, inspect, and report *direct* to the Lord Chancellor, upon the care and treatment of all persons found of unsound mind by inquisition; but, in 1855, Lord Chancellor Cranworth and the Lords Justices, in the exercise of their powers, further enacted certain General Orders having the force of a statute, by which they directed that all reports of the medical visitors which contained complaints of the manner in which Chancery lunatics were treated should be made, not to the Lord Chancellor, but to the board of visitors, which consisted of the masters and of the said visitors. On the receipt of these special reports (being the reports of greatest importance which the visitors make), the board shall, if they think fit, refer them to the masters, or take such other steps as may appear to them expedient, and the masters shall proceed to investigate the matters reported upon, and if they deem it expedient to summon the committees to give explanations thereon; and the masters shall make such report, if any, on such matters as they may deem proper. Dr. Bucknill explained that "the masters" in this order was not to be understood as the two masters conjointly, but one or other of them who had held the inquisition on the particular lunatic whose treatment was the subject of complaint.

These Chancery orders were enacted when the visitation of the lunatics was made only once a year, during the professional leisure of two practising physicians.

In 1862, the new Lunacy Regulation Act was passed in consequence of the disclosures made before the Parliamentary Committee of 1859, and the scandal of the Wyndham inquisition. By this Act, the aggregate salaries of the visitors were increased from £1,000 in 1833 to £4,500, a legal visitor being added; and they were made to devote their whole time to their duties, and the visitations of all single lunatics were made to be quarterly.

As far as the legislature could provide, the Chancery lunatics were to enjoy, at a considerable cost to the public, the advantage of skilful medical opinion as to their treatment. But it was not to be so, for the spirit of red tape and legal obstruction ordered it otherwise. The wholesome breath of the statute of 1862 was strangled by the General Orders of 1855, and Mr. Samuel Warren has for fifteen years been sitting in judgment upon the medical opinions of Dr. Bucknill, Sir Charles Hood, and Dr. Robertson. These special reports are generally complaints of some abuse of the almost unlimited power over lunatics given to committees of the person, who are appointed to their office on the recommendation of the Master, who is thus made the judge of his own nominees, and who constantly accepts their statements when they are

accused of misconduct as a satisfactory refutation of the disinterested observation and the skilled opinion of the medical visitors. It is not surprising, under this scheme of pruning the law, that Dr. Robertson has had to complain that his most important reports have been set aside by the masters, and that Dr. Bucknill has been forced to admit that those who had the charge of Chancery lunatics in asylums have been able to set the Chancery visitors at defiance.

Another matter indicating the same legal jealousy of medical opinion was elicited from Dr. Bucknill. It appears that a Chancery lunatic in an asylum may be left without visitation by the Chancery official from January in one year to December in the following year. But why not ask the commissioners to look after the case, if the treatment be unsatisfactory, seeing that they must visit several times in the interval? Is there any jealousy between the two boards? "Oh, dear, no!" says Dr. Bucknill, "we are most friendly; but, as you press me, I will tell you what happened. I found a Chancery lunatic in a private asylum tied down in bed, and very badly treated. The inquisition had been held more than a year before, but no committee had been appointed, so that there was no one responsible for his treatment except the proprietor of the asylum, over whom the commissioners, but not the visitors, had power. I therefore committed the indiscretion of writing a line to the commissioners calling their attention to the case; and for this I received a sharp rebuke from the then Lord Chancellor." We should like to learn a little more about this case. Did the man die before the master could find any one to take care of him? and have there been any other cases in which the rusty machinery of the master's office has failed to overtake the strides of disease? The law's delay is no slight matter, even in the world's gear; and a lunatic, whose property is put under Chancery-lock by inquisition, has no small grievance if he be left a year or so dependent upon the charity of his friends, until a dilatory official can make up his mind as to the man whom he will place in charge and the allowance he will dole out from the lunatic's own estate. But the bodies and lives of men are not to be dealt with, in point of time, as if they were real estate; and Chancery proceedings in medical questions ought to be greatly more expeditious than we hear that they are, seeing that disease and death are matters of the day, and the diary of the physician ought not to be replaced by the year-book of the master.

The obvious remedy is an amalgamation of the Boards of Commissioners and Visitors in Lunacy, whereby one board for the visitation of all lunatics will be provided, too powerful to be placed under the feet of the Masters in Lunacy, and the absurd waste of public money avoided by the dual action of two sets of officials discharging practically the same duties. The commissioners and the visitors cost the country about £27,000 a year, and yet additions are demanded for both boards, in order to enable them to discharge duties which would be easily within the competence of the present staff, and might, indeed, be largely added to without inconvenience, if only the official jealousy, not of the two boards, but of the chancery department to the general department of lunacy, could be set aside. The master's office stands in grievous need of thorough reform; but that is a question with which we have only an indirect interest. The question which touches medical sympathies is, that the medical visitation of Chancery lunatics shall not be stifled by legal officialism; and, with so wise, just, and strong a man as Lord Cairns in power, and disclosures like those we have noted being made public, we see good reason to hope that it will be efficiently settled without much delay.

THE ADULTERATION ACT: CONFLICTING DECISIONS  
ON THE MILK OF SULPHUR QUESTION.

BY a variety of decisions, judicial and magisterial, we shall gradually arrive at what is adulteration in law. We recently reported some cases in which it was decided that chromate of lead if mixed with food was a noxious adulteration, while, when spread on the outside of the article of food, it was not so regarded.

We this week have to report that the milk of sulphur question has



been decided on appeal in a manner which is most unsatisfactory to the public. The Runcorn convictions for the sale of plaster of Paris mixed with about an equal part of sulphur, under the name of "milk of sulphur", have been quashed on appeal by the magistrates at the Knutsford Quarter Sessions. The grounds on which this decision were based will be perceived from the subjoined extract. After evidence had been given to the effect that it had been the custom of the trade to supply milk of sulphur with sulphate of lime contained in it, Mr. Pemberton of Birmingham said "it had been used for years and years by the highest in the land with continuous benefit. He thought the sooner they used the lime-compound—milk of sulphur—instead of pure sulphur the better". The counsel for the appellant stated that a number of cases through the country were depending upon the decision at Knutsford as to whether the convictions should be confirmed or otherwise. When he was about to call Dr. Redwood, the chairman of the bench stopped the case, and said, although the absence of this substance "lac sulphuris" from the *Pharmacopœia* justified the county analyst in taking these proceedings, the bench could not for one moment doubt, after the evidence of Mr. Pemberton and others, that, in the trade and in the profession, there were two distinct substances known as lac sulphuris and precipitated sulphur, and that they were supplied to the trade and the public by those names as two distinct things. They, therefore, thought the case had not been made out, and that the appellant had not committed an offence within the Act. The convictions would, therefore, be quashed.

The Chairman thus held that lac sulphuris and precipitated sulphur are two distinct substances. In reference to the old *Pharmacopœia*, this is correct; but there is the authority of Dr. Redwood and others for asserting that they are now synonymous, and are produced by the same process from the same materials.\* It is much to be regretted that, by excluding the evidence of Dr. Redwood, the chairman has unwittingly suppressed the important fact that the *same formula* is given by this authority for producing what he described as *two distinct substances*. Further, it is simply impossible that milk of sulphur with sulphate of lime can be produced by adopting Dr. Redwood's process, and it is clear, therefore, that, at that date, Dr. Redwood did not consider them to be distinct substances. He had then either laid aside the view that milk of sulphur must always contain sulphate of lime, or he misled the public and profession, by describing a process which could not by any possibility produce, with sulphur, this calcareous compound.

If the sale of sulphur thus contaminated, is to be permitted in future, it should be at least insisted on, for the public benefit, that the sulphate of lime compound sold as lac sulphuris, should be properly marked on the outside of the packet, so that the public may know what they are really purchasing; otherwise it would be unjust to compel a grocer, in dealing with coffee and chicory, to mark the packet containing the mixture, in order to distinguish it from that containing pure coffee.

We consider this decision to be a heavy blow and a great discouragement to the sale of pure drugs. There is, unfortunately, no public prosecutor to look after the interests of the public with the same amount of zeal as that displayed by the legal gentlemen who appeared on behalf of the Chemists and Druggists' Trade Association, otherwise the decision of the Knutsford bench might be reversed, and that of the Runcorn magistrates upheld.

#### PUBLIC HEALTH (IRELAND) BILL.

THE Irish Public Health Bill is again before Parliament; and, with all its defects, is an improvement upon the present state of the law. The defects, however, are so glaring that it is absolutely essential to the success of the measure that they should be removed. We have space only to discuss the measure as far as it affects the members of our own profession, to which the working of the Act is in the main confined. The injustice of the present law to the medical profession in Ireland

has been so often pointed out that we need not again repeat the details. The following petition, proposed by the Council of the Irish Medical Association, which is being numerously signed by the dispensary medical officers of Ireland, puts forward in a clear and accurate manner the hardships to which they have been subjected by the administration of the Act of 1874.

"That your petitioners are the dispensary medical officers of Ireland, a body of members of the medical profession, exceeding eight hundred in number, entrusted with responsible and onerous duties under the Medical Charities, the Adulteration of Food and Drugs, and the various Vaccination and Registration Acts.

"That, under Section 10 of the Public Health (Ireland) Act of 1874, your petitioners were, by virtue of their office as dispensary medical officers, without option or power of appeal, constituted sanitary officers for their several districts, with such additional salary as the sanitary authorities thereof might determine, with the approval of the Local Government Board, and were obliged to undertake such duties and functions as the Local Government Board assigned to them.

"That your petitioners undertook the duties imposed on them by the Act without protest, believing that the spirit of the Act would be adhered to, and that, in return for faithful and efficient services, due recognition of their professional position, a careful definition of their duties, and adequate remuneration for the same, would have been secured in the administration of the Act.

"That, shortly after the Act was put in force, the Local Government Board, contrary to the spirit of the tenth Section, themselves fixed a maximal scale of salaries to be paid by the local authorities to the medical officers for their skilled services under the Act; such scale of salaries being, in the opinion of your petitioners, quite inadequate remuneration for the duties required to be performed by them, as specified in an order of the Local Government Board, bearing date September 9th, 1874.

"That, with very few exceptions, even the scanty maximal salary fixed by the Local Government Board has not been awarded.

"Your petitioners therefore pray that the designation applied to them in Clause 10 of the Public Health (Ireland) Bill, 1877, may be altered from 'sanitary officer' to 'medical officer of health', as in the corresponding Public Health Act for England.

"They also respectfully, but firmly, ask that security should be given them for the payment of such salaries or fees as shall be commensurate with the onerous and responsible nature of their duties as medical officers of health; or, failing the granting of such security, that the acceptance of office under the Public Health Act should not any longer be made compulsory on them as dispensary medical officers.

"Further, that, with a view of protecting them in the performance of their duties, the Bill should provide for the appointment of district medical inspectors, who shall be officers of the Local Government Board.

"That adequate remuneration should be secured to the medical officer of health for attending and assisting in all legal proceedings in which their attendance and assistance may be required.

"That a fixed and proper fee, not less than one guinea, should be secured under Clause 150 of the Public Health (Ireland) Bill, 1877, for medical attendance on board ship; and, under Clause 154, for certifying for the removal of a body dead of any contagious or infectious disease.

"And lastly, your petitioners pray your Honourable House that the Bill be referred to a Select Committee, who shall also inquire into the working of the Sanitary Acts at present in force in Ireland."

From the foregoing statement, it is evident that the Poor-law Medical Service of Ireland has been victimised by the penuriousness and impotence of the Irish Local Government Board. We have taken great pains to watch the working of the Irish Public Health Act of 1874; and we have no hesitation in stating that it might have been made to work well, but, by mismanagement, it has been almost a complete failure. We go further, and say that its usefulness is decreasing instead of increasing, every day. The medical officers are gradually striking work, finding their sanitary efforts neither remunerated nor appreciated. The Local Government Board seem to be in a complete fog about the results. They have absolutely no means of supervising the working of the Act, and must, therefore, believe whatever the local authorities tell them. The inability of the Board to grasp the work of local government has been demonstrated by the extraordinary disclosures made to the Commissioners now inquiring into the local

\* Gray's Supplement to the *Pharmacopœia*, pp. 885-886, second edition, 1848. Under one head we find sulphur precipitatum, lac sulphuris, precipitated sulphur—synonyme, milk of sulphur.



government of towns in Ireland. It is a remarkable fact that, although the Irish Local Government Board has had the control and supposed supervision of municipal matters in all the towns in Ireland, since the year 1872, not a single local defect has been discovered by them, although the present Commission is finding everything wrong everywhere. The fact is, the connection of the Board with the local authorities is completely cut off by the present want of proper supervision. Local officers, including the members of the sanitary service, are completely ignored or bullied by the local authorities. We are glad to find that the Poor-law medical officers of Ireland are supported in their action by the Colleges of Physicians and Surgeons. The former College has sent a deputation to the Irish Attorney-General on the subject. The Irish Medical Association have also waited on the Irish law officers; and we trust and believe that the Government will at length see that the views which have been put forward, over and over again, must be adopted, or that sanitary legislation must continue a farce, as it has hitherto proved to be in Ireland. All the suggestions now put forward as to position, pay, and supervision, were made as long ago as August 1873, before any legislation for Ireland had taken place. The suggestions were made by Dr. Grimshaw and the late Dr. Maunsell, in their paper read before the London meeting of this Association, and, if followed out, would have prevented the present disgraceful state of sanitary administration in Ireland. We hope the Irish Medical Association and the Poor-law medical officers will be firm and steadfast in the demands they have put forward in their petition.

#### THE ARMY MEDICAL DEPARTMENT AND ITS DOCTORS.

A MILITARY cotemporary, who devotes a good deal of space to remarks on the medical department of the army, has lately contained some striking suggestions for its improvement. The pith of them is to lower its numbers, or even to abolish it altogether. The shortest way to remove the grievances complained of is to remove those who make the complaints. The navy might be improved after the same fashion. One correspondent, who has had personal experience of the blunders of doctors during his naval career, inasmuch as, when suffering from bleeding from the chest, he was treated for bleeding from a nasal polypus, thinks it a most admirable scheme that surgeons in the navy should be abolished, and that, instead, "a compact medicine-box", containing only three drugs, castor-oil, peppermint-water, and sulphate of magnesia, "to be served out by the purser's steward", should be supplied. Even this, we believe to be no new suggestion. We believe we are right in saying that, a few years ago, a naval commander of conspicuous position gave evidence before a Royal Commission to the same effect. He would not object to go to sea without a surgeon; he rather thought he should get on better without one in his ship; a few medicines with a few simple directions would be all that he should care about. Gallant Major Haviland, "late Queen's Bays", however, thinks it well for the army to have some "talented surgeons, useful on the battle-field", but that it would be better for it to have "fewer dispensers of medicines on home service". Give soldiers good food and plenty of exercise, and that will prevent the necessity for swallowing drugs. Has not the old trooper proof positive of this? Have not events under his own direct observation for a period extending beyond sixty years been the means of making him familiar with the fact? Listen to the worthy major's own account of how it all came about—the very *verba magistri*. "I myself have not taken any physic since the year 1816. In that year I had fever and dysentery, and was sent into hospital at Hazebrouck in French Flanders. I was daily getting worse; I had hardly strength to crawl. One day I laid myself down under the garden-hedge. A Flemish lady saw me and said, 'Monsieur, vous avez l'air malade'. I told her my symptoms. She answered by saying, 'Reposez-vous ici, ne bougez pas de là, et soyez tranquille'. She left me for a little while. She came back, bringing with her six eggs boiled very hard, and a piece of liquorice.

She told me *not to take medicine*, but when hungry to eat an egg, and when thirsty to put a piece of the liquorice into my mouth, and to come again at the same hour daily. I did so. After three days I was convalescent and discharged from hospital. I then called on Madame Debuysers to thank her. She asked me if I smoked. I said No. She said I must, and presented me with a pipe and tobacco. The lady cured me by common sense; the M.D.s did not. For sixty-one years I have been a smoker, seldom exceeding thirty pipes daily, etc." Moderate Major Haviland! long may you still enjoy your thirty pipes daily, and experience no need for any other medicine.

It only seems strange that the gentlemen who would cure the disorders of the army medical service by such depletory measures should not be aware that the very remedies they suggest are already in operation. A lowering treatment has been adopted for some time past. If these "doctors of the doctors" will compare an army list of three or four years ago with one of the present date, they will see that the reduction in the ranks of the medical department is already no inconsiderable one. If it be further observed that, whenever a batch of medical commissions is offered in the market, only half a corresponding number of surgeons come forward to seek the vacant places, it is not difficult to perceive that the process of reduction must be still going on, and that, if there be no change in the treatment of the case, the final abolition of the medical department of the army is only a question of time. Can Mr. Hardy have had something of this kind in view when he recently, in introducing the army estimates, according to the newspaper reports, described the medical service as one "which has been a trouble to me ever since I have been in office, and ever will be a trouble, I am afraid, as long as medical men exist"? Certainly, when the medical men cease to exist, the particular kind of trouble which the Minister for War may have experienced on their account must cease also. But may not other troubles of even greater moment arise when this consummation has been attained? We think we can discern a few that may be less easy to be shaken off than any of those that have hitherto been felt at the War Office. Let us hope, therefore, that some remedy may yet be discovered to relieve the disordered state of the army medical department, less heroic than that of its total extinction.

#### HABITUAL DRUNKARDS.

WE print in another page a summary of the Bill "to facilitate the control and care of habitual drunkards", introduced into the House of Commons by Dr. Cameron, the Hon. Evelyn Ashley, Mr. Read, and Mr. Jenkins; and also the resolutions passed at a recent meeting in Glasgow, along with a letter on the subject from Professor Gairdner. It will be seen that, while the Bill aims at the same objects as was held in view by the late Mr. Dalrymple, its promoters have made some modifications which deserve attention. In the first place, all expressions liable to lead to the idea that habitual drunkards are to be treated as lunatics are avoided; and they are regarded as criminals only when they have been decided to be such by an ordinary court of justice. In the Bill, *quoad* curative treatment, an habitual drunkard is simply an habitual drunkard.

Another important feature of the Bill is the provision of two kinds of institution for the cure of the habitual drunkard; one, the "retreat", into which he may be received on his own application or on that of his family; the other, the "industrial hospital", into which he is sent after having been convicted in a police or similar court of being drunk and disorderly or incapable. These "industrial hospitals" would, of course, absorb a large number of the cases of habitual drunkenness with which a large part of the time of police magistrates is occupied.

An endeavour is also made in various parts of the Bill to ensure against improper detention or any undue interference with liberty; and an organised system of inspection and visitation both of retreats and of industrial hospitals is provided for.

While the details of the Bill will, no doubt, require modification in some points, its general principles will, we believe, command approval.



THE Servian Government has conferred the Gold Cross of the Takovo on Dr. George H. Lamson, late chief of the military hospital, and representative at Semendria of the League in Aid of the Christians of Turkey.

MR. JAMES DEWAR, F.R.S.E., Jacksonian Professor of Natural Experimental Philosophy in the University of Cambridge, has been elected Fullerian Professor of Chemistry in the Royal Institution, in the room of Dr. J. H. Gladstone, resigned.

A PROOF of the efficacy of vaccination is shown by a report issued by Dr. A. T. Brett, Medical Officer of the Watford Rural Sanitary Authority. Small-pox visited a family nine in number, residing at Bushey. Three had been vaccinated, and six had not. All six unvaccinated persons took the disease, and four died; while the three that had been vaccinated escaped altogether—one of the three being a child at the breast, fed by its mother within two hours of her death.

A MUCH-ESTEEMED Paris practitioner, Dr. Cintrat, has fallen a victim to duty. Attending a child for croup, he found an incision in the throat insufficient to save its life without sucking out the infected matter. In the evening he felt symptoms of quinsy, devised an excuse for sending his wife and three children in the country to prevent infection, and procured the best medical aid, but died on April 6th, after five days' suffering.

COLONEL LOYD-LINDSAY has received a letter from the Commander of the Army of Nish, Ali Saib Pacha, and the Chief of the Staff, Nedjib Pacha, conveying the thanks of the army to the members of the National Society for the Aid of the Sick and Wounded in War who afforded professional assistance during the recent war. The Order of the Medjidie has also been sent to Mr. MacCormac and his colleagues in recognition of their services. In distributing the decorations at the office of the Society, Colonel Lloyd-Lindsay remarked that the distinction was the more gratifying because it was entirely unexpected.

#### MEDICAL SOCIETY OF LONDON.

AT a meeting of the Council held on Monday, the 9th instant, Mr. Francis Mason, Surgeon and Lecturer on Anatomy at St. Thomas's Hospital, was unanimously elected Lettsomian Professor during the next session. Mr. Mason will probably select as the subject of his lectures the Surgery of the Face, Mouth, and Throat.

#### THE PATHOLOGICAL SOCIETY.

THE next meeting of the Pathological Society on April 17th will be one of unusual interest. There will be two communications from Dr. Klein—one on the Minute Anatomy of Scarlatina, and one on the Anatomy of the so-called Pig-Typhoid. Dr. Braidwood of Birkenhead will also communicate some of the results of his researches into the intimate pathology of contagion. Specimens will be ready for exhibition under the microscope half an hour before the usual hour of meeting.

#### THE LATE DEPUTY INSPECTOR-GENERAL DR. MACKAY, R.N.

It is announced that it has been decided to award a special pension to the widow of the late Deputy Inspector General Dr. Mackay, R.N. (whose death from typhoid fever was noticed in the JOURNAL of the 17th ult.), in consequence of his fatal illness having been shown to be attributable to drinking contaminated water at the office at which he was employed in Spring Gardens. We are informed that the overflow-pipe of the cistern from which the water he was in the habit of drinking was drawn was in direct communication with the main sewer, without any trap or check to prevent the regurgitation of sewer-gas from the sewer to the cistern. The cistern was covered, so that the gas which might thus find entrance could readily accumulate in a stagnant condition and be gradually absorbed by the water below. This alone, as we understand Dr. Mackay drank freely of the water from

the source mentioned, would suffice to account for the illness which led to the termination of the career of this highly accomplished and valuable public servant; but it is certainly questionable whether, in the case of a conduit, as it were, for sewer-gas being thus specially opened to the water-cistern, it would not equally be the means of admitting the gas to the air of all the apartments in the neighbourhood. If so, there would be a double source of blood-poisoning, by inhalation as well as by the stomach. Altogether, the practice of converting private houses into government offices is most objectionable. Every room becomes occupied, not unfrequently without any proper ventilation or relation to cubic space, from the roof to the basement; and the closet and other domestic arrangements, which were originally contemplated for a few persons, are made to meet the wants of a large number. There are no establishments which require closer or more constant sanitary supervision than public establishments, when they are located in houses which were originally constructed for private dwellings. The recent report on the condition of the War Office in Pall Mall furnishes a striking illustration of this fact. The unusual boon of a special pension being granted to the bereaved family of Dr. Mackay is said to be due to the urgent representations of Sir Alexander Armstrong, the Director-General of the Naval Medical Department, in whose office Dr. Mackay was serving at the time when he was seized with his fatal illness.

#### THE LATE SURGEON-GENERAL BEATSON.

A LARGE and handsome painted window was last week placed in the chapel of the Royal Victoria Hospital at Netley, in commemoration of the late Surgeon-General Beatson, C.B., of the Army Medical Department. It occupies the whole of three large compartments at the east end of the chapel. Shortly after the death of Surgeon-General Beatson, which took place at Simla in 1874, when he was holding the high post of Principal Medical Officer of British Troops in India, a subscription was entered into by his brother officers for the purpose of showing by some lasting memorial their sense of the loss which the department had suffered by his death. Part of the fund thus collected was devoted to the erection of a suitable monument in the Simla Cemetery, where Dr. Beatson was buried; and the remainder has been expended in the new window at Netley. The work has been produced at the well-known establishment of Messrs. Clayton and Bell, and now forms a very important feature in the chapel.

#### MEDICAL ADMINISTRATIVE AND INTIMATIONS IN INDIA.

MR. HARDY's reply to the question of Dr. Lyon Playfair on the above subject will not, without a word of explanation, be intelligible to our readers outside the department. We understand a case has just arisen which has a good deal to teach us. A gentleman of high position and reputation in the service was selected for promotion to administrative rank, and intimation to this effect was conveyed to him in the usual way. When, however, the time came to gazette this appointment, it was discovered that the officer in question had only done regimental duty in India for two years and four months, thus being short of the required term of three years by eight months. Intimation was accordingly conveyed to him that, until he had served the full time required by the rules of the Government of India, he could not be promoted. Feeling aggrieved, this gentleman appealed, first on the ground that he had never heard of the rule, and, secondly, because certain medical officers now serving in administrative posts in India had never complied with the rule, which, moreover, to this day has never been published in the medical regulations of the British army. The Secretary for War, in his reply to Dr. Playfair, touched on both points, saying, in effect, that the existence of the rule was notorious in the service, inasmuch as many meritorious officers had been passed over on this very ground. Mr. Hardy admitted that some officers are now serving in the administrative ranks in India who had not served as regimental medical officers, but that this had arisen under exceptional circumstances, and would not occur again. What, it may be



asked, is the object of this rule? Why does the Government of India insist on it? The alleged reason is that, if officers are appointed to administrative posts in India without having served in a regimental capacity and become acquainted with the climate and system of Indian medical administration, they have been found, as a rule, inefficient, unreasonable in their demands on Government, and apt to embarrass the authorities by an indisposition to act in harmony with the superior officers of the medical service of India. When the Government of India conceded a large increase to the medical administrative staff of the British army in India, five years of regimental service was demanded as a *sine quâ non* for promotion for service in India. Under pressure from the Home Government, this was reduced to three years, on the distinct understanding that in no case was the rule to be broken. This was in substance what Mr. Hardy meant, although it must be allowed that he did not convey his meaning with his usual clearness. We have been at some pains to inquire, and find that this rule of three years' service in India is well known throughout the medical department, although it is a pity it was not published at home in such a way as to put it out of the power of any medical officer to plead ignorance of it.

#### AN ILLUSTRIOUS VISITOR.

OUR Berlin correspondent writes:—I understand that the London season will be enlivened by a distinguished visitor from this city, whom the good people of Berlin will sorely miss, for he is, perhaps, the most popular, as he is certainly the most unique, inhabitant of the city, and the one who has received now for many months the most numerous and affectionately admiring visitors. I have been spending the morning with him, and have been infinitely diverted by his amusing and lively ways, his frolicsome and friendly games, his grave courtesy on occasions, and his childlike good-nature and docility. If I add that he has been alternately drinking claret and water out of a glass with excellent grace and propriety; then turning over head and heels, shaking hands at frequent intervals; then drumming on his breast and on the floor; chasing a little boy and a dog (his two favourite companions) round the room; handing wine to his cousin; and swinging on a trapeze, seated by the side of his boy-friend,—it becomes necessary to explain that I have been received in private audience by the Gorilla, the much prized possession of the Berlin Aquarium. He is the only living gorilla ever seen in Europe, and much coveted by the Zoological Society of London, who offered, I believe, as much as £2,000 for him. He is as like a little Negro boy in the face as a being not absolutely human can be; his hands are most startlingly human; and in many of his childish ways and solemn courtesies he is almost more than "anthropomorphic". He was brought to Europe by Dr. Falkenstein as one of the spoils of the Prussian expedition to Africa, and motives of patriotism determined the people of Berlin to retain him there. Dr. von Hermes, the Director of the Aquarium, is about, however, to bring him to London "for the season"; and I do not doubt that he will have a reception as enthusiastic as he has received here, and as is due to his distinguished character as an unique individual and an ape of the most gentle disposition and agreeable manners. His "cousin", a very lively chimpanzee, who is on the best possible terms with "Pongo", will probably accompany him; for the semi-human tricks of the two, and the extreme politeness with which they share a friendly glass of wine and water, add a good deal to the zest of "Pongo's" audiences. To see the gorilla "Pongo" gravely and politely tilting over a glass half-full of wine and water to enable his cousin "Tschego", the chimpanzee, to share his draught, while he gravely watches his enjoyment of it, is really a startling spectacle. It is not a trick which he has been taught, but the effect of his politeness. "Pongo" has presented me with his photograph; but it is by no means so delightfully ugly or so gravely intelligent as he is, and really does not do him justice. He is the most delightful beast of my acquaintance, and, if he were allowed to go into society, would be, I think, the lion of fashionable salons during the season.

#### STATISTICAL SOCIETY.

AN ordinary meeting of this Society will be held on Tuesday, the 17th instant, at the Society's rooms, Somerset House Terrace (King's College entrance), Strand, when a paper will be read by Mr. Frederick Martin, on Births, Marriages, and Deaths, and the Comparative Growth of Population in the Principal States of Europe. The chair will be taken at 7.45 P.M.

#### AN INQUEST-ROOM FOR THE CITY.

A REPORT on the proposal to erect a proper inquest-room for the City of London has lately been presented to the Commissioners of Sewers by Dr. Sedgwick Saunders, the Medical Officer of Health. It appears that the annual number of inquests in the City is about two hundred and fifty, of which about ninety are held in the hospitals. The remainder are held in public-houses; and this the coroner, Mr. Payne, states not only to be a source of discomfort to himself and the jurors, but a means of diminishing the value of the evidence, in consequence of the facility with which the witnesses can obtain drink. In his communication to the Commissioners, he pointed out several advantages which would attend the possession of a special court. The Commissioners have accordingly determined to erect an inquest-room near the mortuary in Golden Lane, with proper accommodation, at an estimated expense of £1,775.

#### THE PUBLIC HEALTH.

DURING last week, 5894 births and 4,400 deaths were registered in London and twenty-two other large towns of the United Kingdom. The mortality from all causes was at the average rate of 28 deaths annually in every 1,000 persons living. The annual death-rate was 27 per 1,000 in Edinburgh, 29 in Glasgow, and 32 in Dublin. The annual rates of mortality per 1,000 last week in the twenty English towns, ranged in order from the lowest, were as follow: Leicester, 13; Brighton, 17; Portsmouth, 17; Norwich, 19; Bristol, 22; Wolverhampton, 23; Bradford, 26; Hull, 26; Salford, 27; Leeds, 27; Sunderland, 27; Liverpool, 28; London, 28; Plymouth, 29; Sheffield, 31; Manchester, 32; Birmingham, 32; Newcastle-on-Tyne, 32; Nottingham, 37; and Oldham, 40. The fatal cases of small-pox in the twenty towns, which had been 87 and 93 in the two preceding weeks, were 85 last week, of which 78 occurred in London and 7 in Liverpool. In London, 2,525 births and 1,922 deaths were registered. The births exceeded by 13, and the deaths by 296, the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which had been 26.6 and 30.3 per 1,000 in the two preceding weeks, declined to 28.4 last week. The 1,922 deaths included 78 from small-pox, 50 from measles, 16 from scarlet fever, 4 from diphtheria, 69 from whooping-cough, 27 from different forms of fever, and 9 from diarrhoea; thus to the seven principal diseases of the zymotic class 253 deaths were referred, against 201 and 243 in the two preceding weeks. These 253 deaths exceeded by 14 the corrected average number from the same diseases in the corresponding week of the last ten years, and were equal to an annual rate of 3.7 per 1,000. The 69 fatal cases of whooping-cough showed a considerable increase upon the numbers in recent weeks, the mortality from the disease being proportionately largest in North London. The 27 deaths from fever, although exceeding the numbers in recent weeks, were 7 below the corrected average; 3 were certified as typhus, 19 as enteric or typhoid, and 5 as simple continued fever. The deaths from small-pox, which had been 76 and 86 in the two previous weeks, were 78 last week, of which 37 were certified as unvaccinated, 15 as vaccinated, and 26 were "not stated" as to vaccination. The fatal cases showed a decline in North and East London, whereas they had increased in West and South London. Fourteen deaths of infants under one year of age were the result of suffocation. In greater London, 3,103 births and 2,236 deaths were registered, equal to annual rates of 37.1 and 26.7 per 1,000 of the population. The fatal cases of small-pox in the outer ring, which had been 7 and 10 in the two preceding weeks, were 11 last week.



## DEATH OF A MANCHESTER SURGEON FROM NITROUS OXIDE GAS.

THE following particulars respecting this melancholy accident were elicited at the inquest that was held on March 28th. On the previous evening, the deceased, Mr. George Morley Harrison, a surgeon practising at Hardwick Green, Manchester, on completing his usual day's work, called upon his immediate neighbour, Mr. E. H. Williams, dentist, and complained that he was in great pain from an alveolar abscess, and in consequence had not slept the previous night. This was found to proceed from some carious stumps. At his own request, the nitrous oxide gas was administered by Mr. Williams, assisted by his servant. When sufficient of it was supposed to have been inhaled, Mr. Williams attempted to extract the stumps; but the deceased complained that the pain was frightful, and he must have some more gas. When he was again giving it, the dentist asked him to keep his hand in motion as an index for himself; this the deceased refused to do, saying he must give him the gas until he had "a good snore". When Mr. Williams attempted to remove the inhaler, the deceased put his hands over it and pressed it firmly to his face. After he snored, the dentist proceeded to extract the stumps, but, after removing two, noticed that the deceased was unusually quiet. He immediately dashed cold water into his face and had the window and doors thrown open. As he did not appear to revive, he sent the servant to summon Dr. Noble, whose residence was near, with directions, if he should not be in, to go for Mr. Worsley, the nearest surgeon. When the latter arrived, however, life was apparently extinct; the face and neck were livid; the eyes fixed and open, and the pupils widely dilated; the hands cold and pale, but the feet and legs quite warm. The usual means were tried; viz., cold affusion, artificial respiration, friction, revulsion to the feet and legs, and the galvanic battery; but without the slightest success. The *post mortem* examination was made eighteen hours after death by Mr. Jones, Pathologist to the Royal Infirmary. Dr. Noble and Mr. Worsley were present. The body was exceedingly well nourished, the lividity of the face and neck being still apparent. The hypostases also were unusually pronounced. Upon incising the scalp, a quantity of dark fluid blood was found between it and the periosteum. On removing the calvarium, the dura mater was found very adherent; the membranes were distended with serous fluid, and the veins intensely congested. The ventricles were also filled with the same fluid. The brain-substance was firm and healthy. On opening the chest, some difficulty was experienced, owing to complete ossification of the cartilages of the ribs. There was a large deposit of fat in the anterior mediastinum and upon the pericardium. The lungs were very dark-coloured and intensely congested. The heart was slightly enlarged, soft, and friable; the left side quite empty, the right full of dark fluid blood. There was a considerable deposit of fat in the interventricular furrows. On section, the aorta was found coated with atheromatous deposit, and the aortic and mitral valves were thickened. On section of the abdomen, an immense amount of adipose tissue was observed, the omentum being also greatly thickened by fatty deposit. The stomach was much distended by gas, and contained a small quantity of partly digested food. The liver was greatly enlarged and in a state of fatty degeneration. The spleen was healthy, but gorged with dark fluid blood. The kidneys were both healthy, but deeply congested.

## SUPERSTITIONS REGARDING HYDROPHOBIA.

ONE of our German correspondents writes: Deaths from hydrophobia, which have occurred recently in the Prussian-Rhenish province, have called the attention of the Government to the practice, much prevailing there, of having persons who show symptoms of hydrophobia treated, not by a medical man, but by a Roman Catholic priest. The consequences have, naturally enough, invariably been disastrous to the patients. Another superstition existing in the Rhenish province is the belief that the bite of dogs which have been burned with the Hubertus key can never be dangerous, and this belief is producing a large revenue to a Belgian convent, which sends out emissaries with

Hubertus keys to perform this interesting operation. The Prussian Government has now, in order to prevent further misfortunes, reminded the Roman Catholic clergy of a Government decree, according to which the clerical treatment of persons showing symptoms of hydrophobia can be commenced only when it has been proved to the priestly operator that the person bitten is already under medical treatment.

## SHORT-SIGHTED SANITARY POLICY IN SOUTHSEA.

IN blaming local sanitary authorities for their frequent neglect of health responsibilities, it should not be forgotten that the fundamental principle of all local government is elective, and therefore that inefficiency of local government is in reality the fault of the public, or rather that portion of the public enjoying voting privileges. It is somewhat unfortunate for Southsea that its sanitary authority is the Town Council of Portsmouth, within which borough it is situated, inasmuch as that body has long shown itself opposed to energetic sanitary action, and this policy is one full of the gravest danger to the health reputation, and hence of the prosperity, of this favourite watering place. The borough of Portsmouth has the advantage of the services of an efficient and scientific medical officer of health in Mr. George Turner. This sanitary officer appears, however, to have incurred the grave displeasure of a large majority of the Town Council for having, in the exercise of his discretion, adopted measures for improving the sanitary condition of a house in Southsea, which, if somewhat unusual, was at any rate effectual. The house in question is situated in Clarence Parade, and notice to drain was served upon the owner on December 10th, and again on February 3rd. Both these notices were, however, entirely disregarded, and on February 19th the occupier of the house made an official complaint of its insanitary condition. This led to a special inspection of the house by Mr. Turner, the medical officer of health, who made a final and urgent appeal to the agents to have the nuisance removed, adding that if this were not effected in three days he should certify the house to be unfit for habitation. A week later, Mr. Turner being satisfied, by a further inspection, that nothing had been done to improve the condition of the house, gave to the occupier the certificate referred to. The result of this certificate has been that the occupier surrendered his tenancy, and that the house has since been rendered habitable by the performance of work which the owner received notice to do in December. At a meeting of the Town Council about a month since, a resolution was passed calling upon Mr. Turner to make a special report upon the circumstances of the case, one or two of the members appearing to take a strongly personal interest in the property which had been temporarily condemned. At the last meeting of the Council on the 3rd instant, the Sanitary Committee reported that, having received from the medical officer of health the special report in question, and having considered it, they had passed a resolution approving his action in the matter. In spite of this, however, an overwhelming majority of the Council refused to adopt this report of the Committee, and carried an amendment referring the matter back to the Committee, in order that another report might be prepared on the subject, showing why this certificate was issued instead of prosecuting the owner or agent. We are confident that none will regret this obstructive sanitary policy of the Portsmouth Town Council more than those who feel the strongest interest in the welfare of Southsea. In proposing the amendment, which was carried, Mr. Cunningham severely deprecated the medical officer of health for having stepped out of his way to "benefit a tenant". It is very probable that the Town Council represents the interest of the owners and landlords far more strongly than it does that of the tenants; but, inasmuch as tenants are generally the victims of defective sanitation, it is clearly, in the words of a local contemporary, "the first duty of the sanitary authority to protect them against the negligence or cupidity of property owners". It is, moreover, simply astounding that the Portsmouth Town Council should forget that the prosperity of Southsea is mainly dependent upon the welfare of the tenants whose interests the



sanitary authority's officials are not to step out of their way to benefit. The Town Council seems to be determined systematically to neutralise and destroy all the advantage which the sanitary reputation of Southsea would derive from the energetic and intelligent policy of their medical officer of health.

#### THE CATTLE PLAGUE.

THE renewed outbreak of cattle plague is naturally exciting much attention, especially in regard to the importation of foreign live stock. At a recent meeting of the Staffordshire Chamber of Agriculture, it was decided that, considering the success which had attended the introduction of dead American meat, and the inefficiency of the precautions adopted for the prevention of the introduction of cattle-disease, both in the interests of consumers and producers, it was of the greatest importance that the importation of foreign live stock should be prohibited. A proposition was also carried that accurate statistics as to the relation which foreign imported live and dead meat bears to the aggregate amount consumed in Great Britain should be prepared by the Government. An opinion was expressed that the introduction of dead American meat would be advantageous. The local authorities of various places have issued orders prohibiting the introduction of live cattle within the boundaries of their jurisdiction.

#### CHANGE OF HOLIDAY-TIME.

DURING recent autumns, complaints have been made of the almost complete absence from London of the leading medical and surgical authorities. We are pleased to see that the notice taken of this difficulty has not been without effect on a few of our distinguished *confrères*, some of whom have lately availed themselves of Eastertide to travel in search of rest and recreation. One gentleman has gone to St. Petersburg and Moscow; but there is not the slightest foundation for the report telegraphed to the *Times* on Wednesday last by its Prussian correspondent, that the Czar was suffering from a malady for which he was shortly to be consulted. Others have gone to Rome, Paris, Spain, Berlin, etc. We doubt not that they will all return reinvigorated for the work of the coming London season.

#### METROPOLITAN MEDICAL RELIEF.

THE Council of the Charity Organisation Society have arranged to have a special meeting at the rooms of the Society of Arts, John Street, Adelphi, on Tuesday next, the 17th instant, at 4 P.M. Dr. H. W. Acland of Oxford will take the chair; and a paper by Sir Charles Trevelyan will be read.

#### HOME FOR INVALIDS IN ROME.

We are glad to learn, from a letter to a daily contemporary, that steps are being taken for the foundation in Rome of a home or sanitarium for the reception of invalids. It is intended primarily for the English and American residents and visitors, but will be open to invalids of other nations on the recommendation of the Committee. All medical men and ministers of religion are to have access to it. It is proposed to open the Home in October next. The payments will be at a fixed weekly rate on the most moderate scale commensurate with the cost of maintaining a house in every respect well appointed and provided with all English comforts and refinements. Those payments will include every extra, special diets, and meals apart, foreign wines and spirits alone excepted. The endeavour will be to render the Home bright, cheerful, and sociable. A private hospital will form part of the work, entirely separated from the Home itself, where severe cases of accident and illness will be received and nursed in private rooms at special rates of payments. Trained English nurses will be attached to the Home, and take charge of the cases under medical supervision. An appeal is made for funds to furnish the Home and guarantee expenses, though it is believed that it will ultimately become self-supporting. The project has received the warm support and sanction of the English Ambassador and of the United States Minister at the Court of Italy. Miss Pearson and Miss McLaughlin, who have had

large hospital experience, have consented to take charge of the Home and superintend the nursing. The proposal is one deserving of general support.

#### A HOSPITAL FOR MADAGASCAR.

MISS NIGHTINGALE has sent to a daily contemporary a letter from the Missionary Bishop of Madagascar, asking for aid in establishing a hospital in the island. Bishop Cornish, writing from Tamatave, a town of about 10,000 inhabitants, of whom 8,000 to 9,000 are natives, says:

"Upon this mixed population a very severe epidemic (small-pox) has fallen, which has decimated the native population and has not wholly spared the Creoles and Europeans. When such a calamity occurs, the native authorities have one only rule of action; they send away to the forest every infected person. The natural result is that those who escape death by disease are too likely to be starved to death. When I found out what was going on, and that it was in vain to look for any other action from the Hovah authorities, I secured a piece of ground, upon which there was a small dilapidated wooden house, and placed there a lady who was staying with me—a Nightingale nurse of large hospital experience—who, as might have been expected, promptly came to my assistance. She has had as many as ninety patients under her care at one time; and, if many have died, their sufferings have been alleviated by all that tender care could do for them, while a large number have, by her instrumentality, been restored to health. Our efforts have been nobly seconded by Dr. Davidson, the physician of the Scotch Medical Mission at Antananarivo, who happened providentially to be detained here owing to the very stringent quarantine between this country and Mauritius. This epidemic will pass away so soon as it has worn itself out; but our experience of this terrible sickness has forced upon us the conviction that, with so large a population, it is our duty to endeavour to establish a permanent hospital in this town. And if this is to be done at all, it must be done from England, because this is at present a young community, as yet without form or unity of action."

#### CORONERS AND INQUESTS IN AUSTRALIA.

A BILL is now before the Legislative Assembly of Victoria which provides for the abolition of the office of coroner, and appoints that every police magistrate, or any two justices in the absence of a police magistrate, shall have jurisdiction such as the coroner now exercises, and shall perform the duties of coroner; and further, that, "when an inquest cannot for any reason whatsoever be held by reason of the inability of a police magistrate or justices to attend such inquest, then it shall be held by any person appointed for the purpose by the minister of the Crown entrusted with administering this Act". This Bill was discussed at a late meeting of the Medical Society of Victoria, and the following resolution was passed.

"That this Society, having considered a 'Bill to provide for the holding of inquests and for other purposes', now before Parliament, its object being virtually to abolish medical coroners, and to appoint as coroners those having only legal or general knowledge, therefore regards it as dangerous to the common safety, inasmuch as the verdict of a coroner's jury so frequently depends altogether upon the medical evidence, and it therefore requires medical knowledge on the part of a coroner, in order that evidence of this kind shall be thoroughly comprehended by him."

#### "FAMINE" DIARRHŒA.

THE correspondent of a daily contemporary, writing of the large number of deaths from starvation at Madras, owing to the famine, says: "But to see the miserable sufferers from 'famine diarrhœa', long rows of them in the hospital sheds, and to know that under kind care and skilful medical treatment about 50 per cent. of them die, suggests to the observer the thought that, if this rate of mortality occur under observation, what must it be among the starving villagers who have not ventured into the town to seek relief? This famine diarrhœa, my medical friends tell me, is nothing more than the physiological result of a long course of bad or insufficient food. When the food is insufficient for the nutrition of the body, the tissues of the body begin to be absorbed, and, after a time, the delicate mucous membrane of the bowels gives way, and there is what is called ulceration of the intestine, the symptom of which is 'diarrhœa'. If the individual have been starved



very badly before this diarrhoea sets in, recovery is very rare. Dr. Thompson, the able medical attendant of the camp at the Monegar Choultry, has had many hundreds of these people under his care, and can tell by a mere glance at his patient whether he will live or die."

## SCOTLAND.

A CASE of small-pox is at present under treatment at Leith Hospital. The patient is a woman who had been only two days in the service of the hospital as cook when she was seized.

DURING the financial half-year just closed, legacies of £100 or upwards have been paid to the Edinburgh Royal Infirmary to the amount of £7,300 in round numbers. During the same period, there has been received specially for the building fund a donation of £1,050 by the Magistrates and Town Council of Edinburgh, and with it has to be acknowledged a donation of £1,000 for the same purpose by James Wilson, surgeon, late of Canada, received some time before.

THE report of the Glasgow Dispensary for Skin-Diseases shows that during the past year upwards of 1,200 patients presented themselves for advice, and sixty-seven patients had been admitted to the wards of the Western Infirmary. The income for the year had exceeded the expenditure by £120, and there was a reserve-fund in the bank of £1,150. The chairman stated that it was the intention of the directors to secure a sufficient sum of money to enable them to raise a permanent house for the relief of the out-door patients.

### DEATH-RATE OF EDINBURGH.

THE mortality of Edinburgh has been for the past week or two somewhat above the average, owing probably to the strong east winds which have been prevalent. Deaths from chest-diseases, inclusive of consumption, caused 37 per cent. of the deaths. Infectious diseases, however, are still almost entirely absent. With the exception of whooping-cough, to which six deaths are credited, there were but two deaths last week from other zymotic diseases—one from typhus, and the other from typhoid. The mortality for the week was at the annual rate of 26 per 1,000.

### UNIVERSITY OF ABERDEEN.

A MEETING of the Senatus of Aberdeen University was held last Saturday, when Mr. J. Traill was installed as Professor of Botany. Professor Bain moved that, in the event of any Bill being brought into Parliament referring to the Scotch Universities, the Senatus agree to petition Parliament to introduce a clause removing the legal restriction to the admission of women. Professor Fuller moved as an amendment, that it was inexpedient for the Senatus to pronounce any opinion on the subject of the admittance of women into Scottish Universities till the subject was brought before them in a definite shape and with a view to a practical solution. Those who voted for the resolution were Professors Pirrie, Milligan, Black, Forbes, Struthers, and Bain—six; those for the amendment were Professors Thomson, Fuller, Nichol, Geddes, Brazier, Trail, Stephenson, Fyfe, and Traill (Botany)—nine. The Principal and Dr. Ogston declined to vote. Professor Fuller was elected as assessor of the Senatus to the University Court, in room of Dr. Pirrie, resigned.

### HEALTH OF GLASGOW.

IN his last fortnightly report of the health of Glasgow, Dr. Russell, the medical officer of health, states that during the fortnight there had been 745 deaths registered, compared with 661 in the fortnight preceding, and being equal to an annual death-rate of 35 per 1,000 living, in place of 31. The average of March for the past ten years was 35, while that of the last four weeks was 33. There had been one death from small-pox, which had occurred in a hospital; the case was a confluent one, and no vaccine mark was visible. Only one death from scarlatina was registered during the fortnight: seven cases of small-pox

had been notified to the authorities during the same period; of these, four were related to the primary case of death at home reported a month ago, making seven cases in all derived therefrom. No fresh cases had been discovered for ten days.

### HABITUAL DRUNKARDS.

A MEETING of the leading medical men of the west of Scotland was held in Glasgow on April 5th, Professor Allen Thomson presiding. Resolutions were adopted declaring that it was often found to be utterly impossible to cure dipsomaniacs, that insanity in its most pronounced form frequently developed out of a craving for drink, that the only effectual cure is personal restraint for a longer or shorter period, that many persons would voluntarily submit themselves to this restraint, and that, therefore, the meeting would petition in favour of Dr. Cameron's Habitual Drunkards' Bill.

## IRELAND.

THE deaths from small-pox in Dublin for the first quarter of the year amounted to seventeen, the last death registered being in the week ending March 17th.

THE Board of Trustees of the Cork South Infirmary and County Hospital, have elected Dr. J. G. Curtis Surgeon, and Drs. Mac-naughton Jones and Charles Tanner Assistant-Surgeons, to the Infirmary.

THE Council of the College of Surgeons, by a recent resolution, have refused to receive for the future the entrance examination in Arts of the University of Dublin, as qualifying for the preliminary examination for the diploma in surgery.

### DEATH OF A CENTENARIAN.

A GENTLEMAN died last week at Bray, Co. Wicklow, who was reported to have reached the advanced age of 109. The deceased was indubitably over 105, and retained his mental faculties to the last. Up to a short period before his death he enjoyed very fair health.

### DEATH FROM GLANDERS.

THE death of a young married woman from this disease is reported to have occurred last week near Coleraine. It is said that the woman contracted this disease from her husband having brought a glandered horse into their dwelling-house.

### THE LEDWICH SCHOOL OF MEDICINE AND THE UNIVERSITY OF DUBLIN.

THE proprietors of the Ledwich School of Medicine having brought the correspondence between that institution and the Board and Academic Council of the University of Dublin under the notice of the Council of the Royal College of Surgeons, a meeting of that body took place last week, when a resolution was unanimously adopted by the Council to the effect, that they considered the decision of the authorities of the University of Dublin as unwarrantable, and that they had every confidence in the proprietors of the Ledwich School of Medicine.

### LECTURES ON SANITARY SCIENCE.

ONE of the main objects of the Dublin Sanitary Association is to create an educated public opinion with regard to sanitary matters in general. This task the Association have been most energetic in endeavouring to accomplish by undertaking the delivery of annual courses of Popular Lectures on Sanitary Science. Judging from the numerous attendances at the lectures, which were given under the auspices of the Association at Rathmines last year, the success of this plan is assured, and the amount of vital information thus disseminated among the public cannot fail to bear good fruit. The following is the syllabus for the course of lectures just announced for this year:—Introductory, by the Very Rev. Dean Dickinson; Healthy Homes, by



Chetwode Crawley, F.G.S.; Story of a Mountain Stream, by Emerson Reynolds, M.D.; Recent Researches in Atmospheric Dust, by C. R. C. Tichborne, Ph.D.; Invisible Foes, and how to fight them, by Stewart Woodhouse, M.D.; and Food, by H. J. Tweedy, M.D.

#### SURGICAL SOCIETY OF IRELAND.

THE last meeting of the present session took place on Friday, April 6th; some morbid specimens being exhibited, and several communications read by various members of the Society. Among the papers was one by Mr. Stokes on "Foreign Bodies Removed by Operation", in which he described a curious case, where an entire catheter was removed from the bladder of an insane patient in the Richmond Hospital on two occasions, who had purposely introduced it; and shortly afterwards, in another hospital, about two inches of a third catheter were taken away from the bladder of the same patient. Dr. Robert McDonnell exhibited a modified lithotomy staff, the peculiarity of which was the full curve, large groove, and no stop on the groove of the staff. Dr. Kidd, the President, in a short address, referred to the proceedings of the past session, which he considered to be of a very high order; after which the meeting separated.

#### NATIONAL EYE AND EAR INFIRMARY, DUBLIN.

THE bazaar recently held for enlarging this institution has brought in the handsome sum of £523. At a meeting of the Committee last week, the following resolution in reference to this matter was unanimously adopted: "That the grateful thanks of the Committee of the National Eye and Ear Infirmary are hereby accorded to the ladies who so zealously and laboriously organised, took part in, and matured the recent bazaar, which produced such abundant fruits for this deserving and valuable institution." We trust that the sum still required to carry out the necessary alterations will speedily be obtained, the accommodation at present being perfectly inadequate for the applications for relief.

#### STEWART INSTITUTION FOR IMBECILES.

THE annual meeting of the Council of this estimable institution was held on March 29th, the chair being occupied by Lord James Butler. During the year ending December 31st, the subscriptions and donations were an improvement on those of the preceding year; the annual subscriptions amounting to £656, general donations £369, and those for the building fund to £2,103. In this latter sum are included the proceeds of a bazaar held last year, which produced £625, free of all expenses. The report read states that the true objects of the institution appear to have become better understood by the voters; its mission being to endeavour to promote an improvement in the condition of imbecile cases where a reasonable probability of such appears to exist. The results of the last few elections have been, on the whole, more satisfactory than previous ones, the children received being of a somewhat higher average of intelligence, and a good hope is entertained by the medical superintendent of making them in some sense contributory to their own livelihood. Dr. Nugent, Inspector of Lunatic Asylums, in a recent report, after referring in favourable terms to the Institution, observes that it may be regarded as a success, affording every reason to anticipate that, when the building at Palmerston is completed and tenanted, a lasting benefit is sure to be conferred on a numerous class of the mentally afflicted, who in childhood and early age cannot be satisfactorily treated either in district or private asylums, from which they should, as a rule, be debarred, their commixture with insane adults being alike detrimental to both. The Chairman and Vice-Chairman of Council, with the Committee, having been re-elected, the meeting separated.

DEPUTY INSPECTOR-GENERAL AHMUTY IRWIN, C.B., who was specially promoted for his services in the Ashantee War, has been appointed to succeed Mr. Pickthorn, as Second Medical Officer of the Royal Naval Hospital at Haslar. Mr. Irwin is succeeded in medical charge of the Naval Establishment in Jamaica by Deputy Inspector-General Charles M'Shane.

## LEGISLATION FOR HABITUAL DRUNKARDS.

### THE HABITUAL DRUNKARDS BILL.

THE Bill introduced into the House of Commons by Dr. Cameron, member for Glasgow, resembles in principle the measure introduced four years ago by the late Mr. Donald Dalrymple; but, in the hands of the Association formed for the purpose of dealing with the subject of legislation for habitual drunkards, some important modifications of the machinery have been made.

The Bill defines a habitual drunkard as "a person who, by reason of habitual intemperate drinking of intoxicating liquor, is dangerous to himself or to others, or incapable of managing himself or his affairs". It provides for the establishment of two classes of institutions for the reception and treatment of such persons; viz., "retreats" and "industrial hospitals".

By the term "retreat" is meant a building for which a licence, to remain in force for not more than twelve months and capable of renewal, is granted by the borough or county justices as the local authority. Into such retreat, the habitual drunkard may be admitted on the application of himself or of his relatives or guardians. In the former case, the application must be attested by a justice of the peace or a commissioner to administer oaths, and it must be stated that the applicant understood the effect of his application. When the application is not made by the person himself, the case must be decided by the justices in petty session, and, if required by the person implicated, a jury must be summoned to inquire whether he is or not an habitual drunkard. With respect to management of retreats, the duties of proprietors, etc., certain clauses of the Lunacy Act are adopted, with the necessary substitutions.

An "industrial hospital" may be an existing hospital certified by the Secretary of State on application by the managers, and on the report of the inspectors, to be fit for the reception of habitual drunkards; or it may be provided by the local authority of any county or borough, for which purpose the necessary powers are given. The industrial hospital is intended for the reception of habitual drunkards, who, when convicted of drunkenness before a court of summary jurisdiction, are to be liable to be committed to such hospital, and detained for a period of not less than one month or more than twelve; either at the expiration of any sentence previously passed on them or immediately after conviction. Again, a person convicted of being drunk and incapable or drunk and disorderly three times within twelve consecutive calendar months may be ordered to find sureties for good behaviour during twelve months, or, in default, be committed to an industrial hospital.

In all cases, the period of detention in a retreat or an industrial hospital is to be not less than one nor more than twelve calendar months. A person admitted into a "retreat" at his own application may be at any time discharged at his own request, or, if admitted on the application of his relations, at their request, made to the justices, if such request appear to be reasonable and proper. A person sent to an industrial hospital is to be detained for the time specified in the order for his committal, unless discharged by the Secretary of State at the recommendation of the inspector or assistant-inspector of industrial hospitals.

Provision is made in the Bill for the appointment of an inspector (and, if necessary, an assistant-inspector) of industrial hospitals, who is to inspect every retreat and industrial hospital from time to time. Visitors are also to be appointed by each local authority. They are to be three or more justices, and at least one registered medical practitioner, who is to receive such salary as the local authority shall think fit. Every retreat and industrial hospital is to be visited six times at least in every year by at least three visitors, one being a medical visitor. The visitors may order the discharge of persons who appear to be detained without sufficient cause; and may give license to inmates of a retreat, or to persons who have been detained not less than three months in an industrial hospital, to live with any trustworthy and respectable person for a definite time.

The Bill—which consists of sixty-one clauses—also makes provision for expenses, and for dealing with offences against the Act.

### MEETING IN GLASGOW.

A MEETING of medical men, for the purpose of considering the Bill, was held in Glasgow on the 6th instant; Professor Allen Thomson in the chair.

Dr. FERGUS moved, and Dr. LAPRAIK seconded, the following resolution, which was carried:—"We, as members of the medical profession, have had frequent opportunities of observing the deplorable



effects arising from habitual excess in the use of intoxicating drinks, and we have often felt ourselves in a position of utter helplessness and inability to apply any effectual means for the treatment of such persons."

Dr. YELLOWLEES, Superintendent of the Gartnavel Asylum, moved the next resolution, viz.:—"Persons habitually addicted to excess in the use of intoxicating liquors are frequently in that regard in the condition of insane persons, and ought to be treated as such. Being perfectly reckless in their morbid desire to obtain a supply of drink, they sacrifice themselves and their families to their passion with all the disregard of consequences of madmen. It is also a fact known to all medical men that insanity, in its more pronounced forms, frequently develops out of this insane craving for drink." In speaking on the subject, he said that medical men had to guard very carefully the taking under their wing people who were habitual drunkards. So long as drunkenness was merely a vice, they had nothing to do with it, except that they knew it led to disease, and that they could therefore give more solemn warning than others of the community. Even when the vice became dangerous, he did not think they had anything to do with it; the case was one for punishment and legal interference. It was when this habitual vice became a resistless disease, that they as physicians had anything to do with it. It was most fitting that they should move, as they now did, for some legislative help in caring for the habitual drunkard. He agreed with Dr. Fergus as to the inexpediency of sending such cases to lunatic asylums. Such a proceeding was liable to render a man's condition more hopeless, from the feeling that he was associated with insane persons, and he had known only two dipso-maniacs who had made any satisfactory progress in an asylum. The provision of the law for the reception of habitual drunkards into asylums, as voluntary inmates, amounted in its results to almost nothing.

Dr. W. D. FAIRLESS, of Bothwell, seconded the motion, and expressed his opinion that legalised power to detain habitual drunkards for a lengthened period was necessary. The system of voluntary admission into asylums had been found by him to be a failure.

The resolution was adopted.

Dr. GRIEVE of Port Glasgow moved the next resolution, which was as follows:—"The only effectual method in our opinion of dealing with such persons, in order to their cure or reformation, as well as for the protection of their property and relatives, is to put them under some means of restraint, for a longer or shorter period of time. We believe that many would voluntarily submit themselves with a view to their recovery, and for such as would not thus voluntarily place themselves under treatment, means might be devised whereby restraint might be put upon them, without endangering the proper liberty of the subject."

Dr. DONALDSON, Hamilton, seconded the motion, which was carried.

Dr. COATS read an extract from a letter from Dr. Cameron, explaining the objects of the Bill.

A resolution, proposed by Dr. MCCALL ANDERSON, was, after discussion, adopted in the following form:—"That this meeting empowers and directs the chairman, Dr. Allen Thomson, to prepare and transmit to Parliament, in name of this meeting, a petition embodying the resolutions; and the meeting being informed that a Bill has been introduced into Parliament by Dr. Cameron, approve of what they understand to be its main provisions, and further authorise their chairman to petition the House of Commons in its favour."

Dr. Gairdner has forwarded to us the following copy of a letter on the subject, addressed by him to Dr. Coats, the secretary of the meeting:

"225, St. Vincent Street, Glasgow, April 5th, 1877.

"Dear Dr. Coats,—I am very sorry that a call to Dundee to-morrow, which I cannot well postpone, will prevent me from attending the meeting to consider the 'habitual drunkard' question. I am not familiar with what is proposed to be done this session; but in the days of Mr. Dalrymple's Bill, I took a good deal of interest in the subject, and corresponded with him about it, with the result, I think, of modifying both his opinions and his proposals in some degree. I have never doubted either the propriety or the expediency of restraining habitual drunkards, as well in the interests of society as in their own. But I have also a feeling that it will be difficult, and possibly inexpedient, to pass a measure founded on what may be called the *dipsomaniac* theory in its more thorough-going form—i. e., the theory that a man incurably addicted to drink is, *ipso facto*, a subject of medical care rather than police supervision. Such a theory, when applied to persons not demonstrably insane, must always be unacceptable to the great mass of liberty-loving persons in this country, and tends, in its applications in detail, to strain the medical prerogative in a degree most injurious to our legitimate professional influence. Dr. Bucknill's recent revolt against the whole of this kind of legislation is just an example

of what will go on in many minds, even of intelligent medical men, if the dangerous power is conceded to them of pronouncing upon the fitness of habitual drunkards to live at large. But what I should gladly see carried out is a measure making drunkenness, and, *a fortiori*, habitual drunkenness, an offence, and a cumulative offence; so that a habitual drunkard, of a certain degree of *habit and repute*, should be *judicially* deprived of his liberty, or otherwise prevented from getting access to his alcoholic temptation for a lengthened period. This would, of course, involve primarily the idea of punishment in various degrees, as for a crime against society; but the question of insanity in particular cases, or of diminished moral responsibility through weakness of mind, might be reserved as a genuine medical question affecting the nature and amount of the penal consequences. I cannot in writing go more into detail, but I dare say this will be more or less intelligible to those who have maturely considered the subject.—I am, yours truly,  
"W. T. GAIRDNER."

## ASSOCIATION INTELLIGENCE.

### COMMITTEE OF COUNCIL: NOTICE OF MEETING.

#### ALTERATION OF DATE.

A MEETING of the Committee of Council will be held at the Office of the Association, 36, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 18th day of April next, at Two o'clock in the afternoon.

FRANCIS FOWKE,  
General Secretary.

36, Great Queen Street, London, W.C., March 28th, 1877.

#### MIDLAND BRANCH.

THE sixth and last monthly meeting of this Branch will be held at the house of the President, on Friday, April 20th.

Coffee at 7.30 P.M.

A paper on the Progress of Surgery during the last Thirty Years, by Joseph White, F.R.C.S. Edin., President of the Branch.

L. W. MARSHALL, M.D., Hon. Local Secretary.

Nottingham, March 26th, 1877.

#### NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch will be held at the Royal Hotel, South Shields, on Wednesday, April 25th, at 3 P.M.

Dr. Eastwood will propose, "That it is the duty of the General Medical Council to prosecute unqualified medical practitioners."

Dr. Eastwood will present a petition to be signed in favour of the Habitual Drunkards Bill, 1877.

The following papers have been promised.

1. Dr. E. C. Anderson: Objection to the use of the term "Typho-malarial Fever"; that it is not a hybrid of the enteric and malarial forms of fever, but a manifestation of two separate concurrent diseases, one of which may cease to exist in the system and the other pursue its course.

2. Dr. E. C. Anderson: Notes upon a Case of Rheumatic Fever, in which after apparent complete recovery, the patient suffered from a relapse. Former attack treated with large doses of bicarbonate of potash, the latter with the salicylate of soda.

3. Dr. J. C. Reid: Milk, as a Therapeutic Agent.

4. Dr. M. M. Bradley: The relative merits of the several methods used for the Treatment of Prolapsed Funis; illustrated by Cases.

5. Dr. T. W. Craster: A peculiar case of Epileptiform Convulsions. Dinner at the Royal Hotel at 5 P.M. Charge 6s., exclusive of wine.

G. H. PHILIPSON, M.D., Honorary Secretary.

Newcastle-upon-Tyne, April 10th, 1877.

#### BORDER COUNTIES BRANCH.

THE spring meeting of this Branch will be held at Penrith, on Friday, May 4th. President: Dr. HENRY BARNES. President-elect: Dr. STEWART LOCKIE.

Gentlemen intending to read papers, or be present at the dinner, are requested to give notice to the Secretaries.

RODERICK MACLAREN, M.D. } Honorary Secretaries.  
JOHN SMITH, M.D. }

Carlisle, March 6th, 1877.



## CORRESPONDENCE.

## THE MEVAGISSEY CANTHARIDES CASE.

SIR,—I read with much satisfaction the leading article in this case in your issue of March 24th. It appears to me, however, that it would be a misfortune were the trial and the remarkable ruling of the presiding judge to pass out of view without a little more criticism than that to which you have subjected it, and for which your editorial columns could hardly afford further space. If, as you suggest, it can be brought under the review of other judges and a reversal of the Chief Justice's ruling obtained, it will be a decided public benefit; if, unhappily, the ruling should be sustained, it will be a heavy blow and great discouragement alike to criminal jurisprudence and to public morality. It is to be hoped that, if any appeal be taken, though I do not exactly see who has any interest in so doing, it may be put in such a form that it will not collapse into a technical legal discussion, as to whether Hennah should or should not be punished, but that it may evoke a full discussion of the remarkable ruling of the Chief Justice, and the still more remarkable grounds upon which he bases it.

There seems to be no doubt as to what the *ipsissima verba* of Chief Justice Cockburn were. I have before me two Devonshire papers, in each of which the judgment is reported in terms which, though not identical in words, are practically identical in sense:

"The statute requires, in order to constitute an offence, that there shall have been an administration of a noxious thing; and we think, in order to make out an offence, the thing administered must be of such a character as to satisfy rigorously the requirements of the law, namely, that it must be a noxious thing. I think there must be a distinction between a thing, only noxious when given in excess, and a thing which is a recognised poison, known to be a thing noxious, pernicious in its effect."

With regard to his lordship's first proposition, that before a person can be convicted of administering a noxious thing the thing must be proved to be noxious, there will, I presume, be no difference of opinion. His second proposition might be called disputable, if there could be any dispute, among those who have paid any attention to toxicology, as to its being untenable. He says: "I think there seems to be a distinction between a thing only noxious when given in excess and a thing which is a recognised poison, known to be a thing noxious and pernicious in its effect. A distinction is to be made between poisons such as prussic acid and strychnine, poisons of a well-known and established character, and a thing which is only capable of doing mischief when it is administered in excess."

The remarkable thing with regard to this passage is that his lordship had himself answered it by an *obiter dictum*, which he interjected into the discussion before the court. "His lordship observed", reports the newspaper, "that one of the most deadly poisons that a murderer could resort to was strychnine, yet it was used as a medicine by the most eminent practitioners."

What is this but to say that strychnine is a deadly poison when used in excess, and wherein does it differ from cantharides?

His lordship says that it does differ. Continuing the *obiter dictum* above quoted, he says: "A man might administer strychnine, thinking he would produce a destructive effect, but might only use that quantity which, as a medical man would say, would do no harm. Still he used a noxious thing for producing a certain effect." And in his charge to the jury, he says, as above quoted: "A distinction is to be made between poisons such as prussic acid and strychnine, poisons of a well-known and established character, and a thing which is only capable of doing mischief when it is administered in excess."

The doctrine, therefore, thus enunciated is that there is in certain substances, such as strychnine or prussic acid, an inherent essential noxiousness, but that this does not reside in cantharides. It is hardly necessary to say, not to speak profanely of a judicial decision, that this approximates very closely to the incomprehensible.

Continuing the charge to the jury, the Chief Justice says: "Upon the medical evidence before us, cantharides, or, as it is commonly called Spanish fly, is administered medicinally in small quantities, and, up to a certain extent, it is incapable of producing any effect at all. What is important to the present case is, that the quantity administered was incapable of producing any effect." What his lordship here calls medical evidence was that of a druggist, whose experimental testimony consisted in his taking out and weighing certain fragments of cantharides

from a fig, and finding them to weigh from a grain to a grain and a half; and whose scientific testimony consisted in his stating that this quantity was insufficient to produce any effect on the human system, and in his tearing from its context, and laying before the jury, an isolated statement from Dr. Taylor's work on *Poisons*, that the fatal dose of cantharides may be twenty-four grains.

The fatal dose was no question here. The question was whether the drug attempted to be given (one to two grains) was "noxious", that is, what might "injure, grieve, or annoy" the person to whom it was administered. Had there been either at the bar for the prosecution, or, with all respect be it said, on the bench, any one who appreciated the question before them, they might have extracted from the so-called medical witness some facts which would have thrown light on the matter. They might have learned that the tincture of cantharides of the *British Pharmacopæia* is made with a quarter of an ounce of flies to the pint of fluid; that the maximum dose is stated at twenty minims, which means that a dose above this may "injure, grieve, or annoy" any person who swallows it, because it may, and almost certainly will, produce strangury, which is a pretty decided annoyance; and that this dose, twenty minims of tincture, represents less than two grains (1.82 of cantharides), just about the quantity used in the case in question. This evidence would not be lessened in value by the fact that the poison was here attempted to be administered, not as a tincture, but in powder. The form is of no consequence. The powder can produce the same effect as an equivalent quantity of tincture, and it is a fact within my own knowledge that such a quantity of powder can produce annoying effects. In a case which came under my observation some pills, containing each half a grain of the powder, were prescribed for a case of amenorrhœa, by an obstetric celebrity, and had to be peremptorily stopped on account of strangury, which came on when three of the pills (one and a half grains of cantharides) had been taken. There appears to me, therefore, to be in the Chief Justice's charge two errors: first, one of theory, that there is a difference between such poisons as strychnine or prussic acid and cantharides, which makes the former intrinsically noxious, irrespective of the dose; and secondly, an error in fact, that such a quantity of cantharides as one to two grains cannot produce any effect on the human frame.

The truth appears to be that, in this case from first to last, the whole of the parties concerned in it seem to have been in a false position, with the exception of the counsel for the defence, who adroitly—and, regarding him as an advocate, most properly—seized upon the imperfect evidence before the court, and gained an acquittal for his client. The solicitor for the prosecution seems to have had no idea of the importance of the case, when he contented himself with producing such imperfect evidence on a scientific question of this kind. The counsel for the prosecution was in a false position, when he had to argue his case on so imperfect a brief. The druggist, who, I have no reason to doubt, is an excellent man in his own vocation, was in a false position when he was made to figure as a medical witness; and, sooth to say, the judges were in a false position, when, having to decide a most important question on such insufficient data, they enunciated, after laying their learned heads together during a long consultation, so lame and impotent a conclusion as that to which the court came.

I repudiate entirely in these observations the desire to find fault with these various parties, as, individually, such would be an impertinence on my part. Of the solicitor and counsel on either side, and of the druggist who was the scientific witness, I know nothing personally. For the Lord Chief Justice I entertain that respect which is due to him as one of the ablest lawyers of his day; and, as one interested in medical jurisprudence, I would respect him, even if I knew nothing more of him than his marvellous speech in Palmer's case, perhaps the finest instance of accusative pleading in our time. The fault lies not with the men, but with the system under which they act. It does not appear likely that such a *fiasco* would occur anywhere except in England, where there is no public prosecutor. It could hardly, I think, take place in Scotland, for I believe few lawyers would like to stand in the shoes of the Procurator Fiscal or Advocate-Depute who should be found bringing before our justiciary saddle a case supported by such insufficient evidence, and, as Bartholine Saddletree says, "batherin' their lordships" therewith. At all events, it is to be hoped that this ruling as to cantharides will not stand, or that we shall be vouchsafed some idea of what is meant by giving the thing "in excess". Otherwise, there will be easy times for the coarse practical jokers who delight in putting jalap into pies, and for the immoral brutes who think they can excite erotic feelings in girls of fifteen by giving them cantharides, and figs and flies (Spanish) will be at a premium in the enlightened community of Mevagissey.—I am, etc.,

DOUGLAS MACLAGAN.

University of Edinburgh, March 30th, 1877.



## EXAMINATION FOR F.R.C.S.

SIR,—You publish two letters on the above subject. Although one of those who signed the recent memorial to the Council, and who, in my limited sphere, took an active part in the successful opposition to the obnoxious *ten years* clause, I cordially endorse every word of Professor Humphry's thoughtful letter. I am in favour of removing all the vexatious restrictions which now exist, such as preliminary examinations and extra courses of lectures beyond those required for the diploma of membership. But I would go further, and would allow the candidate to present himself for examination at twenty-one years of age. Perhaps this is contemplated. I would not abate the stringency of the examination one iota; on the contrary, I would make it progressively harder in proportion to the advance of surgery and to the increased facilities for instruction. I worked for and passed not only the professional, but the preliminary examination several years after I had been in active practice. There are many others whose case is much stronger.

Surely, it is not too much to ask that others, with at least as much leisure at their command, should do what we have done. I think, if candidates were admitted to examination at twenty-one years of age, the grievance of such as your other correspondent would be removed. If they did not then avail themselves of the opportunity of presenting themselves when fresh from their studies and before they became otherwise engaged, they would have no right to complain if they had to work a little harder at a future time.—I remain, sir, yours obediently,

St. Mary Cray, April 7th, 1877.

C. H. ALLFREY, M.D.

## MRS. HOGGAN'S CASE OF TRANSFUSION.

SIR,—The notes published in your issue of March 31st, 1877, commence with the just remark that it is in the interest of scientific progress that the causes of success or failure in operations should be made public. Light, indeed, can be thrown on such questions by free discussion alone, and this is the reason why I venture to criticise the conclusions arrived at in the notes in question.

Mrs. Hoggan, M.D., attempted to perform a transfusion on April 25th, 1874, with Aveling's original apparatus of the old pattern, which has since been modified in accordance with my principles. She experienced a reverse, in consequence of the repeated coagulation of the blood in the cannula, and, therefore, determined to give up transfusion and confine herself in future to the injection of defibrinated blood. These notes and this unexpected conclusion she published three years later, without thinking of the progress which has been made during these three years. This is scarcely more logical than it would be to say in these days, that one of the first locomotives, tried fifty years ago, ran off the rails; consequently we ought in future only to travel in carriages drawn by oxen. In point of fact, the difference between these two modes of conveyance is no greater than that which exists between the transfusion of living entire and unaltered blood, and the injection of the inefficacious and modified liquid, which is the residuum of the defibrination and filtration of blood.

Mrs. Hoggan mentions the fact of certain reproaches having been made by the patrons of her patient with regard to transfusion. Such reproaches were certainly unjustifiable. Transfusion was so really necessary in this case of hæmorrhage that death ensued because the transfusion was not completed. But other criticisms will be made with more justice when Mrs. Hoggan, in trying the injection of defibrinated blood, meets with the failure which is inevitable; for this antiphysiological operation has never been of any real use; all the transfusionists who have practised it have abandoned it; only those still continue to speak of it who have a mere theoretical acquaintance with its employment. To practise it would be to take a step back and to ignore the progress already made.

In the first place, Mrs. Hoggan ought no longer to employ the term "transfusion", which can only with propriety be applied to the direct passage of the blood from one body to another. She ought only to have said this: "I have failed with a certain apparatus; perhaps I did not thoroughly comprehend its action; or I will make experiments with another."

Since there are many kinds of apparatus existing, she will only be embarrassed to choose the best, or rather she will have no difficulty in deciding if she have observed all the conditions necessary to a good transfusion. To distinguish the apparatus which fulfils them all, will be a light task for a person of such fine discrimination as my honourable colleague. To make such a choice is very necessary; for transfusion is a very delicate operation. The obstacle presented by the tendency of the blood to form clots can only be overcome by the minutest observation of several complicated rules which it is absolutely

indispensable to study before becoming capable of touching human blood.

The authors of the notes in question have endeavoured to elucidate the causes of coagulation. They give five which have struck them. One of these is very well stated: "1. There are two long metallic tubes or cannulae, one at each end of the apparatus, which have to be plunged into the tender blood-vessels." The others are not completely understood. "2. There is the shock of turning the stopcocks at each end when the two circulations are to be connected." "3. There is the double shock of the blood entering and leaving the ball or chambers of India-rubber in the centre of the apparatus, at each filling and discharging of an ounce." Now, it is not the shock which causes the blood to clot; the clots are produced because the blood is in repose where it touches the stopcocks and the metallic mountings of the ball. "4. There is the long India-rubber tube connecting the different parts together. In this tube, all friction and shock to the passing blood had to be sustained." This friction and shock are inevitable, and the tube is indispensable; but, if the tube be constructed of pure caoutchouc polished, soft, moist, and warm, like the human vessels themselves, no coagulation is produced in the length of time necessary for the rapid passage of the blood. "5. The substitution, in the instructions, of water for alkaline solution was, if necessary, much more conducive to the chance of coagulation." Since by this method, as Mrs. Hoggan has justly remarked, all the water which fills the apparatus must be introduced into the circulation, it would be more prudent to employ pure water.

In my transfuser, which is already a little known and approved of in London, there are no metallic mountings or tubes; nor are there any metallic stopcocks in the current of the blood. My stopcocks or clamps are not made of metal, and never open or shut in the course of the blood which has to be transfused. The caoutchouc, which is the only suitable material, is absolutely pure and polished. I do not introduce into the patient's veins the water which is contained in the apparatus in order to expel the air; consequently I am able to use an alkaline solution without detriment, but pure water amply suffices. I have performed more than fifty completed transfusions and more than one hundred bleedings to illustrate the working of my transfuser. Other surgeons have also very often employed my apparatus, and on no occasion has the transfusion been arrested or obstructed by the coagulation of the blood; nor could such a difficulty arise with my transfuser, unless a person were to use it without having sufficiently studied its working.

I am in a position to say, with the great majority of operators, that direct transfusion of living and unaltered blood is the only justifiable operation. It alone should be studied and brought to perfection. I hope to prove this in a pamphlet on *Transfusion* which will shortly be published by Messrs. Churchill; and I shall be happy if I dissuade my colleagues Dr. and Mrs. Hoggan, and all others, from the hazardous practice of injecting the residuum of defibrinated blood, to which pure water is far preferable.—Yours, etc.,

DOCTEUR J. ROUSSEL (of Geneva).

23, Gloucester Place, Hyde Park, London, April 10th, 1877.

SIR,—As I must bear the responsibility of reintroducing in this country immediate transfusion, I am naturally interested in any criticisms which may be made upon the operation. Will you allow me, therefore, to make some comments upon a case which occurred in the practice of Mrs. Hoggan, M.D., at the New Hospital for Women? Dr. Hoggan assisted and acted as reporter. Briefly stated, as far as possible in his own words, the history of the operation is as follows.

They first examined the apparatus, and "acquired anything but a cheering opinion of it", and were "rightly or wrongly suspicious of the instrument". Then they began the operation and "connected the two circulations without the slightest hitch". Next, "three or four pumps or syringefuls were cautiously discharged into the patient with success"; then came "the refusal of the ball-pump or syringe to dilate". An obstruction having been found in the afferent tube, a probe was passed into it, the instrument again filled with water, and the operation recommenced. Again, after "three or four pumps", obstruction took place and the operation was suspended. "The effect on the patient, however, seemed very beneficial; her spirits and her circulation improved greatly, although at most she had not received above eight ounces of fluid."

The comments upon this operation are to the effect that clotting of the blood was the cause of the obstructions; that it is better, in all cases, to use defibrinated blood; and that mine is "an instrument upon which little dependence can be placed". These conclusions are, I believe, all erroneous. My reasons for discrediting the "clot" theory are these. 1. The time necessary for leisurely filling and empty-



ing the apparatus three or four times is too short to allow the formation of an obstructing clot. 2. The quantity of fluid injected is given as "not above eight ounces". My instrument holds about an ounce, and injects about three drachms. Taking the mean of the "pumps" given, the number must have been seven. Seven pumps would inject twenty-one drachms; of these, sixteen would be water and five blood. There is an evident misstatement here; for, if the number of pumps given were seven, the number of ounces injected could not be eight. If the number of pumps given were really seven, only two and a half drachms of blood passed into the instrument at each operation. This quantity would scarcely be sufficient to cause an obstructing clot. 3. I have, when operating, found the afferent tube suddenly occluded. This I have found to be caused by the side of the vein coming into contact with and being drawn against the mouth of the tube. The occlusion has always been removed by altering the position of the tube in the vein. A probe passed down the tube would have the same effect, as it would remove the obstructing part of the vein. 4. My experience is, that the efferent tube is the first to become occluded, but neither has been obstructed early in the operation by clotting. The question whether normal blood or a fluid manufactured from blood should be transfused is now almost universally answered in opposition to the opinion of Dr. Hoggan. As to the value of my apparatus, I know perhaps better than anyone else its imperfections. I should be glad to be able to dispense with passing the afferent tube into the vein of the blood-donor, and am making experiments to that end. The greatest objection to all transfusion instruments is, that blood will coagulate when it comes into contact with an inanimate substance. A film of blood forms over the whole of the inner surface of every apparatus, and this thickens as the operation proceeds. In my instrument, this obstructing process does not occur with the rapidity Dr. Hoggan believes; and this statement is corroborated by Dr. Glynn of Liverpool, who, publishing his case the same day as Dr. Hoggan (*Lancet*, March 31st), opportunely declares that he transfused with my instrument from "eighteen to twenty ounces", and adds: "I cannot conceive that any apparatus could work better than Dr. Aveling's did in this instance."

As Mrs. Hoggan's patient's circulation improved greatly from the slight transfusion effected by my instrument, why was the operation not repeated with defibrinated blood? Dr. Hoggan answers: "We did not dare to attempt another operation with defibrinated blood, although we had reason to feel assured of its having the best effect on the patient." Why did they not "dare" to try to save life? Dr. Hoggan again answers: "Why we did not interfere further may be imagined from the fact that, even in the case under consideration, some *titled friends* of the poor patient, who had sent her into hospital, were afterwards heard to express in a *high circle* their opinion that their *protégé* had been unjustifiably experimented upon." It cannot surely be widely held that the life of a patient should be sacrificed when popular prejudice is against the necessary operation, or when loss of high patronage may result. It would, I should think, be most damaging to a hospital, if it were believed that the practice of its staff was in the least degree controlled by such considerations.—I am, etc.,

J. H. AVELING, M.D.

1, Upper Wimpole Street, W., April 2nd, 1877.

#### ORAL INSTRUCTION FOR THE DEAF AND DUMB.

SIR,—This plan of instruction, noticed in your article on March 17th, deserves the fullest attention of the profession; for there is an absolute physical gain to the children educated by the "German" system, viz., by lip-reading and articulation, which is generally overlooked, because known only to those who make the oral system a special study. This advantage is that the child's breathing apparatus, being used for vocal purposes as well as in respiration, is restored to a normal condition. The chest is also expanded by means of gymnastic exercises, the breathing is directed by the trachea through the nose instead of the mouth, as is customary with deaf-mutes, and, in consequence of the muscles of the tongue, face, and larynx employed in the act of speaking being brought into play, as they were originally intended to be, the face of the deaf child in course of time loses that heavy flabby appearance common to the dumb, and acquires mobility, liveliness, and an expression of alert intelligence.

Children taught to speak and lip-read are also happier in themselves than those, educated by signs and the manual alphabet, who remain dumb; and this happiness reflects itself upon their bodily vigour. It is well known that the majority of the deaf and dumb are very suspicious and irritable. This suspicion and consequent irritability, which is particularly shown in the presence of strangers, arises from the fact that the deaf person cannot understand what is passing between those

about him, and becomes possessed by the idea that he is the object of conversation and contemptuous remark. Most people know the very disagreeable feeling which takes possession of them when, in a railway carriage, for instance, strangers are speaking in a language foreign to them, their remarks being accompanied by smiles and glances. Now, in all probability, their conversation may have not the slightest reference to themselves, but still the uncomfortable feeling certainly exists. The deaf and dumb experience this same feeling intensified; and the consequence is, that they shun the society of hearing persons and seek the companionship of those afflicted like themselves. But, when enabled by lip-reading and articulation to enter into the conversation of hearing persons, they have less, if any, reason to avoid them. The deaf who have been taught to speak are not compelled to limit themselves to association with others who are deaf; consequently they can seek in marriage hearing persons instead of following the plan of many unfortunate deaf-mutes who intermarry with other mutes, and thus increase the probability of propagating the affliction.

Even in schools, it is not well to associate a large number of deaf children together; it is only possible when the proportion of teachers to pupils is large to maintain adequate surveillance to prevent the children from making signs to each other, and thus interfering with that undivided attention to the lips which is essential if the pupil is to learn to read from them.

It is impossible that the oral system can be extended until a good supply of well trained English teachers can be obtained, and it is to supply this want that the proposed training college is to be established. If the superiority of the oral system be acknowledged, as it should be, by the profession, its speedy extension is secured.

I am, etc.,

E. SYMES THOMPSON, M.D., F.R.C.P.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE Birkenhead Improvement Commissioners and Urban Sanitary Authority have increased the salary of Mr. Francis Vacher, Medical Officer of Health, from £250 to £300 *per annum*.

VACCINATION.—Mr. George Harvey has received a grant of £8:6 from the Local Government Board for the state of vaccination in the Wirksworth district of the Belper Union.—The Local Government Board have awarded to Mr. A. C. Mayo of Mildenhall, £14:12 for efficient vaccination in his district.

#### WORKHOUSE MEDICAL OFFICERS AND CASES OF DRUNKENNESS.

SIR,—The letter of Dr. Joseph Rogers in the last number of the JOURNAL regarding the case of a drunken woman who was sent to the workhouse by the police, affords another illustration of a kind of irregularity with which I was formerly well acquainted, and which, I see, has not yet dropped into desuetude. Some time ago, I assisted Dr. Rogers as his legal substitute in the Westminster Union Workhouse and Infirmary, and I have a disagreeable recollection of having been called on several occasions during the night as well as the day to see persons brought by the police as cases of illness requiring admission to the workhouse, and finding them cases of simple alcoholic intoxication. The woman referred to by Dr. Rogers would seem to have been just in this condition. When examined by the divisional surgeon, she very probably showed signs of "irritable heart"—one of the usual results of alcoholic intoxication, particularly in women; but surely this did not entitle her to be admitted to the workhouse wards. I have generally found and always look for a certain amount of illness in connection with a drunken spree: the experience of the police authorities of Marlborough Street appears to have been different. The statement that the woman was an epileptic rests upon proof best known to Dr. Waters, while the mass of evidence adduced by Dr. Rogers convinces me that he has proved his case, and that the annoyance he has suffered has been owing to an abuse of authority which, I am glad to find, he has had the courage to expose.—Yours faithfully,

WM. F. PHILLIPS, L.R.C.P., L.R.C.S.Ed.

Luss, Dumbartonshire, April 10th, 1877.

#### PUBLIC HEALTH MEDICAL OFFICERS, AND MEDICAL PRACTITIONERS.

SIR,—A short time ago, I had a case of small-pox to attend, which I reported at the office of the Board of Works for this district. The officer of health (who passed his examinations last year, and obtained his present appointment a few months afterwards) visited the case once or twice, and reported to the Board of Works that he "unhesitatingly pronounced" it not to be a case of small-pox, without stating what in his opinion it was, and without meeting or consulting me in any way. I continued to attend the patient for about three weeks, and have no doubt as to my diagnosis. The opinion of the officer of health was published in the local papers in his usual fortnightly report, and I contented myself with asserting the accuracy of my diagnosis in a letter to the editor. As may be imagined, our relations are not very amicable, and are not likely to improve under such circumstances. The report of the Horsham case has induced me to send you this.—I am, sir, yours, etc.,

W. F. SHEARD, Medical Officer  
Putney District.

Putney, March 7th, 1877.



## FEES FOR PAUPER LUNATIC CERTIFICATES.

SIR.—We have to thank F.R.C.S. Ed. for his lucid explanation of the law relating to the above. Also, the law is not the difficulty. Many a letter "O. H. M. S." have we from the Board of Supervision in our favour. The true difficulty is a fear that we may be deprived of our appointments by the exercise of that arbitrary power of dismissal which ever overhangs the

PARISH MEDICAL OFFICER.

March 20th, 1877.

## POOR-LAW MEDICAL APPOINTMENTS.

\*BIDDLE, Cornelius, L.R.C.P. Lond., appointed Medical Officer and Public Vaccinator for the Town and Vaynor Districts of Merthyr Tydfil Union, *viz* "J. J. Gabe, M.D., deceased.

CARTER, Frederick Heales, M.R.C.S., appointed Medical Officer, Public Vaccinator, and Medical Officer of Health for the No. 2 or Milton District of the Pewsey Union, Wilts.

## MILITARY AND NAVAL MEDICAL SERVICES.

DR. JOHN T. U. BREMNER, who has been promoted Deputy Inspector-General of Hospitals, joined the Naval Medical Department as an Assistant-Surgeon, 26th July 1844, and being appointed in June 1852 to the *Sanspareil*, Captain Richard Dacres, served with her in the Black Sea during the Crimean War, and on shore with the Naval Brigade before Sebastopol, for which he received the Crimean and Turkish medals, the Order of the Medjidie, and promotion to the rank of Surgeon, 13th November 1854. In March 1857, he was appointed to the *Himalaya*, troopship, and was subsequently for several years connected with the *Britannia*, training-ship. In January 1870, he joined the *Zealous*, flagship of Rear-Admiral Farquhar, in the Pacific, and was last employed at Deal for service with the Royal Marines.

DEPUTY SURGEON-GENERAL T. FRASER, M.D., Surgeon-Major on the half-pay list, has been appointed to succeed Dr. Andrew Maclean as Surgeon on the Staff of the Royal Military College. Dr. Fraser served with the 10th Hussars in the Crimean campaign from April 17th to August 30th, 1855, including the capture of Tchorgaun, battle of Tchernaya, and siege of Sebastopol (medal with clasp and Turkish medal). He entered the army on December 16th, 1845; became Surgeon-Major on December 16th, 1865, and retired upon half-pay with the higher honorary rank on July 29th, 1874.

## REDUCTION IN THE ARMY MEDICAL DEPARTMENT.

It was stated by the Right Hon. the Secretary of State for War, some time ago, that one of the advantages of the changes he was making in the constitution of the Army Medical Department would be that a less number of medical officers would be required for discharging the hospital and other duties in it. But we can hardly think that such a reduction was contemplated as is shown to have taken place by a recent parliamentary return. According to this document, the total number of army medical officers on January 1st, 1869, was 1,050; in 1870, 1,038; in 1871, 985; in 1872, 986; in 1873, 961; in 1874, 938; in 1875, 909; in 1876, 885; and, on January 1st of the present year, 841. There has, therefore, been a diminution in the number each successive year since 1869, the reduction now amounting to 209 officers. This diminution can hardly be intentional, although, of course, it represents a large saving in money to the War Department. There can be little doubt it is due, to a considerable extent at any rate, to the difficulty of filling up the vacant places in the Army Medical Service under the existing rules. As the establishment shown in the army estimates for the current year amounts to 926 medical officers, *viz.*, 41 in the administrative and 885 in the executive ranks, obviously the department was eighty-five medical officers below its contemplated strength on January 1st last.

## ARMY MEDICAL SERVICE: A SUGGESTION.

A CORRESPONDENT suggests the following plan for recruiting the ranks of the Army Medical Department. The Secretary for War has faith in a limited service of ten years, with a bonus at the end of that time in lieu of all further demands. Most persons believe that this can never prove as attractive as the system of unlimited service, with a pension graduated according to circumstances on retirement. It is possible that some young surgeons might be so situated as to make the short service system more acceptable to them; it is certain, from the comparatively large number of competitors for appointments in the Indian Medical Service, as well as from the experience of former years in the Army Medical Department itself, that the majority prefer to engage them-

selves where they can obtain, not merely employment for a few years, but an opening for a lifelong career. Under these circumstances, why not offer inducements for surgeons to enter under either kind of engagement, whichever they may choose? It is open to soldiers, or has been recently so, to engage themselves either for limited or unlimited service, the terms varying with each kind of engagement; why should the same not be done with surgeons? The only objection that can be urged is, that it will interfere with uniformity of system. But there is no uniformity at present. There are surgeons in the Army Medical Department under the long service arrangements, and there are also others under the ten years' system—the "job-wallahs", as they are called in India—and the mere fact of there being surgeons under two different kinds of engagement does not appear to lead to any difficulties so far as administration is concerned. After all, it only amounts to two different kinds of contract between the parties immediately concerned—the surgeons and the Government. Let terms be offered both for short and long service in the medical department of the army, and, at any rate, the principal objection which is now made at the medical schools against competition for army appointments will be done away with, while it will soon be rendered obvious to everyone which of the two systems is the most popular.

## ARMY MEDICAL DEPARTMENT.

SIR.—In reverting to the subject of the Army Medical Department, it will be as well to glance at the exchange question. *Cadum non arduum mutandis*, said Horace of old with regard to those who move from one place to another; and if the well known poet was partly right, he was partly wrong. Exchanges within due limits must be allowed—certainly with regard to foreign service, and with the promised *deport* fixed appointments, I foresee the necessity will arise to sanction home exchanges. A man may not care to pass all his home service, say, in the North of Scotland. As an Englishman, his proclivities may suggest that a station in England would for a part of the time be desirable; and if a mutual arrangement with no expense to Government, could be arrived at, we fail to see any reason why it should be opposed. Most decidedly the old exchange foreign system was a mistake. Men with money and interest managed to remain almost always at home, and ultimately reaped equally the advantages of promotion, etc. Now this could be avoided in one or two ways: either (1) by making officers refusing to go abroad and exchanging to home service forfeit all claim to promotion out of their rank; or (2), we are inclined to think, a better plan would be to place such officers' names a second time on the foreign roster, giving them two years' grace. Should a medical officer then decline to proceed abroad, resignation should be made compulsory.

Again, the name of the Army Medical Department is now unsatisfactory. It is made a distinct corps, and it may fairly ask for a distinct name worthy of a place in the *Army List*. I would suggest Royal Medical Corps (R. M. C.); the initials are intelligible and distinct; and any one who has served in India (which is now the great drain of our medical department), where he has to labour side by side with his satisfied Indian medical brother, will admit the necessity for some distinctive term for medical officers in the Queen's service; nor could our Indian *confrères* feel offended at our gaining a distinct Royal title, especially as some few years since, when "amalgamation" was hinted at, they repudiated the idea most warmly. I will, then, briefly sum up the points which, in common justice, ought to be conceded in order to satisfy the Army Medical Department.

1. A new special designation, such as the Royal Medical Corps or Staff, should be adopted.
2. The Director-General should be allowed £2,000 a year for five years, with the rank of Lieutenant-General.
3. Mutual exchanges should be allowed at home. Foreign exchanges should be permitted, subject to the penalty of losing promotion; or foreign exchange permitted for a time, and after two years' exchange to be obliged either to go abroad or submit to forced retirement from the service.
4. A modified regimental system should be adopted; attachment to regiments thus giving to medical officers the privileges of messing and servants. It would not, perhaps, be too much to suggest that one surgeon-major, with a surgeon, might be attached to a regiment in time of peace.
5. The station hospital work would teach the necessary duties, and medical officers could be detached immediately in case of any emergency. I feel sure that all medical officers would willingly respond to the call of active service, and cheerfully submit to any personal inconvenience arising from being so detached.
6. Optional retirement, after twenty or twenty-five years, with, say, £355 pension after the former period, and an extra shilling a day for each year's service afterwards.
7. Sick-leave should be extended if health positively so require.
8. There should be designation of rank, to allow the use of military servants and enable medical officers to draw fringe and staff allowances.
9. The Army Hospital Corps should be directly controlled by the Royal Medical Corps.

And now to sum up. Is the Army Medical Department to be the only body of men on which no ray of hope is to shine? Why should they be so constantly rubbed the wrong way? The innumerable warrants issued of late years, so many and confusing, are surely signs of weakness in some quarters; we had almost ventured to say of weakness and ignorance in high quarters, and they do not bring sufficient grist (in the shape of men) to the mill. A few concessions are all that the department asks, and those are not concessions which involve extra pay, but only fair social position and just retirement. The sister services—the Indian and Navy—are satisfied, and are amply provided for. In the Indian Service there are forty candidates for ten places, whereas in the Army Medical Department there are only twenty-three candidates for fifty vacancies. Can anything point a moral or adorn a plain unvarnished tale more than such a fact? *Quid pro quo?* Is there no member of Parliament with courage and *esprit de corps* enough (the information can easily be gained, who will cause public inquiry to be made into the deplorable condition of that wailing but struggling body the Army Medical Department?—Yours, etc.,

G. E. E.



## OBITUARY.

### GEORGE MORLEY HARRISON, F.R.C.S.

THE subject of this brief memoir was born at Chester on April 15th, 1823, and was principally educated at the Wesleyan Preparatory School, Woodhouse Grove, Leeds, of which establishment his grandfather was governor. He was apprenticed to his uncle, the late Mr. Morley of Leeds, a surgeon in extensive practice. His medical studies were pursued, first at the Leeds School of Medicine, where he obtained several distinctions, and subsequently in the metropolis, at Guy's Hospital; obtaining the membership of the Royal College of Surgeons in 1845.

In 1849, he commenced his career in Manchester, and practised most successfully as a prescribing surgeon, having a highly respectable *clientèle*. About the year 1851, he was elected honorary surgeon to the Ardwick and Ancoats Dispensary, which office, after filling with the greatest assiduity, he relinquished in a few years, when he was unanimously elected consulting-surgeon.

In 1856, he commenced to lecture on Forensic Medicine at the Chatham Street School of Medicine and Surgery, and continued his lectures after its incorporation with the Pine Street School as the Manchester Royal School of Medicine and Surgery, and again at Owens College when the medical school became amalgamated with that institution. This position he resigned in the year 1876.

In 1873, he was elected President of the Manchester Medico-Ethical Society, and, at the expiration of his year of office, was again chosen for 1874.

Of late years, his thorough practical knowledge, combined with his sound treatment of disease, brought him frequently into requisition as a consultant, in which capacity his uniform consideration and general kindness endeared him alike to patient and colleague.

As a practitioner having a widely scattered practice, his time was too fully occupied to allow much leisure for writing; so that, beyond a few lectures to the working classes on sanitary and other cognate subjects, he never appeared in print.

In private life, he was distinguished by extreme amiability and generosity. He was of a genial hearty temperament, and his fund of anecdote and smartness of repartee were well known.

By his untimely death, his patients have lost a kind and sympathetic friend in addition to a valued adviser, whilst only those who had the privilege of knowing him intimately can realise to the full extent the loss they have sustained; indeed, his character has been well brought out by a very intimate friend in words expressed to the present writer: "He was the most unselfish man I ever knew."

## MEDICAL NEWS.

**ROYAL COLLEGE OF SURGEONS OF ENGLAND.**—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on April 9th; and, when eligible, will be admitted to the pass-examination.

Messrs. A. C. Rich, G. J. Jones, Richard Bredin, and George Rice, students of the Liverpool School; Henry Payne, Arthur E. Pownall, J. C. Staley, and W. A. Marsh, of the Manchester School; E. M. Butcher, H. T. Bowman, and J. P. Ellis, of the Newcastle School; Robert Hayyard, J. W. Oxbury, and Norman Porritt, of the Leeds School; John Whitcomb, C. W. Suckling, and H. T. Bassett, of the Birmingham School; T. H. Pope, of the Edinburgh School; F. S. Peck, of the Bristol School; H. E. Garrett, of the Charing Cross Hospital; C. A. Ballance, of St. Thomas's Hospital; and John Rees, of University College Hospital.

The following gentlemen passed on April 10th.

Messrs. Walter E. Boulter, Samuel Mc.M. Challinor, Oliver Withers, Jas. Chronnell, James Wood, T. H. Hayle, G. H. Withington, and Thos. Mellor, of the Manchester School; G. D. Pidcock, B.A. Cantab., and Frederic Dale, of the Cambridge School; Augustine Houlgrave and Alfred Meeson, of the Liverpool School; J. C. Grinling, of the Birmingham School; G. H. Barton, of the Leeds School; H. E. R. Wolrige, of the Bristol School; H. W. G. Triggs, of the Edinburgh and Middlesex Hospitals; A. L. Smith, of Guy's Hospital; and Joseph Ranschoff, of the Ohio School.

The following gentlemen passed on April 11th.

Messrs. J. T. J. Morrison, Robert Pemberton, and H. H. Austen, of Guy's Hospital; Evan Alban, Thomas Kirsopp, and E. M. Fearless, of St. Bartholomew's Hospital; H. P. Miller, Walter Falla, and J. H. Lilley, B.A. Cantab., of University College; F. T. Hebb, T. F. P. Adolphus, and Denis McDonnell, of King's College; Arthur Newsholme, R. C. Benington, and F. D. Savill, of St. Thomas's Hospital; Thomas C. Squance and John R. Dodd, of the Newcastle School.

**APOTHECARIES' HALL.**—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, April 5th, 1877.

Brown, John, 155, Marylebone Road

Hicks, Frederick John, University College  
Leahy, Albert William Denis, Oxford Street  
Middleton, Charles Frederick, Russell Road, Finsbury Park  
Smith, Ferdinand Clarence, Brentford  
Taylor, Harold Gilberston, Queen's Road, Bayswater  
Wheler, John Mordaunt, Matlock Bridge

The following gentlemen also on the same day passed their primary professional examination.

Otway, Charles John Carrol, Guy's Hospital  
Reid, William Gladstone, King's College  
Rigden, Brian, University College

## MEDICAL VACANCIES.

THE following vacancies are announced:—

- ATCHAM UNION**—Medical Officer for the Pontesbury District.  
**CLAYTON HOSPITAL and WAKEFIELD GENERAL DISPENSARY**—House-Surgeon. Salary, £120 per annum, with residence, coals, and gas. Applications to be made on or before the 16th instant.  
**COUNTY and COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY**—House-Surgeon. Salary, £125 per annum, with lodging, fire, and lights. Applications to be sent in on or before May and.  
**EAST RIDING ASYLUM**, Beverley—Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, and attendance. Applications to be sent in on or before the 20th instant.  
**GLOUCESTER COUNTY INFIRMARY**—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to be sent in on or before the 21st instant.  
**HONITON UNION**—Medical Officer for the Seventh District.  
**LEEK UNION**—Medical Officer for the Longnor District.  
**MACCLESFIELD GENERAL INFIRMARY**—Senior House-Surgeon. Salary to commence at £100 per annum, with board and residence. Applications to be sent in on or before the 14th instant.  
**PETERBOROUGH UNION**—Medical Officer for the Crowland District.  
**REETH UNION**—Medical Officer and Medical Officer of Health for the Muker District. Salary, £70 per annum, and fees. Applications to be sent in on or before the 18th instant.  
**ROTHERHAM HOSPITAL and DISPENSARY**—Assistant to House-Surgeon. Salary, £25 per annum, with board, lodging, and washing.  
**ROYAL FREE HOSPITAL**, Gray's Inn Road—Junior Resident Medical Officer. Applications to be sent in on or before the 18th instant.  
**ROYSTON UNION**—Medical Officer for No. 5 District. Salary, £70 per annum, and fees. Applications to be sent in on or before the 24th instant.  
**TEIGNMOUTH, DAWLISH, and NEWTON INFIRMARY**—House-Surgeon. Salary, £50 per annum, with board, lodging, and washing. Applications to be made on or before the 26th instant.

## MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

- \***BARKER**, Robert, M.R.C.S., appointed Medical Officer to the New Cross District of the London, Brighton, and South Coast Railway, *vice* P. C. Duncan, M.D., resigned.  
**CROCKER**, H. Radcliffe, M.D., appointed Assistant-Physician to the East London Hospital for Children, *vice* R. W. Leftwich, M.D., resigned.  
**DONKIN**, Horatio B., M.B., appointed Physician to the East London Hospital for Children, *vice* J. Magrath, M.D., resigned.  
\***HARVEY**, George, L.R.C.P.Ed., appointed Certifying Factory Surgeon for the Warkworth District, *vice* \*William Webb, M.D., resigned.  
\***PEELE**, Edward, L.K.Q.C.P.I., appointed Physician to the Hospital for Incurables, Dublin, *vice* C. F. Peiceval, F.K.Q.C.P.I., deceased.  
**WORSLEY-BENISON**, H. W. S., F.L.S., appointed Lecturer on Botany at Westminster Hospital, *vice* E. M. Holmes, Esq., resigned.

## BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

### BIRTHS.

**CLARK**—On April 9th, at Cavendish Place, London, the wife of Andrew Clark, F.R.C.S., of a daughter.

### MARRIAGES.

**DAVIES**—**FELTOE**.—On April 12th, at Holy Trinity Church, Kilburn, by the Vicar, the Rev. G. Despard, M.A., assisted by the Rev. W. Venables Williams, M.A., Vicar of Llandrillo yn Rhos, Thomas Davies, L.R.C.P.Ed., of Colwyn Bay, North Wales, to Sarah Ann Dutton (Lillie), eldest daughter of F. F. Feltoe, Heworth House, Kilburn, and Albemarle Street, London.

**GILL**—**HANNER**.—On April 7th, at Wallasey Parish Church, Cheshire, by the Rev. T. E. Espin, B.D., Chancellor of the Diocese of Chester, Henry Clifford Gill, Surgeon, of Bootham, York, only son of Clifford Gill, of Bartholomew Road, London, N.W., to Elia Amanda, widow of R. Hanner, of Alder-ey Edge, and daughter of the late W. Ebborn—No cards.

**RAMSAY**—**EYRE**.—On April 5th, at St. Nicholas Church, Brighton, by the Rev. J. J. Hannah, Vicar, assisted by the Rev. H. T. W. Eyre, Vicar of Great Titcham, Essex, \*James Ramsay, M.D., York, to Frances Williamson, youngest daughter of the late Rev. W. T. Eyre, Vicar of Padbury, and niece of the late Sir James Eyre, M.D.

**WILLS**—**GLOVER**.—On April 4th, at St. Peter's Church, Dublin, by the Rev. S. R. Wills, M.A., Rector of Rathkeale, and the Rev. Canon Wills, M.A., Rector of Mallow, brothers of the bridegroom, Dr. Thomas M. Wills, F.R.C.S.I., Bootle, Liverpool, to Lizzie Hannah, eldest daughter of the late Surgeon-Major Glover, H.M. Indian Army.

### DEATHS.

\***CLOUTING**, John R., M.R.C.S.Eng., at Shipham, Norfolk, aged 62, on April 5th.  
**MARTIN**.—On April 2nd, at the Limes, Walkden, in her thirty-fourth year, Jane, the beloved wife of \*William Young Martin, F.R.C.S.Ed.



## OPERATION DAYS AT THE HOSPITALS.

- MONDAY.....** Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- TUESDAY.....** Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopedic, 2 P.M.
- WEDNESDAY..** St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—King's College, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
- THURSDAY....** St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 3 P.M.—Charing Cross, 2 P.M.
- FRIDAY.....** Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
- SATURDAY....** St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 9.30 A.M. and 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- MONDAY.**—Medical Society of London, 8.30 P.M. A Clinical Discussion. Cases by Dr. Crisp, Dr. Purcell, Mr. Francis Mason, and Mr. William Adams.
- TUESDAY.**—Pathological Society of London, 8.30 P.M. Dr. Klein, "Specimens illustrating the Minute Anatomy of Scarlatina; Dr. Klein's Specimens illustrating an Experimental and Anatomical Inquiry into the so-called Pityrioid"; Dr. Braidwood, "Contribution to the ultimate Pathology of Contagion"; Mr. Barker, "Unusually large Vesical Calculi"; Dr. Felix Simon, "Aneurism of the Thoracic Aorta." [Microscopical Specimens on view at Eight o'clock.]
- THURSDAY.**—Harveian Society of London, 8 P.M. Mr. Herbert Page, "On the Thermometer, and Clinical exactness".
- FRIDAY.**—Medical Microscopical Society, 8 P.M. Mr. C. H. Golding-Bird, "Double Staining with Indigo-Carmine and Carmine".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## CONSULTATION FEES.

MR. A. COSGRAVE, of Bolton-le-Moors, asks for an opinion in a case like the following. The junior partner is attending, and a consultation becomes necessary: the senior partner is appointed consultant. Can the latter fairly charge the same fee as any other medical man who might have been called in?

\*. We should be glad to have information as to any precedents relating to such a case.

COMEDONES.—Inquirers asks for the means of a permanent cure for the following case. A patient has been troubled for some time with "comedones" thickly covering the nose. No other part of the body is affected. The general health is good.

## ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The following were the questions on anatomy and physiology submitted to the candidates at the primary examination for the diploma of membership on April 6th, when one hundred and eighty-seven gentlemen offered themselves, who were required to answer four (including one of the first two) out of the six questions. 1. Describe the minute structure of a very large and a very small artery. What endowments do their component tissues respectively confer upon arteries? 2. How long would a man be likely to survive when entirely deprived of food and water? What would be the relative loss of weight before death ensues? the condition of the temperature? the symptoms? and appearances after death? 3. Describe the *astagalis*, and mention in order the tendons in contact with it. 4. Describe the attachment of the muscles to the metacarpal bone and phalanges of the index finger. 5. Describe the origin, course, and relations of the gluteal artery. Name its branches and their anastomoses. 6. Describe the course and relations of the duodenum.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## MEDICAL ETIQUETTE.

SIR,—As I have no doubt that I am the gentleman referred to in the letter published in your last issue, headed "Medical etiquette", and signed "L.R.C.P.E.", you will do me the favour to insert the following explanation and slight correction thereof. To appreciate the etiquette of the circumstances, you must be made cognisant of L.R.C.P.E.'s history here. I will, for brevity's sake, simply state that, having bought this practice, my predecessor was taken seriously ill before any introduction could be given, and six weeks afterwards I was also taken ill, when we were both laid up. L.R.C.P.E. located himself in the village. He began by applying for clubs held by me, offering to attend them at sixpence per head less, to which reduction I was obliged in one instance to submit. The same plan of opposition was adopted with regard to general practice. Twice in cases of emergency I endeavoured, at his request, to assist him, against my own inclinations, but no one else was procurable. I have never been in any way intimate with L.R.C.P.E., as you may imagine, from the foregoing. I was therefore extremely surprised when he requested me to see his infant. I refused very courteously, and at the same time said that if he could not get another medical man I would go. L.R.C.P.E. expressed no opinion to me as to the probable duration of the infant's life, but merely said he thought it would die; and as Dr. L. lives at a distance of not more than five or six minutes' walk of L.R.C.P.E.'s house or my own, the question of time can scarcely have been any consideration. With regard to the rather hazy accusation in the latter part of L.R.C.P.E.'s communication, I presume he alludes to the following facts, which I should otherwise have passed by. I was called in by a woman (an old patient of mine) to see her husband, and had not, until in the house, any idea that L.R.C.P.E. was or ever had been in attendance on him. When told of it, I immediately said that if they wished me to attend they must inform L.R.C.P.E. of the fact, which the wife did. The result was, that L.R.C.P.E. threatened to expel, or have the man expelled, from the benefit club to which he belonged, and called upon him (knowing that I was in attendance), asked what my opinion of the case was, and made use of very unnecessarily strong language to my patient, who was in no state to bear it. This being only one example (chosen by L.R.C.P.E.) of a rule, you will not be surprised to hear that of "good fellowship" there is none between us.

In conclusion, I may add that I should not have taken the trouble to answer L.R.C.P.E.'s letter had it not been for the editorial remark with reference to it, which I have reason to believe is used somewhat differently from what was intended by you.

Having, I think, sufficiently vindicated my conduct, I beg to remain, sir, yours faithfully,  
C. H. C. HUDDART, M.B.

Greenhithe, April 7th, 1877.

In reference to the letter on medical etiquette in the *JOURNAL* of March 17th and our comment thereon, Mr. Worth of Millbrook writes that he and some of the most respected members of the Association in the locality are not satisfied with our opinion. Looking to the evidence before us at the time, and to the legal aspect of the question (which in such a case cannot be overlooked), we still think that our opinion was under the circumstances correct—that B. was bound to attend in compliance with the summons. In his last letter, however, Mr. Worth informs us that a gentleman living near the cottage where the woman died, immediately as the coroner and B. drove up, informed them that A. had visited and made a *post mortem* examination, and that he would be very glad to send a servant on horseback for A. If we had known this at first, we should have given it its full weight; and we now say that we think it a matter much to be regretted that the offer was not accepted.

ASSOCIATE.—Legally qualified medical practitioners alone are entitled to fees as experts in coroners' inquests. An unqualified practitioner, however, may give evidence as an ordinary witness, and receive the fees usual in such case.

## POISONING BY UENANTHE CROCAT.

SIR.—Will you allow me to say that I published a short account of the fatal cases of poisoning by *Uenanthé crocata* which occurred at Stockton-on-Tees during last year in the *Practitioner* for October last; and further, that I will be happy to give your correspondent any additional information not contained therein.—Your obedient servant,  
R. W. FOSS, M.D.

## CERTIFICATES OF DEATH FOR ASSURANCE SOCIETIES.

SIR,—I should be glad to be informed whether it is usual to charge for signing a certificate of death for an assurance society, if the deceased have been a patient: if so, what would be the proper fee?—I am, sir, yours, etc.,  
A MEMBER.

March 21st, 1877.

## HAIR ON THE FEMALE FACE.

In answer to Dr. Gresham, Dr. Shingleton Smith suggests that nothing short of removal of the skin containing the roots of the hairs can have the desired effect. Whilst the roots remain in the hairs will continue to grow, and their growth will be only stimulated by applications called "depilatory", which simply remove the portion of hair projecting above the surface of the skin. If acetic acid or liquor potassæ applied to the cut extremities of the hairs could be made to permeate the hair-tissue to the bottom of the follicle, it might be possible to interfere with the nutritive processes going on at the hair-papilla. If any one have been able to accomplish this, doubtless many of his medical brethren will be interested to learn the details of the process.

## EFFECTS OF CHLORAL.

In reference to the question of "A Member", Mr. Lennox Browne states that he has recently had under his care a gentleman, over sixty years of age, who has taken twenty to thirty grains of chloral, and sometimes more, every night for the last seven years. He is continuously engaged in an occupation requiring great mental activity. He has within the last year produced a literary work which involved immense study; and he is an ardent and daily whist-player of considerable repute.

"M.D." writes that he has witnessed symptoms similar to those usually met with in mild cases of delirium tremens, through continued doses of twenty grains taken at bedtime, in the case of an elderly lady. He has also observed that chronic chloral hydrate-takers are prone to boils, which are difficult to heal. He has never heard of met with a case of insanity that could be clearly traced to the ill effects of the prolonged and continued use of this drug.



**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

THE DUBLIN CORONER AND DR. EGAN.

SIR,—In reply to the letter of Dr. Jacob, which appeared in the *JOURNAL* of March 31st, I beg leave to state that, taking the average on the returns made by me to the proper officer during the past seven years, I find that I attended and gave evidence at sixty-eight inquests only in each year of that period. At inquests held on the bodies of those who die in hospitals I am not examined, the Act of Parliament providing that medical evidence shall be taken from the staff of these institutions. As a rule, the testimony is given by the medical pupils. Hospital cases form, I think, a majority of the total inquests held in this city. Inquests in cases where the deceased had been at the time of death under the care of a private practitioner are obviously a minority, as must be evident to anyone who will allow himself to think on the subject—inasmuch as the production at the preliminary inquiry of a properly authenticated certificate as to the cause of death meets the requirements of the law, satisfies the coroner, and dispenses with the necessity for further proceedings. I need scarcely state that this does not apply where a criminal charge is pending, or to other exceptional cases.

From these facts, I think it is sufficiently evident that I do not "absorb the entire medical evidence at inquests in the city of Dublin."—I am, sir, your obedient servant,

RICH. W. EGAN, L.R.C.S.I., L.R.C.P.Ed.

Dublin, April 3<sup>d</sup>, 1877.

PROFESSOR LISTER.

THE following effusion is from the pen of Professor Blackie.

To Professor Lister, on learning his determination not to leave Edinburgh for London.

Some live to feed ambition, some for fame;  
Others for gold; and some, the nobler few,  
For honest work achieved and service true,  
With wage of truth and love. This last thy claim  
And glory, Lister. When the Southrons laid  
Their golden snare for thee, and every charm  
Of that gross-monster'd Babylon displayed  
To lure thee from thy station for our harm,  
Thou didst stand firm. For this my humble rhyme  
Thee honours, and Edina gives thee place  
High-perched, with the prime patterns of her race,  
Scott, Chalmers, Wilson, Hamilton, and Syme,  
And bids thee bloom on Scottish soil, and grow

Proudly, like stout old pines where stiff old breezes blow.

College, April 2.

JOHN STUART BLACKIE.

ADMINISTRATION OF IODIDE OF POTASSIUM.

IN answer to "An Inquirer" as to the best way to give iodide of potassium to a patient whose system is intolerant of the medicine, A. suggests that he should try iodide of sodium, beginning with one or two grains, using compound decoction of sarsaparilla to counteract the depression which occurs when the iodide is used alone.

THE ADMINISTRATION OF PHOSPHORUS.

SIR,—Since writing last week on the above subject, I have received two samples of tincture of phosphorus—one alcoholic and the other ethereal, each of the strength of one per cent.—from Messrs. Gale and Co. of Fleet Street, and that both perfectly fulfil every requirement, and are indeed admirable pharmaceutical preparations.—I am, sir, yours obediently,

S. M. BRADLEY.

272, Oxford Road, Manchester, April 9<sup>th</sup>, 1877.

Mr. C. Symes (Liverpool) writes:—In your *JOURNAL* for Oct. 7<sup>th</sup>, 1876, Dr. Owen Rees points out that phosphorus pills prepared according to the *British Pharmacopœia* are useless, and this was followed by some other communications confirming the statement; but long previous to this, our firm (and, I believe, very many others) had prepared and dispensed some thousands of phosphorus pills which were thoroughly disintegrated in the stomach within fifteen or twenty minutes after being taken; and certainly the pilular form is the most elegant and agreeable in which phosphorus can be administered, and, if not prepared according to the *Pharmacopœia*, as efficient as any. The oleum phosphorum of the *Pharmacopœia* is, I can testify, a reliable preparation, and can be made into a good emulsion, as pointed out by Dr. Redwood; but if Mr. Bradley really prefer a solution in ether, Bentley's pocket formulary contains a formula for ethereal tincture of phosphorus which has been in use by many practitioners for years. The *Homœopathic Pharmacopœia* states that "if the ether be pure, it will dissolve nearly one per cent. of phosphorus"; but much of this is deposited on standing, and, as sent out, one-half per cent. or less would be nearer to correctness.

Mr. W. Martindale writes:—It is impossible to make a "fairly reliable and uniform strength of one per cent." (by volume) solution of phosphorus such as was ordered in the first *British Homœopathic Pharmacopœia*. At ordinary temperatures it is difficult to get half a grain of phosphorus held in solution in one hundred minims of absolute ether, specific gravity 920, and it is less soluble if the ether be not absolute. This error has been remedied in the last edition of the above-named *Pharmacopœia*, in which the strength has been reduced to one grain in five hundred minims of ether.

CUI BONO?

À PROPOS of his "In Memoriam" in your issue of March 31st, allow me to remind E. L., who will prefer Latin to Scotch, although *domum* does not even rhyme with *bonum*, of the lesson of the celebrated and witty Raestner. As he was looking out of his window at Göttingen, a student passing called out to him, "Quid meditas, Raestner?" "Meditor, meditatus sum, meditari", was the answer. Unless he knew it, a man should no more speak Latin than prophesy, and, above all, not depart from his own creed, that is, "De mortuis nil nisi bonum".—I am, etc.,

Manchester, April 1877.

GOOD FRIDAY.

THE "MEDICAL DIRECTORY" AND THE "MEDICAL REGISTER".

SIR,—Regarding the letter from "Subscriber" in your last issue, and your annotation upon it, I would call your attention to a case in point. On the back of my card, herewith enclosed, you will find the name of a practitioner, and an university degree which is appended to his name, in the *Register*—such registry, as I understand, being a mistake. The same mistake occurred for some years in the *Directory* (1866, etc.), but latterly has not appeared there, the party having had his attention called to it in court when on oath. I once wrote to the University about the matter, but received no reply.—Yours truly,

L. W.

**NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.**

ADMINISTRATION OF CHLOROFORM.

WITH reference to the letter of "A Country Surgeon", Mr. J. H. Craigie says the remedy appears to be in bringing the matter prominently before the profession and the public, and getting it made penal for any other than those holding a registrable medical qualification to administer anaesthetics of any description, and also by taking measures to suppress the numerous advertisements on the subject with which our daily papers (both London and provincial) teem, and by which many, without consulting their medical advisers, are misled.

CUTANEOUS ITCHING.

DR. PERCY BOULTON writes:—The cases referred to by a "Young Practitioner" are generally due to some gouty, biliary, or urinary derangement. The locality is generally the legs, particularly the calf, and the inner condyle of the humerus. Artificial dry heat or cold frosty air aggravates the itching. The treatment will depend on the cause. Is the patient gouty; and how about the liver, kidneys, and bowels? I should prescribe tepid bathing, exercise, a simple non-stimulating diet, and a small dessert-spoonful of natural Carlsbad salts in a morning. Locally, one of the following lotions will give relief: 1. Chloral hydrate, gr. 15 to 3i; 2. Borax, gr. 25 to 3i; 3. Dilute hydrocyanic acid, 5i to 5i; 4. Nitrate of alumina, gr. 5 to 3i. Any of them may be made with glycerine and rose-water.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Scarborough Daily Post; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; The Hull Criterion; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The High Peak News; The Metropolitan; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Middlesex Advertiser; The Rock; The St. Andrew's Gazette; The West Cork Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Warrington Express; The Croydon Chronicle; The Northampton Herald; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Londoner's Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Richmond and Twickenham Times; The Western Morning News; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; The Manchester Free Lance; The Belfast News Letter; The Malvern News; etc.

\* \* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. Wm. Rutherford, Edinburgh; Dr. T. Lauder Brunton, London; Dr. J. W. Moore, Dublin; Mr. T. Annandale, Edinburgh; Dr. W. R. Gowers, London; Dr. George Johnson, London; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. J. Braxton Hicks, London; Dr. Henry Simpson, Manchester; Mr. Wase, Margate; Dr. Warner, London; Mr. W. Taberner, Wigan; Mr. Bush, Nottingham; W. J. M., Salop; A Member of the British Medical Association; Dr. Sutherland, London; Dr. Sadler, Barnsley; Dr. R. McLaren, Carlisle; Dr. J. Milner Fothergill, London; The Secretary of Apothecaries' Hall; Dr. P. M. Braidwood, Birkenhead; Mr. Charles Rothwell, Bolton; Dr. Greenhow, Chapel Allerton; Dr. Ringrose Atkins, Cork; The Registrar-General of England; Mr. H. W. S. W. Benison, Canobury; An Old Subscriber; Our Dublin Correspondent; Mr. Tattersall, Chester-le-Moors; Mr. C. Symes, Liverpool; Dr. Millar, London; Mr. Hope, Petworth; Mr. Bushe, Malleapooram; The Registrar-General of Ireland; Dr. W. Fairlie Clarke, Southborough; Dr. Edis, London; Dr. Joseph Bell, Edinburgh; Mr. R. Barker, New Cross; The Secretary of the Harveian Society; Mr. G. Eastes, London; Dr. Egan, Dublin; Mr. Wright, London; Our Edinburgh Correspondent; Mr. George Harvey, Wirksworth; M.D. Ed.; Dr. Dudfield, London; Associate; Dr. Thomas Browne, Hong Kong; Mr. S. M. Bradley, Manchester; Fair Play; Dr. Alfrey, St. Mary Cray; Dr. Marcet, Cannes; Mr. W. B. Holderness, Huntingdon; Mr. Talbot King, London; An Associate; Dr. Marshall, Nottingham; Mr. L. H. Ormsby, Dublin; Mr. C. H. Golding-Bird, London; Mr. Cosgrave, Bradshaw; Mr. F. Mason, London; Mr. John Spence, Edinburgh; Mr. Fry, Swansea; Mr. Mayo, Mildenhall; Mr. W. Martindale, London; Mr. Huddart, Greenhithe; Dr. Roussel, London; Inquirers; Dr. Robert Sandby, Manchester; Dr. Cairdner, Glasgow; Mr. M. Nicholas, Shipdham; Dr. Urquhart, Aberdeen; Dr. A. Robertson, Glasgow; Dr. Armstrong, Newcastle-upon-Tyne; Mr. W. H. A. Jacobson, London; Mr. H. C. Burdett, Greenwich; W.; The Secretary of the Medical Microscopical Society; Mr. H. Sewill, London; Dr. Joseph Rogers, London; Dr. Tyley, Wedmore; Mr. E. Ledwich, Dublin; Dr. Grimshaw, Dublin; Chirurgus; X.; Medicus; Dr. Peele, Dublin; Mr. Thos. Clarke, Pennicuik; Mr. C. Ashe, Dublin; Dr. Foss, Stockton-on-Tees; Mr. R. L. Bayley, Stourbridge; etc.

## BOOKS, ETC., RECEIVED.

Hints for Hospital Nurses. Arranged by Rachael Williams and Alice Fisher. Edinburgh: MacLachlan and Stewart. 1877.  
The Select Dramatic Works of John Dryden. Edited by Samuel Lockwood Seaton. London: Hamilton, Adams, and Co. 1877.



## THE LUMLEIAN LECTURES

ON

## THE MUSCULAR ARTERIOLES:

THEIR STRUCTURE AND FUNCTION IN HEALTH  
AND IN CERTAIN MORBID STATES.

Delivered at the Royal College of Physicians of London.

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## LECTURE II.

*The Relation between Renal Disease and Hypertrophy of the Heart.—Various Hypotheses.—Hypertrophy of the Muscular Arterioles: its Relation to Renal Disease and to Cardiac Hypertrophy.—Results of Arterial Tension in Bright's Disease. 1. Degeneration of Arterial Walls. 2. Cerebral Hemorrhage. 3. Reduplication of the First Sound of the Heart: its Cause and its Practical Significance.*

I PROPOSE NOW to discuss the state of the circulation in cases of Bright's disease, and the influence of the muscular arterioles in the causation of the phenomena.

Dr. Bright was the first to point out the frequent association of disease of the kidney with disease of the heart. In a paper published in the first volume of the *Guy's Hospital Reports*, while passing under review the chief morbid appearances observed in one hundred cases of renal disease connected with albuminous urine, he refers to the subject of cardiac disease in the following terms. "The deviations from health in the heart are well worthy of observation; they have been so frequent as to show a most important and intimate connection with the disease of which we are treating; while at the same time there have been twenty-seven cases in which no disease could be detected, and six others which, from not having been noted, lead to the belief that no important deviation from the normal state existed. The obvious structural changes in the heart have consisted chiefly of hypertrophy, with or without valvular disease; and, what is most striking, out of fifty-two cases of hypertrophy, no valvular disease whatsoever could be detected in thirty-four, but in eleven of these thirty-four more or less disease existed in the coats of the aorta; still, however, leaving twenty-three without any probable organic cause for the marked hypertrophy generally affecting the left ventricle. This naturally leads us to look for some less local cause for the unusual efforts to which the heart has been impelled; and the two most ready solutions appear to be, either that the altered quality of the blood affords irregular and unwonted stimulus to the organ immediately, or that it so affects the minute and capillary circulation as to render greater action necessary to force the blood through the distant subdivisions of the vascular system."

Now, the problem to be solved is the relation between disease of the kidney and hypertrophy of the left ventricle, when there exists no disease of the valves or of the large arteries to account for the hypertrophy. This subject has been much discussed of late; and, although I have nothing absolutely new to bring forward on the present occasion, I shall endeavour so to arrange the facts and arguments which bear upon the question as to assist in the formation of a definite opinion with regard to some hitherto debated points.

It is generally admitted that the hypertrophy of the left ventricle in the cases under consideration is the result of some impediment in the course of the circulation, to overcome or counterbalance which the heart has been impelled to unusual efforts; and, when the arterial trunks and the larger branches are in a normal state, it is evident that the impediment must exist somewhere beyond, in what Dr. Bright calls the "distant subdivisions of the vascular system."

One hypothesis may be mentioned and dismissed in a few words as being utterly inadequate. I allude to the suggestion of Traube (*Ueber den Zusammenhang von Herz und Nierenkrankheiten*, Berlin, 1856), that, when the kidney is in an advanced stage of atrophic degeneration, a diminished quantity of blood passes through it; there is, therefore, increased tension of the renal artery and aorta, and consequently more forcible contraction of the left ventricle, with resulting hypertrophy. This explanation is obviously insufficient. The diminished circulation through the kidney alone, even in the most advanced stage of granular degeneration, would not give rise to the great amount of hypertrophy of the left ventricle which is commonly found in these cases; nor

would it cause the high arterial tension throughout the system which is associated with the cardiac hypertrophy.

I believe that one step towards a solution of this problem was made by myself more than a quarter of a century ago, when, in a paper communicated to the Royal Medical and Chirurgical Society and published in the thirty-third volume of the *Transactions*, I described for the first time the remarkable hypertrophy of the muscular walls of the minute renal arteries in the advanced stages of chronic Bright's disease. In that paper, I correctly described and represented in drawings the hypertrophy of the arterial walls; but my physiology was at fault, and I wrongly interpreted the phenomena. The paper in question was read and published in the year 1850—a year, that is, before the publication of Bernard's first memoir describing the results of his experiments on the vaso-motor nerves. At that time, it was very generally supposed—at any rate, I had been taught to believe—that the contraction of the muscular arterioles assists the heart to propel the blood onwards through the capillaries; and, in accordance with that belief, I endeavoured to explain the arterial hypertrophy by the increased muscular contraction required to overcome the impediment resulting from the destruction of the glandular tissue and the intertubular capillaries. The researches of Bernard and Brown-Séquard referred to in my first lecture, resulting as they did in demonstrating that the function of the muscular arterioles is to regulate the blood-stream, and not by their contraction to assist in driving the blood onwards, convinced me that my explanation of the hypertrophy of the renal arteries was untenable; but several years elapsed before I ventured upon any other explanation of the facts. Meanwhile, having daily opportunities of confirming Dr. Bright's observation of the very frequent coexistence of chronic renal disease with cardiac hypertrophy—observing, too, the clinical fact, readily ascertained by the finger and confirmed by sphygmographic observation, of high arterial tension in this class of cases—it occurred to me, thoroughly imbued as I had become with the vaso-motor doctrines of Bernard and Brown-Séquard, that we must look to the influence of the muscular arterioles, and what I have ventured to call their stopcock action, for the explanation of that peripheral impediment to the circulation which results in the arterial tension and the cardiac hypertrophy of Bright's disease.

The course of the argument was this. It is an established physiological doctrine, that the contraction of the muscular arterioles diminishes the blood-stream, calls forth more forcible contractions of the left ventricle, and so increases the blood-pressure in the arterial trunks. It is a physiological law, that increased muscular contraction leads, within certain limits, to increased growth—hypertrophy—of muscular tissue; and this is especially true of the involuntary muscles. If, therefore, in the course of chronic Bright's disease, the morbid quality of blood excites such forcible and long continued contraction of the muscular arterioles, and thereby so increases the work of the left ventricle as to cause great hypertrophy of its walls, it is probable that the muscular walls of the arterioles will be found to have become simultaneously and in a corresponding degree hypertrophied. The next step was to make a microscopic search for the arterial hypertrophy in other tissues than the kidney, where I had discovered and described it years before; and the result was, that the arterioles in various tissues, more especially in the subcutaneous and the sub-mucous tissues, in the muscles, and in the pia mater of the brain, were found to have their muscular walls thickened by a true hypertrophy—by an increase, that is, of their muscular tissue, without structural change or degeneration. The general results of these observations are recorded in a paper which was published nine years ago in the fifty-first volume of the *Medico-Chirurgical Transactions*. I have the satisfaction of knowing that the publication of that paper has had the effect of directing the attention of many competent observers to the condition of the minute blood-vessels in connection with Bright's disease; and, although some of my statements and conclusions have been disputed, I believe that, in the main, my record of facts and my inferences will be found to bear the test of time and criticism.

Some writers have gone so far as to deny the existence and even the possibility of hypertrophy of the muscular coat of the arterioles; but, on the other hand, very competent observers have confirmed my observation of this change in the arterial walls. Amongst these, some have asserted very strenuously that not only is the muscular coat thickened, but the other coats also. I have never denied this, but, on the contrary, I have looked upon it as a matter of course. Just as in the hypertrophied left ventricle there is an increased growth not only of the muscular fibres, but also of the connective and other tissues which constitute the walls of the ventricle, so in a hypertrophied arteriole there is a duly proportioned increase of the outer and inner as well as of the middle muscular coat.

We have now to inquire what are the conditions in which this arte-



rial hypertrophy occurs. What is the physiological explanation of its occurrence? And what are the results of this arterial change?

The associated renal and cardiac hypertrophy are found to occur in the last stages of all the forms of chronic Bright's disease—most constantly and conspicuously in cases of the small red granular kidney; but very frequently, too, as the observations of Dr. Grainger Stewart, Dr. Dickinson, and others, have shown, they are found to occur with the large white kidney which has passed on to the stage of more or less advanced granular contraction. My own observations have led me to the conclusion that there is a direct relation between the destruction of the renal gland-cells and the cardio-arterial hypertrophy; and I will presently suggest an explanation of this relationship.

I must here once more insist upon the fact that the primary and essential structural changes in the small red granular kidney are not interstitial, as the term "interstitial nephritis" implies, but glandular. There is no form of Bright's disease in which the gland-cells are so constantly and extensively destroyed as they are in this. The microscopic evidence of the destruction of the renal cells is to be found during life in the numerous granular casts, composed of disintegrated renal epithelium, which appear in the urine, and after death in the more or less general appearance of transparent tubes denuded of their epithelium and in various stages of atrophy or dilatation.

The clinical evidence of the destruction of the essential secreting tissues in this form of disease is afforded by the notorious fact that symptoms of uræmic poisoning—poisoning, that is, from the retention within the system of various kinds and combinations of urinary excreta—are more common in this than in any other variety of Bright's disease.

On the other hand, in the cases of chronic Bright's disease associated with a large white kidney, the enlargement of the organ up to a certain point is mainly the result of a kind of hypertrophy of the glandular tissue, and with this there may be little or no evidence of uræmia, of arterial tension, or of cardio-vascular hypertrophy. But when the renal disease passes on to the stage of atrophy, with coarsely granular contraction of the cortical portion of the gland, uræmia and resulting structural changes in the heart and arteries are commonly found to be associated therewith.

There is yet another class of cases which have an important bearing upon the question of the relationship between renal disease and the associated cardio-vascular changes: I mean cases of acute Bright's disease. In 1873, Dr. Galabin published a pamphlet *On the Connection of Bright's Disease with Changes in the Vascular System*, in which he showed, by the evidence of sphygmographic tracings, that, "even in the early stages of acute nephritis, such an impediment to the circulation may occur from altered quality of the blood, that the arterial pressure is increased and the heart's contraction made more laborious"; and he added, "if this be true, it is easy to understand that this state of things, if continued long enough, will cause the muscular walls, both of heart and arteries, to hypertrophy". And our late lamented friend and colleague Dr. Sibson, in the Lumeian Lectures (*Lancet*, March 28th and April 4th, 1874), which he delivered here three years ago, and in two Harveyan Lectures (*BRITISH MEDICAL JOURNAL*, January 6th and 13th, and February 10th and 24th), given last year, showed, by a series of elaborate and careful observations, that, in cases of acute Bright's disease, there may occur, as a temporary and transient condition, increase of arterial tension, felt by the finger and demonstrated by the sphygmograph, distension and incipient hypertrophy of the left ventricle, doubling of the first sound of the heart, and an intensified metallic second sound over the aorta: these modifications of the normal cardiac sounds being results and indications of high arterial tension.

The observations of Drs. Galabin and Sibson are entirely in accordance with my own daily experience, and they have been confirmed by many other physicians. What, then, is the explanation of the systemic arterial tension of acute Bright's disease? Without doubt, it is a result of uræmic poisoning; and I believe it to be precisely analogous to the arterial tension, with distension and dilatation of the left cavities of the heart, which have been demonstrated to occur in the early stages of apnoea, when, as I endeavoured to show in my last lecture, the passage of unaerated black blood into the systemic arteries excites, through the vaso-motor nerves and centre, contraction of the muscular arterioles, and thus causes distension of the arterial trunks and of the heart's cavities. We have additional evidence of the close analogy between the uræmic and the apnoeal conditions in the fact that, amongst the results of advanced emphysema of the lungs with chronic bronchitis, and the consequent passage of imperfectly oxygenised blood into the systemic arteries, we find, not uncommonly, a full, tense radial artery, and after death more or less considerable hypertrophy of the left ventricle. In one case of emphysema with chronic bronchitis and hypertrophy of the left ventricle, the subcutaneous arterioles, of which I have a preserved specimen, are very decidedly hypertrophied.

Obviously, then, there are striking analogies between the phenomena of uræmic poisoning and those which attend the passage of unaerated blood into the systemic arteries.

Before I pass on, it may be well to refer briefly to two suggested explanations of the impeded circulation in Bright's disease different from that which I have here given.

One theory is, that the thickening of the vessels which I describe as hypertrophy of the muscular coat, is not hypertrophy at all, but a degeneration of the coats of the arteries. This question is one of microscopic observation, and can be decided only by an appeal to the anatomical facts. But I may remark, in passing, that degeneration of the muscular arterioles would not explain the phenomena, since it is certain that the contraction of the muscular arterioles exerts an influence which, by limiting and retarding the blood-stream, antagonises the heart, and it is obvious that degeneration of their muscular walls would involve, not an increase, but a decrease of resistance; and so, on this hypothesis, the increased arterial tension and the cardiac hypertrophy are inexplicable. It is evident, too, that degeneration of the arterial walls would not explain the rapid onset and the passing away again of the high arterial tension in cases of acute Bright's disease.

The other hypothesis to which I just now referred is that which attributes the impeded circulation in cases of Bright's disease, not to the contraction of the muscular arterioles, but to "an impediment in the capillaries, due to a modification of capillary attraction between the blood and the walls of the vessels; and, the arterial pressure being thus increased, the muscular walls of heart and arteries are both hypertrophied in concert, since both have to act against greater resistance" (Dr. Galabin, *op. cit.*, p. 10). The obvious objection to this hypothesis is, that an imaginary "capillary force" is substituted for the demonstrated physiological function of the muscular arterioles. There was a time when the theory of a capillary force served the useful purpose of linking together a number of facts regarding the circulation through the terminal vessels; but Henle's demonstration of the muscularity of the arterioles, and the physiological discoveries of Bernard and Brown-Séquard, have rendered that hypothesis as untenable as the theory of phlogiston was made by the discovery of oxygen gas.

The substitution of an imaginary subtle capillary attraction for the obviously adequate influence of the muscular arterioles, reminds one of the curious hypothesis by which Riolaus, in opposition to Harvey, endeavoured to explain the passage of the blood from the right to the left side of the heart. Harvey, referring to this, says—"He (Riolaus) would have the blood to make its way into the left ventricle through the septum of the heart by certain invisible and unknown passages, rather than through those ample and abundantly pervious channels the pulmonary vessels, furnished with valves opposing all reflux or regurgitation" (Harvey's *Works*, Sydenham Society's Translation, page 99).

Even if there existed in the capillaries a power of arresting the passage of the blood, mere passive distension of the arterioles, in consequence of an obstruction in front, would not result in hypertrophy of their walls. This is proved by specimens showing no thickening of the arterioles, in the lung of a patient who had chronic incompetence of both the mitral and aortic valves, with much pulmonary engorgement and hæmoptysis.

That a persistent active contraction of the muscular arterioles is the cause of the impeded circulation and of the resulting arterial tension in cases of chronic renal disease, seems to be proved almost to demonstration by the remarkable hypertrophy of the arterial walls; and this view receives confirmation from the influence of nitrite of amyl in lessening the arterial tension. This agent, when inhaled, has the power of causing rapid and extreme relaxation of the arterioles, and consequent injection of the capillaries; and Dr. Broadbent was the first to show that, in a case of contracted kidney, with high arterial tension, the blood-pressure was much lessened by the inhalation of nitrite of amyl. Dr. Sibson repeated this experiment with the same result. He says, "under the influence of the amyl, there was less tension; and, as the tension was removed, the doubling of the first sound was lost".

It is obvious that the nitrite of amyl could not thus influence arterioles rendered rigid by degeneration of their muscular tissue.

An interesting confirmation of the theory that contraction of the muscular arterioles is the cause of the increased arterial tension is afforded by some ophthalmoscopic observations lately recorded by Dr. Gowers (*BRITISH MEDICAL JOURNAL*, Dec. 9th, 1876, p. 743). In five successive cases of Bright's disease, in different stages and with different degrees of arterial tension, Dr. Gowers observed a direct relation between the contraction of the magnified terminal arteries in the retina and the degree of arterial tension at the wrist. And he argues that, "as the immediate effect of contraction of the arterioles must be an in-



crease in the arterial blood-pressure, it is reasonable to conclude that such is the sequence of events in the phenomena under consideration, that, although the two phenomena may be in part the result of a common cause (altered state of the blood), the contraction of the arteries seen in those of the retina, and inferred to exist elsewhere, is, in part at least, the cause of the increased blood-tension."

And now, having, as I believe, adduced sufficient evidence to show that the arterial tension in Bright's disease is a result of the resistance to the blood-stream caused by the contraction of the muscular arterioles, this undue contraction being excited by the influence of contaminated blood upon the vaso-motor nervous system, I pass on to the consideration of some of the results of the increased blood-pressure and arterial tension.

[To be continued.]

## THE CROONIAN LECTURES

ON

### THE DIFFERENCE BETWEEN THE SEXES IN REGARD TO THE ASPECT AND TREATMENT OF DISEASE.

Delivered at the Royal College of Physicians of London.

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#### LECTURE III.—Concluded.

*Respiratory Organs.*—In this group, we find that, taken altogether, men are rather more liable to disease than women, and the excess may arise from the greater degree to which men are exposed. Thus, taking the year 1866, we find in the Registrar's report 41,392 males, against 35,917 females. Thus, in *pneumonia*, there are registered 14,136 males, against 10,919 females; and so on through the various forms of acute and fatal disease of the respiratory organs. To *phthisis*, however, more women fall victims than men. Thus, for the same year, 27,192 males died and 28,522 females. However, in cirrhosis of the lungs, Dr. Bristowe has shown that more males die than females. In his 38 cases, there were 22 males and 16 females.

*Urinary Organs.*—Men suffer twice as severely and fatally from diseases of the urinary organs as females, because of their liability to stricture and retention, to stone and prostatic disease. At the same time, the bladder suffers annoyance and violent pressure in pregnancy and during labour; but from the shortness and dilatibility of the urethra in women, local curative treatment is much more easy and successful; and calculi, which have descended from the kidney, escape generally in a few days.

It was not my intention to allude to the special diseases of the generative system, except so far as affects the general condition. But it is important to notice the much more frequent occurrence of *malignant diseases*, taken as a group, in females. Malignant disease shows itself more frequently in the sexual organs than in any other; and in the female, the high rate of activity and changes to which these organs are liable, no doubt, tends to set up the abnormal actions of malignant disease. Thus, in 1868, we find that there occurred in England 6,137 deaths from cancer in females, while only 2,743 took place in males; in 1866, in females 5,761, and only 2,332 in males. Up to the age of thirty, the sexes are equally affected, but after there is a great variation. Thus, Dr. Tilt (*Change of Life*, 1870) gives this table:

From 30 years to 40—19 females to 6 males.

" 40 "	" 50 "	" 51 "	" 6 "
" 50 "	" 60 "	" 5 "	" 1 "

In 2,781 cases collected by Leroy d'Étoilles, quoted by Dr. Tilt, the uterus was found affected in 30 per cent. and the breast in 24 per cent.

Again, the uterus renders woman very obnoxious to the absorption of irritating matters, whereby peritonitis, septic and otherwise, phlebitis, and septicæmia invade her. Its shape is one particularly adapted to retain secretions, blood, etc.; and thus, by the communication with the atmosphere, these are liable, under the warmth of the body, to decompose. Its structure is also peculiarly adapted for absorption; cavernous in texture, the lymph-spaces large and very numerous, and connected with openings in the peritoneum, it is easy to see how readily irritating matter may be taken in if abrasion exist, as after abortion and delivery

at full term; and this particularly if vascular tension have been previously lessened by hæmorrhages, ill-health, and fatigue, and other depressants, which act also in another manner. For whenever the vital force is depressed, the check it holds against decomposition is lessened, and we find that secretions, which otherwise would have been innocuous, are then more liable to the putrid change. From this special danger the male is exempt.

From the violent uterine hæmorrhages, too, or slow draining of blood, which tells so severely and often fatally on the female, man is free. From the anæmia resulting woman recovers, but slowly; indeed, I should say, never entirely. If you watch these patients, you will find them complaining of the sense of lassitude, imperfect functions, neuroses, emotional excesses, etc., very bitterly; in many for years afterwards, if not for life. Some of them try to get over it by the use of alcoholic stimulants, only to increase the feeling, and ultimately to yield to fatty degeneration.

From these special troubles also man is free; and thus he is more competent to maintain his position as a bread-winner, with muscular, nervous, and mental power, sustained by rich and nourishing blood.

*Malacosteon.*—It is curious to notice and difficult to explain why women, and especially pregnant women, are so much more liable to malacosteon, or mollities ossium, or osteomalacia, than men. The proportion is at three or four times as many in females: always a condition of adult life, and frequently started by pregnancy, or relit by successive ones. Does it derive its virulence from the altered state of the blood, such as occurs in pregnancy? It must be something common to both sexes; but in what point does its cause exceed in women?

Before I conclude, there is one other subject which must not be omitted. I mean the period called "change of life", the "climacteric", "cessation of menses", "turn of life", or, by the French, the "ménopause". These terms are applied to women; but the term "climacteric", "turn of life", is also applied to man. In him the change is more gradual, as puberty is. Virility ceases at a very uncertain time, lasting till at least 80 in some; and though, no doubt, retrograde changes tending to decay take place in him, yet they scarcely can be said to be accelerated at any definite period; they are generally slow, and to himself scarcely noticeable. No doubt, when man has passed the prime of life, and his system is less vigorous than before, he is conscious of this change; and perhaps, if the task he set himself in the world's work be only half-accomplished, and the great struggle is to come; if he have already overtaxed his strength, and then only partly succeeded; or, still more, if he have failed, his mind recognises its position, and the nervous power, losing its sustaining force, is apt to yield; and melancholia, hypochondriasis, dyspepsia, may easily supervene; and, supervening, add to the depression. But this is not the equivalent of the ménopause in women. This is definitely attended by the involution of the ovary; the cessation of its activity, the reverse of the accelerated growth of it at puberty. As the latter was accompanied by the process of menstruation, so this is accompanied by its cessation. In other words, the ovary fails to stimulate the nervous and vascular system generally, and the uterus in particular; and almost invariably the power of conception is lost, just as it commonly ceases upon the occurrence of amenorrhœa earlier in life. We shall not be far wrong probably, if we were to say that the negation of ovarian action occurs in both conditions. But does ovulation cease entirely? It would be difficult to say "Yes" at present, because we saw imperfect ova passed away in childhood, and it may be that imperfect ova pass away after the cessation of the menses. But it is quite certain that all the tendency to various troubles, to which I have partly alluded as belonging to females, principally after puberty, now cease, or at least do so after a time. All the local uterine irritations, engorgements, and fluxes; all the reflex symptoms, neuroses, vomiting, neuralgias, headaches, pass gradually off; and then, when the change is complete, the woman passes much into the state of one who has had her ovaries removed, having a tendency to revert to the neutral man-woman state; yet not entirely so, because there remains impressed upon the mind, memory, and nervous system the reflection of the woman; in manifold ways recalling to her actions and movements that manner and style she had in earlier life.

But, after the change has been completed, we generally find her system improved; not disturbed by the periods, nor pregnancy, nor by the multitudinous reflex symptoms which distracted her attention; losing sexuality and its various impulses, she becomes more capable of rendering herself useful. She is less of the woman she was than a man is a man at the same time of life. The study of the subsidence of menstruation tells us the same physiological facts as those which accompanied its origin; and further, they point out the essence of those complaints which, troubling the woman so long, subside at this epoch,



showing how very neural they were, directly or indirectly, and how few of them are attended by any lesions or change of structure. Thus, suffering all their menstrual life, women now generally become comfortable, stout instead of emaciated, composed instead of hysterical. It is true that those who were not in this state but rather redundant, unless during the transition state they had free blood-loss, become hyperæmic relatively, and suffer its effects, such as sweatings, flushings, headaches, etc. But where the later menses were free at the change, these disturbances are not much felt. However, while the change is going on, while the ovaries are fitfully discharging ova, there is much disturbance of the system, both vascular and nervous; sometimes there is hyperæmia with its results; sometimes severe blood-loss; sometimes as the occasional menstruation occurs, the reflex sympathies are rudely perturbed, producing much disturbance and distress. The cerebro-spinal system is excited or unduly depressed, and the mind often more or less vacillating, so that insanity and melancholia are often observed. Sometimes the vascular tension is so great as to result in violent uterine hæmorrhages, bleeding from piles, and apoplexy; or excitement of the sexual organs so great as to kindle malignant disease, as I have already shown, in the uterus, ovaries, or breast.

Time would fail me to point out all these changes, but this is the less important, because they are so well known to you. When, as I said before, the change is well-established, woman passes on to old age better than man, because free from sexual activity and its many demands on the powers of the system at this later period of life; and, as a rule, suffering less from disease and more secure against external battles and exposure to the elements; more cared for, she more frequently outlives her male comrade in the battle of life.

I have thus, though but imperfectly as I feel, placed before you an outline of the points wherein the male differs from the female. In all these points, some allowance must be made for the effect of the habits and mode of life belonging to each sex, tending more or less to disease; and also for that other influence already mentioned, namely, the transmission of sexual peculiarities. The accurate estimate of these forces is very difficult; though it is not of so much consequence to the subject before us, because this deals with the actual accomplished result. I venture, however, to think that it may serve us something in our diagnosis, elucidation, and treatment of these diseases, thus to bring them in contrast.

There are many things that suggest themselves upon consideration of the foregoing facts. A few of the most prominent I will mention.

1. In studying diseases, we may expect to find the greatest information in that sex in which the disease is more marked or more prevalent; and, also, we can study it best at that age in which it is more marked or more prevalent.

2. We may possibly find a solution of the difficulty in the nature of a disease by first noticing how it affects the sexes differently, and comparing this with the general sexual differences.

3. In females, and in men of a similar type, we cannot allow an irritation or depressant to continue long without the liability to greater effects than in the typical male.

4. Neither can vigorous treatment in these be so severe, nor prolonged without the liability of setting up irritation itself in turn.

5. The emotional system in women and men of feminine type being easily disturbed, more care must be given to allaying its excitements in these persons.

6. In cases of emotional excitements, neuroses, functional derangements, unusual pains, etc., we should endeavour to find the cause, not shielding ourselves under the terms "hysteria", "nervousness", "fancy", etc.

7. Inasmuch as cancer of the sexual organs is so frequent in women at the climacteric, it should be a rule to us especially to allay irritations and disturbances of these organs and system as much as possible.

8. Men need not be more subject to gout than women, provided for a few generations the causes which develop gout in adult life were carefully avoided.

9. We should be careful not to underrate any sign of commencing disease of the cerebrum or spinal cord when it presents itself in men.

Many other hints may be taken which I will not detain you in mentioning; each of you will be able to do so for himself.

I place before you a table drawn out from the foregoing lectures, which show the distinction of the sexes in regard to disease more readily. It is difficult to estimate accurately the proportion in such cases as chlorosis, anæmia, etc. But the proportions may be taken as approximately correct according to our present information.

Gentlemen, I feel conscious of possibly wearying you by placing before you a view of human nature, taken, perhaps, rather from the obstetric side; I could easily add to it; the sketch is not complete, it

is but a rough one. Yet, to properly study our complex nature, we require not only the assistance of the binocular stereoscope, but a poly-scope. But, to make a perfect combination, one side should not be too salient. I trust mine is not so.

Table, showing Relative Frequency of Disease in the two Sexes.

	Males	Females.
Cyanosis .. .. .	++	+
All cases of congenital malformation (Bryant) ..	142	71
Congenital and developmental diseases { 1st year ..	7.027	5.311
(Registrar-General's report) 1866 { 2nd year ..	1.067	.941
" " " " 1868 { 1st year ..	6.797	5.395
" " " " 1868 { 2nd year ..	994	.910
Congenital talipes .. .. .	97	.48
Idiots at birth .. .. .	2.1	.9
Deaths after birth (Dr. Collins) { within half hour ..	16	1
" " " " { within one hour ..	19	2
" " " " { within six hours ..	29	6
Acute hydrocephalus .. .. .	1,707	1,349
Convulsions .. .. .	12,348	9,353
" " " " 1866 { 1st year ..	1.668	1,513
" " " " 1868 { 1st year ..	11,689	8,905
" " " " 1868 { 2nd year ..	1,480	1,367
Laryngismus stridulus .. .. .	34	14
Rachitis .. .. .	1866	38
" " " " 1868	69	49
Croup .. .. .	Churchill 100	82.89
" " " " Trousseau	22	8
" " " " Trousseau	17	5
Whooping cough .. .. .	=	=
Paralysis .. .. .	=	=
Chorea .. .. .	122	300
" " " " ..	13	16
Rheumatism .. .. .	=+	=
Rheumatic inflammation of heart .. .. .	=+	=
Dentition .. .. .	{ 1866 2,384	1,909
" " " " { 1868 2,221	1,924	
Zymotic diseases .. .. .	=	=
Diphtheria .. .. .	++	+
Congenital syphilis .. .. .	=	=
Anæmia .. .. .	Rare	Very frequent
Chlorosis .. .. .	"	"
General neurosis and functional derangement ..	"	"
Simple ulcer of stomach .. .. .	1	3
Exophthalmic goitre .. .. .	8	42
Brouchocele .. .. .	15	105
Insanity .. .. .	=+	=
Diseases of brain .. .. .	=	=
Eclampsia .. .. .	=	=
Spinal diseases .. .. .	128	49
So-called spinal irritation .. .. .	Rare	Frequent
Cerebro-spinal meningitis .. .. .	++	+
Diseases of digestive organs .. .. .	=	=
Intussusception .. .. .	2	1
Typhlitis .. .. .	42	3
Acute atrophy of liver .. .. .	+	++
Gall-stones .. .. .	2	1
Hypertrophy of heart .. .. .	2	1
Atrophy .. .. .	=	=+
Dilatation .. .. .	=+	=
Diseases of valves .. .. .	2	1
Angina pectoris .. .. .	83	8
Vascular engorgements .. .. .	Rare	Common
Gout .. .. .	Very common	Rare
Diabetes mellitus .. .. .	++	+
Acute disease of respiratory organs .. .. .	=+	=
Phthisis .. .. .	=	=+
Cirrhosis of lung .. .. .	22	16
Urinary organs .. .. .	2	1
Malignant diseases .. .. .	1	2
Malacosteon .. .. .	1	3
Dr. Tilt—From 30 to 40 years ..	6	19
" " " " From 40 to 50 years ..	51	6
" " " " From 50 to 60 years ..	5	1
" " " " ..	1	3

TUNBRIDGE WELLS MEDICAL SOCIETY.—A new Society, under favourable auspices, has just been established at Tunbridge Wells, named, "The Tunbridge Wells Medical and Surgical Society". That rapidly increasing town being centrally placed in the districts of East Sussex and West Kent, it is anticipated the meetings will be wellattended. Already nearly forty members of the profession have joined its ranks. On Friday, April 13th, the first meeting for papers and discussion was held at the Great Hall. Dr. Milner Barry, Dr. Johnson, Dr. Wardell, Mr. Marsack, and Mr. Bisshopp, read communications and cases of much interest. For the present year, Dr. Wardell has been elected President; Dr. Colebrooke of Southborough, and Mr. Wallis of Hartfield, Vice-Presidents; and Mr. Cleland Lammiman of Tunbridge Wells, Secretary.

MR. NEWTON H. NIXON, at present on the staff of the School Board for London, has been appointed Secretary of University College Hospital. The position was open to public competition, and there were one hundred and eighty-four candidates.



## THE DIAGNOSIS AND TREATMENT OF AUDITORY-NERVE VERTIGO.

By W. R. GOWERS, M.D.,

Assistant-Physician to University College Hospital, and to the National Hospital for the Paralysed and Epileptic.

[Concluded from p. 420 of number for April 7th.]

*Diagnosis from Epilepsy.*—The attacks of auditory nerve vertigo resemble those of epilepsy in several particulars. This resemblance is of much significance. A sensation of vertigo often attends the slightest attacks of epilepsy. In these, however, consciousness is usually, but not always, lost, while consciousness is usually preserved during the paroxysms of auditory nerve vertigo. Severe attacks of the latter may be accompanied by sudden, transient loss of consciousness. The sufferer may even fall, and be unaware that he has fallen. A patient whom I once saw immediately after an attack had fallen a hundred yards from the place to which he was going, and had then walked to the house, but could not say how he had got there, and did not remember the fall, of which his clothes showed proof. He retched, vomited, and giddiness persisted for an hour. In this case, there had been many attacks of auditory vertigo, and there was no suspicion of epilepsy.

The common features of the two conditions are instructive. No doubt the significance of the feeling of vertigo is in each state the same. In each, it depends on an "incipient motor process" (Hughlings Jackson). In each case also, there may be a developed motor process. The violence of the movement, in severe attacks of auditory nerve vertigo, is remarkable. It is no mere compensatory action to maintain a disturbed equilibrium; the patient is dashed to the ground with force. In a case, detailed above, the patient fell on one occasion with great violence; while, on another, his grasp at some railings was insufficient to prevent him from being borne down to the ground with force. In a case mentioned by Dr. Ferrier, a patient was turned round three times and then dashed to the ground. Such movement must result from the "discharge" of a motor centre, quite analogous to the discharge which occurs in an epileptic fit. If we locate the centre for equilibration in the cerebellum, we may perhaps regard Menière's disease as a cerebellar epilepsy, reflex in character, determined by an irritation of the semicircular canals,\* alone or in conjunction with impressions from some other nerves with which the centre is in connection, as those of the pneumogastric nerve. On this view, it is not difficult to understand the loss of consciousness which may accompany the severer seizures, since the connections of the cerebrum and cerebellum are intimate; fibres from almost all parts of the hemispheres being gathered into the superior cerebellar peduncles.

It has been remarked that ear-diseases may excite actual convulsions, apart from any direct affection of the brain. Such cases have been described by Mr. Hinton, Dr. Brown-Séquard, and others. Many attacks of paroxysmal vertigo present other symptoms resembling convulsive seizures, and rendering it doubtful in which category they should be placed. A premonitory sensation, apparently unconnected with the ear, may be present. In the case of Menière's disease related by Dr. Duffin, some attacks were preceded by such a sensation, which passed from the hypogastrium to the occiput. A case, presenting very interesting symptoms of this character, has been lately under the care of Dr. Ringer in University College Hospital. The patient, a man about forty years of age, was bitten by a dog, about three months before admission, in the back of the right leg, below the calf. The wound was cauterised and healed, but a few weeks afterwards became painful; and one day a sudden pain seemed to start from it, pass up the leg and side of the trunk to the right side of the head behind the ear, and then his head seemed to go round and round "like the wheel of a steam-engine", in what direction he could not say. He had many slighter attacks, and, after the giddiness had subsided, a pain seemed to pass up the leg and down the arm to the palm, backwards and forwards. He was conscious of no auditory defect; but it was found on examination that, while the hearing on the left side was in every way normal, that on the right side was distinctly defective. A watch was not heard so readily opposite the ear as on the left side, and whereas its sound on the left side was much increased in intensity by contact with the

skull, it was not heard at all when in contact with the skull (zygoma or mastoid process) on the right side. There was also some persistent defective equilibrium: in walking, he experienced a constant tendency to go to the left; but he explained this by describing it as the corrective of a tendency to go to the right. The probable explanation of this case I think to be that the equilibration centre, being disturbed by the morbid state of the auditory apparatus and nerve, was further perverted by the irritation from the bite, which developed sudden overaction in the centre, an "irradiating" action of the sensory centre being set up at the same time.

If the paroxysmal auditory nerve vertigo be thus due to an epileptoid process, it is to be expected that the condition of instability of the nerve-cells, such as we recognise as an important element in the pathology of epilepsy, may influence in some cases the occurrence of this affection. The only way in which such a condition of nerve instability could be recognised as a factor in Menière's disease would be by the coexistence of epilepsy and auditory nerve vertigo. Of course, much care and even hesitation is needed in diagnosing auditory nerve vertigo in the presence of epilepsy; but in two cases, at present under my care, there is, I think, clear evidence of the coexistence of the two maladies.

One of them, a married woman aged 65, began to suffer from epileptic fits at the climacteric period, at about 47; the fits continued for six or seven years, and then ceased. All the fits were the same in character; they were preceded for a day or two by slight fainting attacks, and a slight feeling of faintness was the immediate warning of some of the fits. During the attack, consciousness was lost, and there was slight jerking. She slept afterwards, and on waking had occipital headache. For the last twelve years, she has had no fits. During the last two years she has suffered from vertigo, paroxysmal; the attacks sometimes come on when sitting still, but are more often induced by a sudden movement, especially by looking up. The sensation during an attack is that of falling backwards and towards the right. It always comes on sufficiently deliberately to enable her to take hold of some object and save herself from falling. She never loses consciousness. She frequently vomits with the attacks, and refers them to "biliousness". She was conscious of no defect in hearing; a watch is heard on each side at nine inches from the head. A watch, pressed against the left parietal eminence, is heard slightly, but on closing the ear she ceases to hear it. A watch in contact with the right parietal eminence is not heard at all, with the ear open or closed. (The meatus is free from obstruction.) On each side, a watch in contact with the malar bone, and shielded by the hand from the ear, is unheard. A tuning-fork on each side, in contact with the parietal eminence, is heard, but less loudly when the meatus is closed than when it is open. The effect of movement on the giddiness was tested: a sudden jerk of the head backwards brought on an attack; a sudden rotation of the head to the right also brought on an attack, while a sudden rotation to the left had scarcely any effect. During the six weeks before she came under treatment, she had two more fits, of the same character as the earlier ones. Since the recurrence of the fits, the giddiness has been more troublesome.

In the other case, a girl has suffered from several epileptiform convulsions, and has almost constant vertigo, varied by severe paroxysms on movement. The giddiness is worst after rising in the morning. The sensation is of falling backwards and to the left. She has constant noises in the ears, and is generally, though not always, unable to hear a watch in contact with the head. Occasionally, a watch is heard faintly when in contact with the mastoid process. This patient suffered at night from twitching of the right limbs. A similar symptom existed in the case of the man whose strange postures during sleep have been described, and indicates a tendency on the part of the motor centres to spontaneous discharge. She is also troubled with startings in sleep, as were several other patients whose cases have been detailed. It may be suggested that, in this case, the epileptiform convulsions are really excited by the aural affection. But such an explanation will not apply to the other case mentioned; and I believe that convulsions have not been described as the consequence of anything but a severe ear-disease.

It will be seen from these remarks that the diagnosis from epilepsy must turn, as in the case of gastric disturbance, to some extent on the detection of defective audition, and especially on defect in the power of hearing vibrations conducted through the skull. The definite character of the vertigo is in these cases no criterion. A more important symptom is its persistence between the paroxysms and its long duration in the paroxysms themselves. Its relation to movement is also important. If it be related to change of posture, and can be produced by certain sudden movements of the head, it is probably due to auditory nerve disturbance. In the latter, the attacks are succeeded by

\* M. Pierret, in a recent communication on the origin of the auditory nerve (as Dr. Hughlings Jackson has lately mentioned), appears to doubt whether its fibres can be traced with any certainty so far as the cerebellum. The direct evidence contained in Dr. Lockhart Clarke's paper in the *Philosophical Transactions* for 1863 is, however, very convincing, especially his comparative investigations on animals. Indirect evidence is afforded by the fact which he points out, and which I have repeatedly verified, that a large number of the fibres of both divisions of the auditory nerve (the anterior especially) pass into the substance of the restiform body and mingle with its fibres, and the restiform body passes entirely to the cerebellum.



vomiting, much more frequently than are the attacks of *petit mal*. Lastly, there is rarely the objective evidence of momentary loss of consciousness, which is so frequent in minor epilepsy, even in the slightest attack; in auditory nerve vertigo, consciousness is only lost or obscured in severe attacks, in which the giddiness persists for a considerable time and vomiting frequent.

*Production of Auditory Nerve Vertigo.*—Before speaking of the treatment of this affection, it is worth remark that auditory nerve vertigo can be produced artificially. Quinine produces a sense of confusion with tinnitus; but very definite symptoms may be caused by salicylate of soda. This was shown very strikingly in the case of a patient lately under treatment for acute rheumatism in University College Hospital (under the care of Sir William Jenner). The patient was a woman aged 40, whose hearing was supposed to be unimpaired. She was not subject to giddiness. It was her first attack of acute rheumatism, and there was no cardiac affection. On January 26th, salicylate of soda was commenced in doses of twenty-five grains every three hours. On the 28th, she complained of noises in ears, deafness, and giddiness, which the next day had increased so much that the salicylate was omitted. The following day the giddiness was much less, and on the 31st had almost gone. On February 6th, the same dose was resumed; on the 7th, the same symptoms were complained of. The noises in the ears were constant; a watch was heard only at two inches distant from each ear, and was not heard at all on either side when in firm contact with either the zygoma or mastoid process. A tuning-fork on the vertex was heard fairly well, but the sound was not increased by closing the ears. The giddiness was slight and indeterminate as long as she lay still, but was very considerable and definite when she raised her head or sat up. Objects before her all seemed moving to the right. On the 8th, these symptoms continued, and the salicylate was discontinued. On the 10th, the giddiness was gone, and she could hear the watch at a distance of six inches from either ear, and could hear it, although faintly, in contact with the zygoma or mastoid process, but not when in contact with the parietal eminence. On the 23rd, the salicylate was resumed, and, eighteen hours after its resumption, deafness and giddiness had returned, which again ceased a day or two after the discontinuance of the drug. When the patient was convalescent, a careful examination of the state of hearing revealed very little abnormality, the only difference being that the watch in contact with the skull was not quite so distinct on the right side as on the left. In another case, I have seen similar symptoms of deafness and definite vertigo produced by salicylic acid.

*Treatment.*—The direct treatment of labyrinthine affections is a subject for the special aural surgeon. I would only here indicate that, when there is evidence of an irritative process, blistering behind the ear sometimes affords very marked relief to the vertigo. Occasionally, there is evidence of a constitutional condition on which the aural disturbance is dependent. In some cases the patient is gouty, and there is reason to believe that a gouty change in the membranous labyrinth is the cause of the morbid action. This was the case in one of Mr. Hinton's patients, and also in one case which has come under my own observation. Marked relief is afforded under these circumstances by colchicum and potash. In rare cases, the vertigo depends on a syphilitic inflammation of the labyrinth. Such a case has been lately described by Moos of Heidelberg.\* One of the most severe forms of paroxysmal vertigo I have seen was in a child, with almost complete deafness and every sign of inherited syphilis. In all syphilitic cases, the specific treatment is, of course, required.

It has been just remarked that certain drugs have a marked influence on the organ or nerve of hearing. The effect of quinine induced Charcot to employ it, in full doses, in a case of auditory nerve vertigo, with some beneficial result. I have tried it, but have not found any marked effect was produced on the vertigo. The influence of salicylate of soda upon the equilibrium, which I have described, suggested its use in this disease. Equilibrium is maintained by the balance of opposing impressions; its overthrow is the result of the loss of that balance. In our ignorance of the way in which salicylate produces the disturbance, it is conceivable that it may, in some cases, have such an influence as to counteract the morbid action, and lessen the disturbance of equilibrium. This it has seemed to do in one or two cases in which I have tried it. It does not remove the giddiness, but in some cases lessens its intensity. It has been given in doses of from five to ten grains three times a day. The patient with gastric ulcer, whose case has been narrated above, thought that she was better while taking the salicylate than when taking any other

medicine. Its effect, unfortunately, seems after a time to become less.

One of the objects of this paper is to show that, in auditory nerve vertigo, other morbid conditions may concur with the aural condition in causing the vertigo. The knowledge of this will, in many cases, enable much relief to be given. The gastric disturbances are to a considerable extent under control, and, by their removal, the attacks of vertigo which they excite, although ultimately dependent on ear-disease, may be much lessened in frequency and intensity. The most unremitting care in diet and regimen are, however, necessary. An actual attack, which has been produced by gastric irritation, may often be arrested by a good dose of an antacid.

Lastly, any undue sensitiveness of the grey matter of the equilibrium centre must be lessened. For this purpose, no remedies are so useful as the bromides of potassium and ammonium, and several observers have noted their utility in Menière's disease. It is probable, indeed, that bromide does more good in this condition than any other single medicinal agent. This fact affords another point of resemblance between epilepsy and paroxysmal vertigo. The effect of the bromide is in some instances increased by the addition to it of some other sedative, as belladonna. Other sedatives alone—opium, Indian hemp, gelsemium, hyoscyamus—have seemed to me without effect.

Auditory nerve vertigo is unquestionably, in many cases, a very obstinate affection; but, when the several factors in the individual cases are sought out, and as far as possible corrected, a considerable amount of relief may be afforded. In several cases that I have seen, immunity for long periods has been obtained. The patient, whose severe attacks were described at page 419, has had no severe attack since the commencement of the treatment, now a year ago. Occasionally, he notices slight unsteady feelings, "as if the ground were being tilted up a little". When this is the case, he takes a few doses of bromide of ammonium, carbonate of bismuth, and belladonna, and the symptom always vanishes. In another case, in which there were other indications of an irritable nerve-centre, bromide and bark produced an almost complete cessation of the attacks; and the improvement was subsequently maintained on a course of quinine only, although quinine had at first failed altogether to relieve.

It is on a recognition of the associations of auditory nerve vertigo, and their place in the pathology of the affection, that its treatment can be most effectually based.

## CASE IN WHICH MOBILITY AND A PERFECTLY USEFUL LIMB RESULTED AFTER EXCISION OF THE KNEE-JOINT.

By THOMAS ANNANDALE, F.R.S.E.,

Surgeon to the Edinburgh Royal Infirmary, and Lecturer on Clinical Surgery.

At a meeting of the Clinical Society of London in May of last year, Mr. Barwell showed a girl whose knee-joint had been excised three years before by Mr. Cowell. In this case, a "flail" joint had resulted, but the limb was an useful one. Having lately had an opportunity of examining a patient whose knee-joint I excised almost five years ago, I found in her case a condition similar to, but more perfect than, that described in connection with Mr. Cowell's patient. As such a result after excision of the knee is rare, I have thought my case worthy of a special note and illustration.

The interesting result in this case was quite accidental, and I can give no special reason for its occurrence either in regard to the operation itself or the after-treatment, both of which were carried out according to the usual principles. In fact, I at first looked upon the case as one of failure to obtain proper union after excision of the knee-joint; and it was only on examining the patient some years after the operation that I discovered with pleasure and surprise that my case was, instead of a failure, a new and remarkable success, in so far that a movable new joint and perfectly useful limb had resulted. An important fact in the case is, that the patient had the power of flexion and extension, and the new articulation was by no means a "flail" one.

Agnes M., aged 10, was admitted into my wards, suffering from disease of the knee-joint, on October 25th, 1872. Excision of the knee was performed on November 13th, 1872, by means of a semilunar incision across the front of the joint. The articular surface of the femur, a thin slice of the tibia, together with its articular surface and the patella, were removed; care being taken not to interfere with the epiphyseal line of the former. The patient was dismissed with the wound healed on June 22nd, 1873; but osseous union had not taken

\* Virchow, *Archiv*, vol. lxi, part ii, p. 313. The patient suffered from attacks of giddiness and noises in the ears; and, later, rapidly increasing deafness. *Post mortem*, there was found a small-celled infiltration of the membranous labyrinth, and especially of the ampullæ.



place. Before leaving the hospital, the limb was surrounded by paste-board and a starched bandage, so as to keep the knee perfectly at rest.



Fig. 1.

From time to time, the patient attended as an out-patient, and the condition of the joint was occasionally investigated; but no improvement took place in the union of the bones. After this, I lost sight of



Fig. 2.

the case until recently, when I had an opportunity of examining the patient and of having photographs taken of the limb.

The condition of the limb on March 7th was as follows. It was an inch and a half shorter than the other when in the straight position; and the new joint at the knee was freely movable and could be flexed very nearly to a right angle. The illustrations, taken from photographs, show the limb in its extended position and extreme point of flexion. (Figs. 1 and 2.) Very slight lateral movement existed; and the patient had the power of extending and flexing the joint, but not quite to the full extent. The whole limb was well developed; and the patient was able to bear good weight upon it, and to walk actively, but with a slight limp.

### CASE OF UNCONSCIOUS AUTOMATIC ACTS IN AN EPILEPTIC.

By ALEXANDER ROBERTSON, M.D.,

Physician to the Town's Hospital and Asylum, Glasgow.

THE series of important leading articles on unconscious and automatic actions after epileptic fits which have just been published in this JOURNAL induces me to record the following case in illustration of the mental condition so well described in these leaders. I may remark, before beginning, that acts of this character are tolerably familiar to practitioners who, like myself, see many cases of epilepsy, but hitherto they have not attracted that degree of attention to which it is now clear they are justly entitled. Obviously, they are of considerable interest in relation to mental pathology, and their importance in a medico-legal aspect is also very great. Happily, both for society and the unfortunate sufferers themselves, the actions referred to are generally harmless; not unfrequently they are such as the individuals have been accustomed to perform in their daily avocations. There are, however, all degrees between these simple habitual acts and those attended with the greatest danger either to the patients or to others. I have elsewhere\* published a case describing how an epileptic man in this hospital, who had been apparently well mentally, one day, without the slightest provocation, began to swear loudly, called out for a knife to "stick some of them", and eventually sprang at the patient next to him. A struggle ensued; but, as the other patients quickly interfered, the epileptic was soon mastered, fortunately before anyone was seriously injured. I reached the ward about a quarter of an hour after the seizure commenced, and found that already he was conscious and intelligent, though somewhat confused in mind. When I told him what he had been doing, he was greatly surprised, and listened to my account of his conduct with a smile of incredulity. I shall now describe the case which forms the special subject of this paper.

Mrs. F., aged 53, inmate of the asylum, has been epileptic for the last twelve years. The fits occur in three different forms. There are, first, violent convulsive seizures in groups of from six to thirty, spread over two or three days, at intervals of seven or eight weeks; second, by faintish turns several times a week, lasting for two or three minutes, during which she is unconscious; third, by peculiar mental states, in which various seeming automatic acts are performed. We are specially concerned with the last kind. They are not of frequent occurrence, not more than three or four having been noticed during the last year. The most marked one was about three months ago. I shall record it in the way it was described to me by the intelligent attendant who has had the charge of the patient for some years. "It was about eleven o'clock", she said, "this being about two hours before the usual time for preparing for dinner, when Mrs. F., who had been engaged in sewing, rose from her seat in the day-room, went to a side-table, and lifted the table-cloths. I saw by her expression that she was in a 'turn', and it occurred to me that I would not interfere with her, but just wait and see what she would do. Muttering to herself all the time, what I could not make out, she went to the tables and spread the cloths neatly on them; then she went down the short stair, crossed the room to the pantry, lifted the box containing the table-spoons, and returned the way she had come till she reached the tables. She next took the spoons from the box and placed them on the cloths exactly as they are laid at dinner. After she had finished, I said: 'Mrs. F., it is too early to prepare for dinner.' She looked at me bewildered, and I then led her to a seat. She did not, however, remain there longer than a minute or two, but got up and went to a work-table, where she lifted a stocking and began deliberately to pull out the worsted, though the stocking was properly knitted. I took it from her and led her back to the seat, and remained beside her till she came to herself. She appeared to come out of the 'turn' just as if she were awaking from sleep, except that her eyes were open, as they had been during the whole time it lasted. I then told her what she had

\* Glasgow Medical Journal, January 1876.



been doing, but she just laughed at me, and would not believe that it was she who had set the tables for dinner. From the commencement, it might be about half an hour before she fully recovered consciousness."

This, as I have said, was the most decided attack she has had of this kind. On another occasion, about six months previously, she took one when about to go to an evening entertainment, and, while in it, with a pair of scissors cut out a large part of the side of her dress. And, a few days ago, during a similar seizure, she took a pin and undid the sewing of the hem of an apron, taking great care not to break the thread. After doing so, she began to make a fringe at the edge of the apron with the pin. The attendant now stopped her, and, in about two minutes afterwards, she recovered consciousness. As formerly, she was quite unaware of what she had been doing.

When not suffering from epilepsy, this woman is intelligent and active, though rather irritable. She occasionally, but not regularly, assists the attendants in arranging the tables for meals.

Besides this case, there is another one under my care at present, in which the automatic acts are even more striking in some respects than those above-mentioned, but I do not feel at liberty to describe it in detail. I may state, however, that the patient has been subject to epileptic "absences" during the last eighteen months, and occasionally, while in them, has acted very strangely in the streets and in houses where he was visiting.

### PROTRACTED SUSPENSION OF THE MORAL AND INTELLECTUAL CONSCIOUSNESS IN EPILEPSY.

By J. STITT THOMSON, L.R.C.P.Ed., etc., Dalkeith, N.B.

I READ with much interest a short account of a case of the above in the JOURNAL of March 17th, 1877, by Dr. Edmund Holland; and, as the subject is one of very great importance from a medico-legal point of view, I wish briefly to give the notes of a case somewhat similar, although not so protracted, which happened in my practice a short time ago.

On the forenoon of March 18th, 1877, I was hurriedly summoned to visit Mrs. M., a robust healthy-looking woman, aged 45. Her husband is alive. She has had a numerous family. On arrival, I found her sitting on the bed, crying loudly and attempting to bite everyone and everything within reach. Her husband and sons were holding her down and trying to pacify her. Her eyes were staring; the pupils were slightly contracted. The conjunctivæ were injected. Her face was flushed; the pulse was rapid and full. She was very restless, and made several violent efforts to bite her husband. She recognised me on my entrance, and, when asked, named her sons. She asked for a drink of water, which was given to her in a metal dish. This she immediately seized in her teeth, and it was with difficulty forced from her mouth. She showed symptoms of great cunning; asked for a drink "from a tumbler, and not from the tin dish". This she would have at once broken. She complained much of being held down, and, when released, tore the sheets and her clothing with her teeth.

I ordered a full dose of chloral-hydrate and bromide of potassium, and left. On visiting her again four hours afterwards, I found her quiet, complaining of headache and a general soreness, but perfectly sensible. She remembered nothing regarding my former visit. Next day, she was up and feeling well, though still stiff and sore. Her husband told me that she settled about an hour after I had left, and then fell asleep.

The history of the attack is, that she was seized with an "epileptic fit" one hour before my first visit; and, on recovering from this, she remained in the excited state in which I found her. I was with her for two hours. Thus she was in the "temporarily insane" condition for four hours.

The previous history reveals that she has been subject to epileptic fits since childhood, though there has been no attack for several years previous to this. She once showed symptoms similar to the above noted about eight years ago. She is a woman of sober habits, and enjoys good health otherwise.

It will at once appear how important the medico-legal teaching of such a case is. Had this patient destroyed either herself or child, as I believe she would have done had she not been closely watched; had she been alone when seized, and had no one visited her during the seizure, how very grave the suspicion that the crime was wilfully committed! Such cases as these show how very guarded should be the medical opinion expressed regarding the epileptic criminal; and, as Dr. Holland remarks, "may aid in the solution of the want of motive frequently mystifying the elucidation of great crimes".

## THERAPEUTIC MEMORANDA.

### HYDROBROMIC ACID.

I HAVE great pleasure in adding my testimony to that of Dr. Forrest of New York in favour of the hydrobromic acid, quoted in a leading paragraph in the JOURNAL of March 31st. As a solvent of quinine, I have found it to be most useful. In a case of pyæmia in hospital, eight-grain doses of quinine every six hours were easily borne by the patient, and that for several days, with the assistance of thirty minims of the acid with each dose. With its help, also, many patients, especially ladies who said they could not take quinine without immediate tinnitus, are now able to take even large doses. One case especially impressed itself upon me. I had prescribed quinine with the acid for one of these ladies, and was surprised to learn by letter next morning that the usual symptoms had appeared. I at once wrote her that I was sure the medicine had not been properly dispensed, and forwarded the prescription to a chemist who, I knew, kept Dr. Fothergill's formula. I saw her next day, and learnt that she had taken several doses without any discomfort. I have also ordered it with the perchloride of iron to a lady in whom iron always produced flushing and headache, with the happiest effect.

In my hands, it does not seem to act so well as a cough-medicine, which is one of the uses Dr. Fothergill suggests, except in cases of pertussis in children. As an adjunct to chloral in hysterical insomnia, it seems to be equally efficacious with bromide of potassium. The doses I generally use are, half a drachm with quinine and iron, five or ten minims to children; and a drachm with ten grains of chloral as a draught. In conversation with other medical men, I find that bromohydric or hydrobromic acid is less widely known than it deserves to be; and I write this with the hope that more extended use will vindicate what Dr. Milner Fothergill claims for it.

W. MACFIE CAMPBELL,

Surgeon to the Liverpool Northern Hospital.

I have used the hydrobromic acid repeatedly with the happiest results. I do not believe it is always successful in preventing the headache produced by quinine, but I can recall at least two cases in which it was very effectual. Both patients had been in the habit of taking quinine for neuralgia; but, though generally successful for this malady, it almost always produced ringing in the ears, headache, etc. I used hydrobromic acid as the solvent for quinine in these two cases, and neither of them has since suffered from cinchonism. Again, I found the hydrobromic acid the only acid which one patient could take. As a tonic for business men whose powers have been overstrained, I have found the hydrobromic acid more useful than any other drug.

J. FARRANT FRY, Belvoir, Swansea.

### CLINICAL MEMORANDA.

#### THE PASSAGE OF FOREIGN BODIES THROUGH THE INTESTINAL CANAL.

MR. DENTON's case of "a shawl-pin passed *per rectum*" (JOURNAL, March 17th) induces me to record my experience of similar cases. The line of treatment adopted and the subsequent issue prove the practical value of non-intervention in such cases. Case I was that of a male lunatic who suffered from paroxysms of recurrent mania, with strong destructive propensities. One day, he secreted a smoke-shade, a remnant of which was afterwards found in his possession. In a few days, there were symptoms of anal irritation, and he was observed to use his fingers for the purpose of extracting bits of glass. In the course of three weeks, five hundred of these, all more or less angular, and some, strange to relate, over two inches long and finely pointed, were passed *per rectum*. The passage of the larger pieces gave rise to excruciating pain, and the patient, who ate very little during the time, was allowed to remain in bed and have an opiate. The other cases, two in number, were boys, one of whom swallowed a halfpenny and the other two penny-pieces. Rest was the only treatment enjoined, the result being the appearance of the halfpenny in one week and of the larger coins at the end of three weeks. Beyond the fright, there was no inconvenience in the latter cases.

The first case is a good illustration of the conservative efforts of Nature, and all three demonstrate the good effects of non-interference; indeed, to excite the peristaltic action of the intestine by giving purgative medicine, especially in the presence of sharp bodies, must be



fraught with danger to the integrity of the intestinal tube. Rest, therefore, with or without an opiate, would seem to be the proper treatment.

ALEXANDER MCCOOK WEIR, M.D., etc.

## REPORTS

OF

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### CHARING CROSS HOSPITAL.

WOUND OF PALMAR ARCH: SECONDARY HÆMORRHAGE: LIGATION OF BLEEDING VESSELS: RECURRENT HÆMORRHAGE: LIGATION OF BRACHIAL ARTERY: CONTRACTION OF FINGERS: RESTORATION OF MOVEMENT.

(Under the care of Mr. BARWELL.)

FOR the report of the following case we are indebted to Mr. BIDEN.

L. L., aged 21, a barmaid, was admitted February 10th, 1877, under the care of Mr. Barwell. Whilst she was opening a bottle of lemonade on the evening of the above date, the bottle broke and wounded her in the palm. A medical man applied a firm pad and bandage and directed her to the hospital.

She had evidently lost much blood and was anæmic. Removal of the bandages disclosed an inch-long deep wound midway between the thenar and hypothenar eminences: there was no bleeding at the time. The pad was replaced, and she was put to bed with the hand elevated.

February 14th. Up to the night of the 11th, there had been some oozing, but it had quite ceased after that until about 9 A.M. on this day, when, after a restless night with much jactitation, a stain was seen on the dressings. When these were removed, a sudden spurt of blood from both sides of the wound occurred. The bleeding points could not be seized; therefore a Liston's needle was passed under the vessel on both sides by the House-Surgeons, Mr. Biden and Mr. Conolly, and the bleeding restrained. There had been no attempt at healing.

February 18th. Three days ago, the edges of the wound appearing rather sloughy, poultices were ordered. On the 17th, some swelling and redness appeared above the anterior annular ligament. At the above date, fluctuation was detected at the front of the wrist; an incision gave exit to a considerable amount of pus. There had been no hæmorrhage from the original wound.

February 21st. At 10.30 A.M., hæmorrhage recurred. The bleeding point was seized, but the artery gave way under the ligature, and it was found impossible to secure it. A pad was bound firmly into the palm, a tourniquet applied to the artery in upper arm, and Mr. Barwell was sent for. He decided to tie the brachial artery in the lower third of the arm below the origin of the inferior profunda. The operation was performed under all antiseptic precautions, and rendered bloodless by Esmarch's method; a carbolised catgut ligature was used. After the operation, some oozing from the palmar wound continued; it was general, almost entirely venous, and was probably due to the action of the tourniquet. A pad, however, was placed over the wound and the hand elevated.

February 22nd. The operation-wound appeared healing; the other was not disturbed, the bandage being unstained. Pulsation could be detected behind the internal condyle, but not in the radial and ulnar arteries. The arm had regained its normal temperature three hours after the operation.

February 24th. The operation-wound, when dressed, was found to be suppurating. Her temperature had risen last night to 101.5 deg., and she had been restless. Poultices were ordered to be applied to all the three wounds.

March 14th. Since the above date, the patient had gone on uninterruptedly well. The temperature, appetite, and sleep were normal. The wounds healed rather slowly, but soundly. Pulsation could be felt in the radial on the eighth day of the operation, in the ulnar on the ninth. The fingers were contracted, and any attempt to straighten them gave much pain. At this date, ether was administered by Mr. Bailey, and Mr. Barwell straightened the fingers without difficulty, the adhesions yielding with a sort of silken rub.

March 17th. The movement of the fingers was quite restored. The stretching was not followed by any pain, and passive movement could be employed on the following day. She left the hospital cured of her wounds and in good health, and with excellent use of the hand.

## LONDON HOSPITAL

CONGENITAL NÆVOID GROWTH OF THE CHEEK: OPERATION: CURE.

(Under the care of Mr. RIVINGTON.)

ROSINA B., aged 9, was admitted into the London Hospital on April 12th, 1875. The patient's mother noticed a swelling on the temple the second day after the child's birth; it increased in size downwards, and enlarged so much, that it rested on the neck. After a time, it became smaller and again enlarged until she cut her teeth. At times, the tumour was painful. About four years previously, it became less and not so painful after an attack of bronchitis. The growth was distinctly lobulated. There were four separate masses; one under the zygoma, one below the orbit, a third in the cheek, and a fourth near the margin of the lower jaw towards the angle. The integument was natural in appearance. On the 26th, Mr. Rivington, who had pronounced the growth to be a congenital nævus partially degenerated, made an incision on the inside of the cheek, through the mucous membrane, with the intention of turning the whole of it out, if possible; but this proved to be impracticable, on account of the firm attachments. Moreover, the lobules were discontinuous. The portion of the growth, however, in the cheek was carefully dissected out without injury to any of the important structures adjacent to it. The fourth and lowermost lobule and the remaining lobules were punctured, giving exit to pent up venous blood, after which they collapsed. Considerable inflammation followed the operation. An abscess had to be opened and a drainage-tube inserted. One or two sloughs came away. There was much constitutional disturbance, but both it and the swelling began gradually to subside. As soon as she was well enough, the patient was sent to the seaside. At that time, her cheek was not smaller than before the operation; but, as was anticipated, gradual absorption of the inflammatory infiltration took place, and, when (in November) she returned to the hospital to show herself, her cheek was so much smaller, that she might fairly be called cured, notwithstanding the remnant of fulness which was perceptible to a slight extent in the neighbourhood of the zygoma. She was in the hospital in November for an abscess in the buttock.

Examination of the mass removed showed clearly that it was a nævus undergoing fibrous degeneration.

REMARKS.—The diagnosis of imbedded nævus rests partly on the physical conditions, but especially on the fact that it undergoes sudden changes in size, swelling rapidly at times and then subsiding again. This was the early history of the present case; hence the diagnosis. That the nævus was degenerating, was inferred from the fact that it had for some time ceased to undergo these sudden alterations. It was thought by some that the tumours in the cheek were fatty, the characteristic symptom of nævus being overlooked. *Brit. med. J.*

## HOSPITAL NOTES.

KING'S COLLEGE HOSPITAL: CLINIQUE OF DR. JOHNSON AND DR. PRITCHARD (AURAL DEPARTMENT).

*Thoracic Aneurism.*—A leather worker, aged 33, complained of pain in his right chest. He was evidently in good general health. The chest was well formed, but with distinct bulging of the lower part of the right side, which here measured rather more than the left. Palpation here detected a distinct heaving, a systolic impulse, and "a click-like" recoil, with the closure of the aortic valves. This portion of the chest was dull in front from the third rib downwards, the line of dullness sloping downwards and backwards, leaving the right base resonant behind; but here a pleuritic friction was heard. The cardiac impulse at the normal site was feeble; the præcordial dullness was diminished, the radial pulses were equal; no centric pressure-signs were discovered. The patient said that, two years ago, "he had beating in his chest on exertion"; he went into St. Bartholomew's Hospital, and the paper was marked "aneurism". He had never had attacks of dyspnoea, and continued work till three weeks ago, when the pleuritic pain caused him to desist. Over the seat of pulsation, sounds like the healthy heart-sounds were heard, but both were intensified; there was no *fric.* Dr. Johnson remarked, "the intensified sound heard over the tumour was due to a similar cause to that producing the cardiac first sound, viz, sudden tension of the walls of the cavity. That the pulsating tumour should be thought a vascular malignant growth, was contraindicated by the patient's general good health."

*Adherent Pericardium.*—A boy had rheumatic fever and pericarditis two years ago. At each cardiac systole, as indicated by the carotid pulse, the fourth and fifth left intercostal spaces were forcibly depressed, not merely retiring after being thrust forward. Dr. Johnson believed



the pericardium to be adherent to the heart, and by its external surface to the pleura, thus uniting the parietes of the chest to the heart, and causing them to move with it. There were also signs of mitral regurgitation.

*Necropsy in a Case of Sudden Death after Erysipelas.*—The man was convalescent. A catheter had been carefully passed; this was followed by a rigor; he then suddenly complained of pain over his heart, and was found by the house-physician almost pulseless, and breathing very slowly. He soon died. Dr. Johnson suggested that a fatty heart and *ante mortem* clot would cause such conditions of death, and narrated the case of a gentleman, the subject of a weak heart, who stopped in the middle of a conversation, became cyanotic, was convulsed, and almost immediately died. A firm clot was found adherent to the right ventricle, and obstructing the pulmonary artery, thus suddenly arresting the circulation. A young lady, on her return from a ball, was attacked with sudden faintness, dyspnoea, and hæmoptysis, and died. A flattened fibrinous clot had formed in the auricle, and, becoming detached from the seat of its formation, suddenly closed the tricuspid orifice. In the body under examination, the lungs were emphysematous, the pericardium was adherent, and in part ossified. The right ventricle was thin walled and the seat of fatty growth. A white fibrinous clot was found in it, extending from the apex of the ventricle into the pulmonary artery; opposite the sigmoid valves the clot was constricted as from the flapping of the valves upon it, indicating *ante mortem* formation. Another *ante mortem* clot took origin in the right auricle and passed through the tricuspid orifice, in the direction of the current of blood. The kidneys were congested but healthy. The formation of these clots was believed to be secondary to the erysipelas.

*Stricture of Oesophagus, probably due to Mediastinal Cancer.*—One vocal cord was paralysed, probably owing to implication of the recurrent laryngeal nerve, and the patient was liable to occasional suffocative attacks of coughing, with expectoration of mucus. Dr. Johnson compared such attacks to those of a man after tracheotomy, where the tube must be closed before expectoration, thus raising the tension of the air confined in his lungs behind the accumulation of mucus; then by suddenly reopening the aperture the mucus is driven out. In a healthy larynx, closure of the glottis effects the same thing, but with palsy of one cord no such accumulation of force behind the obstruction is possible, and mucus is not easily dislodged.

*Dr. Pritchard's Clinique: Aural Department.*—For the purposes of examination, a candle-lamp with reflector attached, and a large bell-shaped speculum were mostly used; if a stronger illumination were required, the laryngoscopic frontal reflector, throwing light from an argand gas-burner, furnished with a bull's-eye lens. A man complained of deafness, with symptoms of *petit mal*. The right ear was decidedly deaf to a watch held near it, and a vibrating tuning fork in contact with the forehead was heard with normal acuteness, but *loudest in the right ear*, thus indicating the deafness to be due to tympanic affection, and not to nerve-disease. The pharynx showed granular mucous membrane. The Eustachian tubes were opened by inflation. Dr. Pritchard remarked on the importance in all cases of discharge from the ears of looking to the condition of the pharynx and Eustachian tubes, and bringing these to a healthy condition. In cases of thickening of the pharyngeal mucous membrane, when local painting with astringents failed, benefit was often produced by syringing a weak solution of tannin along the floor of the nose.

*Granulations around a Perforated Membrana Tympani* passing into a chronic stage, when other remedies had failed, were cured by pulvis aluminis exsiccati blown upon the part after thorough cleansing and drying. In an inflammatory condition, powdered French chalk was recommended.

Deafness in cases of *Hereditary Syphilis* was demonstrated in two cases. A lad, aged 19, complained of deafness off and on for six months. The teeth were markedly "pegged", and there was well marked interstitial keratitis, said to be of six years' duration. Hearing for a watch near either ear was much diminished, but was normal to a tuning-fork on the forehead, indicating disease of the tympanum and not of the internal ear. The throat was relaxed, the membrana depressed. He was ordered a drachm of glycerine of tannic acid in two ounces of water, to be syringed twice daily through the nostrils. In a fortnight, the hearing was much improved, and the pharynx more healthy.

A brother of the last patient, aged 15, the subject of gradually increasing deafness of five years' standing, could hear only very loud sounds. There were signs of tympanic mischief. Vibrating tuning-forks, A, C, G, on the forehead were not heard, indicating undoubted *labyrinthine disease*. He was ordered glycerine of tannic acid to be painted on the pharynx, and mixture of iodide of potassium. In three

weeks, he could just hear tuning-fork A through the skull; in five weeks, A and G were heard plainly; C was indifferently heard. The improvement appeared to be due to the action of the iodide upon the nervous apparatus of the labyrinth. These cases show that deafness in cases of hereditary syphilis must not be considered hopeless.

A woman, aged 26, complained of gradually increasing deafness for three years, failing sight nine years; she had double iritis, probably syphilitic. Vibrating tuning-forks C and G on the forehead were heard with normal acuteness; A very quickly lost. Dr. Pritchard considered this simply an empirical fact, possibly due to injury of a portion of the cochlea, or of the nervous fibres of some part.

## REPORTS OF SOCIETIES.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 10TH, 1877.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

ON DIRECT WOUNDS OF THE URETER.

BY T. HOLMES, F.R.C.S.

In this communication, Mr. HOLMES described a case in which it was thought probable that the ureter was punctured from behind by a stab-wound, implicating no other structure of importance. The injury occurred to a boy, who was accidentally stabbed by a playmate. The wound was a very small one, and bled but little. Immediately on the cessation of the hæmorrhage, a copious flow of clear fluid was seen to proceed from the puncture, and this continued for a fortnight, in quantity sufficient to soak three large draw-sheets in the course of the day. The composition of the fluid was extremely different from that of normal urine; but it differed also from that of the cerebro-spinal fluid, which seemed to be the only other secretion that could have been evacuated by a puncture of this kind; nor did the symptoms point to any lesion of the spinal membranes or nerves, while the urinary secretion was much altered in quantity and quality from the date of the injury. Various arguments were adduced to prove that the lesion in this case was really a direct wound of the ureter—an injury not hitherto treated of in our surgical works, though direct wounds of the kidney had been carefully described. The possibility of the occurrence was illustrated by a preparation made on the dead subject, which accompanied the paper.

Mr. THOMAS SMITH said that Mr. Holmes had not mentioned one possible source of the fluid—the peritoneal cavity. The examination made appeared to indicate that the fluid was not urine, and that the ureter was not wounded. Considering the depth at which the ureter lay, it was very unlikely that, if it were wounded, urine would flow to the surface; it would rather pass into the loose subperitoneal tissue. There was just as much difficulty with the peritoneal fluid; but cerebro-spinal fluid would escape more easily. That the peritoneum could secrete a very large quantity of fluid, was shown in cases of hydrocele communicating with the peritoneum.—Mr. HOWSE had had a case which, he thought, supported Mr. Holmes's view. A lad aged about 14 was run over by a heavy van. There was fracture of the os innominatum; and the patient was collapsed. After a time, a swelling appeared on the right side, and increased. There was no rise of temperature. Thinking that the swelling was due to a collection of blood, Mr. Howse introduced a large trocar and cannula, when three or four pints of fluid having all the characters of urine gushed out. In four or five days, it was necessary to repeat the tapping, which was done with a small cannula. The fluid which escaped now contained much less urea than the former. The tapping was repeated once a week for eight or nine weeks; after two or three tapplings, the amount of fluid diminished rather rapidly. The boy was still under treatment. Mr. Howse doubted whether the fluid in Mr. Holmes's case was peritoneal. As regarded the cerebro-spinal fluid, he had observed copious drainage of this fluid in a case of tapping for spina bifida (in which the compressing-pad had slipped) to be followed by symptoms of nervous disturbance, apparently from the removal of the pressure on the spinal cord and brain.—Dr. DEBOUT spoke of a case of discharge of calculous matter through a wound in the back which had happened in France.—Mr. BARWELL said that the chemical character of the fluid in Mr. Holmes's case was opposed to the idea that it was urine. The peritoneum was more easily wounded than the ureter, which was firm and hard, and would readily escape the knife. As regarded the cerebro-spinal fluid, he had seen two cases in which no nervous disturbance was produced by the escape of a considerable quantity.—Mr. RIVINGTON thought that, if the ureter had been wounded, the urine would have escaped into the areolar tissue and set up irritation. The escape of peritoneal fluid into the



areolar tissue, on the other hand, might do no harm. He thought, on all grounds, that Mr. Holmes's case was one of wound of the peritoneum.—Mr. HOWSE asked if there were any known case in which the peritoneal fluid was of the same specific gravity as the fluid in Mr. Holmes's case.—Mr. G. POLLOCK asked Mr. Holmes whether the fluid which escaped in his case was compared with the urine which came from the bladder at the same time. He understood that, as the wound closed, the quantity of urine increased; but this might be due to arrest of drainage from any source. He could not understand why the urine from the bladder should be of higher specific gravity than that which came from the wound.—Dr. JOHN HARLEY suggested that the presence of effused urine in the connective tissue might have set up irritation, resulting in discharge of serous fluid.—Mr. HOLMES said that it had been at first suggested that the fluid might have come from the peritoneum; but the idea seemed untenable, and was dropped. He did not think that a wound of the peritoneum would be followed by the discharge of a large quantity of fluid so immediately and constantly as in his case, in which it could only have come from some perennial source. The peritoneum was further removed from the reach of an instrument entering from behind than the ureter; the latter might slip aside, as an artery did sometimes; but, as was well known, arteries were wounded. He did not know any instance in which peritoneal fluid was free from albumen, as the fluid in his case was. He allowed that it was difficult to explain the absence of urinary constituents; but he hoped the case would be put on record for comparison with any similar cases that might occur in future. There was a remarkable contrast as regarded specific gravity between the fluid and the urine. The knife used was a clasp-knife, with a blade about as long as a finger.

#### PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 3RD, 1877.

WILSON FOX, M.D., F.R.S., Vice-President, in the Chair.

*Granulation Material in White Swelling of the Knee.*—Mr. GODLEE exhibited some microscopical preparations with drawings taken from a child aged 4½, who died from blood-poisoning following amputation of the thigh for acute white swelling of the knee. There was no constitutional taint, and, at the *post mortem* examination, no tubercle was found elsewhere in the body. The articular cartilage was thick, and for the most part healthy, but becoming fibrillated in places. The synovial fringes were the seat of a quantity of flabby "granulation material", which, under the microscope, was found to be composed of cells and nuclei, of the size of leucocytes, embedded in a trabecular mesh-work, with which so-called "giant-cells" were connected by processes. The appearances, in fact, were precisely those described in miliary tubercle of the lungs and other organs, and held to be characteristic of tubercle. But this case only bore out what had been stated before, that there was nothing specific in this structure, for there was no question of tubercle in the case at all. Similar changes had been noted by Friedländer in strumous joints. The case also disproved the assertion that, in organs such as the lungs and testicle, the giant-cell was the remnant of a degenerated air-vesicle or gland-tubule.—In reply to the Chairman, Mr. GODLEE stated that the giant-cells measured from about the  $\frac{1}{16}$ th to the  $\frac{1}{8}$ th of an inch in diameter.—The CHAIRMAN said the specimen was of interest as bearing upon the nature of strumous changes, which were some time ago supposed by Billroth to be identical with tubercle. The question was, as to the relation of special forms of chronic inflammation to the tubercular change. The giant-cell could not be considered characteristic of tubercle; but, was the closely packed reticular formation, with its tendency to necrosis or to fibroid change, marked by a special constitutional state or not? Although there was no pathological change which could be absolutely called specific, yet there were large groups of cases with common peculiarities in their clinical history, associated with certain anatomical characters not shared in by other groups of cases having different clinical features.—Mr. GODLEE had had no opportunity of examining a strumous joint at an early stage.

*Aneurism of the Superior Mesenteric Artery.*—Dr. B. YEO related the case of a man aged 52, who was seen as an out-patient on December 8th, and had had pain in the epigastric and lumbar regions for six months previously. A beating had been felt in the epigastrium all that time. There was headache, vomiting, and emaciation; which symptoms were relieved by rest in bed. He had been an engineer in the Peninsular and Oriental Company's service; and, twelve years before, he had contracted syphilis, and had subsequently had secondary and tertiary sores. On examination, in the median line was a globular pulsating tensile tumour, with a bellows-sound; this was diagnosed as an aneurism of a branch of the abdominal aorta, and not of the aorta

itself. On December 17th, the tumour had increased, and the systolic bruit was louder and harsh. Next day, the patient had four epileptiform attacks, and gradually became insensible. No urine was passed for twenty-four hours. On the 21st, coma was complete; only two or three drachms of highly albuminous urine were found in the bladder; and the patient died on December 22nd. At the necropsy was found an aneurism springing from the anterior surface of the aorta at the origin of the superior mesenteric artery, the extension of which downwards had led to compression of both renal arteries. The opening of the aneurism was of the size of a shilling-piece, nearly closed by firm fibrine and clots. The aorta was otherwise healthy; the brain and all the viscera were healthy. Dr. YEO had only found two other similar cases recorded; one by Dr. Wilks, the other by Dr. Ogle. In both those cases, there was disease of the cardiac valves, and both observers drew attention to the question whether the aneurism was due to embolism. Death in his case was due to uræmia.—Dr. GOWERS inquired as to the condition of the kidneys. Both renal arteries being as it were tied, the case was interesting as to the albumen in, and specific gravity of, the urine.—Dr. MOXON asked if the renal arteries were occluded or patent.—Dr. YEO said there was no obvious disease of the kidneys, which were a little smaller than usual; there was simply a large vacuole at the top of one kidney. The renal arteries were only compressed, not occluded.—Dr. MOXON said that, as the pressure of blood in the renal arteries was in that case as great as that in the aneurism itself, one must be careful to accept such evidence of pressure. Still, Dr. YEO's view was, perhaps, probable, both from the presence of albumen in the urine and from the small quantity of urine which was secreted. Did not one find that after epilepsy albuminuria occurred? He had had two cases in which before the fit there was no albumen, whereas subsequently albumen was found, as pointed out by Dr. Braxton Hicks.—Dr. YEO said that not enough urine was passed to enable one to take its specific gravity. It appeared to him that, in consequence of the pressure of the aneurism, the blood-current in the renal vessels would grow weaker and weaker. Dr. G. JOHNSON had, indeed, thought there was plugging of one renal vessel, the urine passed was so slight.—Dr. SAVAGE had examined the urine in several cases of general paralysis; and could affirm that, as the result of convulsions in such cases it was rare to find albuminuria.—Dr. GOWERS remarked that after epilepsy also it was an extremely rare event to find albumen; only in one case out of thirty or forty was it present.—The CHAIRMAN would suggest two hypotheses. The retardation of the arterial stream might tend to produce congestion of the venous system, convulsions, and albuminuria; or an urine of low specific gravity containing little albumen might, after a convulsion, come to contain a considerable quantity of albumen.

*Lymphadenoma of Stomach and other Organs.*—Dr. COUPLAND exhibited this specimen, taken from a female patient aged 24, who, four months before death, had had hæmatemesis, followed by great debility, and persistent pain in the back. There was a firm globular mass to be felt in the abdomen near the umbilicus; there was also severe vomiting with jaundice. A tumour was found in the right thigh, and other nodules existed in the neck and skin of the abdomen. The patient gradually sank and died. The *post mortem* examination discovered a lymphadenoma in the thyroid, reaching to the anterior mediastinum; and nodules in the lungs, especially in the lower lobes. In the abdomen, the retroperitoneal glands were much enlarged by similar masses; the superior cava contained a thrombus. In the pyloric zone of the stomach were several masses of new growth, and one as large as an orange in the duodenum, which was flattened and stretched over it. There was a tumour in the thigh, and there were others in the inguinal glands. All these tumours were examples of lymphadenoma, and the point of origin was probably the stomach itself or the retroperitoneal glands, whence it became simultaneously disseminated in different regions.

*Lymphoma of Prostate.*—Dr. COUPLAND remarked that this disease was extremely rare; the case which he now exhibited was, as far as he could ascertain, the only one on record. The man was under Mr. Nunn's care, and had had gonorrhœa and a chancre five years before, but had never had syphilis as far as was known. Three months before admission to the Middlesex Hospital, he had had retention of urine after a debauch; the catheter was then used for ten days, and once blood came away. He was a tall thin man, and when at the hospital was always wanting to micturate, whilst upon straining only a few drops of urine passed. He had pain at the tip of the penis, and in the lumbar region, and was sounded for stone on three or four occasions. The patient died from cystitis and suppurative nephritis. At the *post mortem* examination, the prostate was found to be replaced by a large ovoidal tumour as large as a swan's egg, white and glistening on section. The bladder was contracted. Two secondary nodules were



found in the right suprarenal capsule and pancreas, and there was no other disease at all in the body. Microscopic sections of the tumours showed them to be specimens of *lymphosarcoma*: there were "closely packed small round and angular cells, which completely concealed the fine adenoid reticulum within which they were imbedded; but this was brought into view in pencilled sections". The absence of lymphatic glandular infection allied the disease to sarcoma rather than to true lymphadenoma. But even sarcoma of the prostate was very rare.—Mr. S. WATSON inquired if in the first case the thoracic duct was pressed upon by the abdominal growth; if so, that might account for the great emaciation.—Dr. GIBBON inquired if the blood had been examined in that case, and what was the amount of the white corpuscles.—Dr. MOXON asked whether at the point where the stomach and duodenum were affected, the bowel was dilated or constricted; usually the latter condition was produced.—Dr. F. TAYLOR said that in a child with lymphoma of the jejunum, seen by himself, the patient had had frequent motions, and the bowel over the tumour was found dilated.—Dr. COUPLAND presumed the thoracic duct was implicated; but did not know if the blood were examined. The duodenum was mechanically dilated as it was stretched over the growth.—In regard to the second case, the CHAIRMAN remarked that it opened up an entirely new history of morbid growths of the prostate.—Dr. COUPLAND said that it had all the characters of lymphatic tissue-cells in a reticulum. Although it was a new thing in pathology, yet lymphatic tumours might probably invade the prostate as they did other organs.—The specimen was referred to the Morbid Growths' Committee.

*Aneurism of the Coronary Artery, secondary to Ulceration of the Aortic Valves.*—Dr. IRVINE exhibited this specimen. The patient, a labourer, aged 47, was one morning "taken ill". He became faint, and was taken to the Charing Cross Hospital, where he soon rallied. His symptoms simulated those of acute pneumonia; he breathed sixty or seventy times a minute; had a pulse of 120 a minute; and his temperature was 104 deg. The lungs were dull at the bases, and there were moist bronchial rales. The cardiac sounds were audible, but not distinct. The patient shortly died suddenly. At the *post mortem* examination, the pericardium was found to contain eight or ten ounces of fluid and clot. The aorta was healthy, except opposite the valves, on which were vegetations. One of these, by its friction against the opening of a coronary artery, had caused ulceration and an aneurism, which was only prevented from bursting at any point by the tunica adventitia, and had, in fact, given way at one point into the pericardium. Another vegetation fitted into the opening of the other coronary artery at each systole. There was no sign of pneumonia in either lung. The spleen weighed twenty-two ounces, and contained several emboli. Was the rise in temperature due to hæmorrhage into the pericardium? Dr. Irvine also showed another somewhat similar case, in which the aneurism ruptured into the pericardium.—The CHAIRMAN thought the question raised as to the relationship of high temperature and hæmorrhage into the pericardium was of the greatest interest. In several cases of high temperature he had himself followed, such complication was not present. Shock produced usually depression or elevation of temperature.—Mr. HOWSE said that the high temperature might have been due to damage of the cardiac sympathetic, just as the high temperature in cases of fracture of the upper part of the spine, where often before death a temperature of 103 deg. or 109 deg. was recorded, was due to injury of the cervical sympathetic.—Dr. IRVINE said the man's symptoms seemed to be due to the hæmorrhage; the man was taken ill a few hours only before the temperature was taken.—Dr. CHURCH thought they must not accept the statement that the man was well in the morning. Although able to work, he had at any rate enlarged spleen and ulcerated aortic valves.—Dr. IRVINE said at any rate he had no sign of disease until the morning of his last day of life.—Dr. POWELL asked if this were not a case of acute aortic disease. The specimen had some signs of recent disease about it. Might not the high temperature be due to microscopical emboli in the nerve-centres? The coronary circulation was usually supposed to be carried on during the diastole.—Dr. YEO said that the good nutrition of the heart showed that the cardiac circulation could not have been greatly obstructed, although during the systole the coronary arteries must have been almost closed.—Mr. MORRANT BAKER said there was no proof that the coronary circulation could only occur during diastole. Jetting of blood from divided coronary arteries occurred during the systole. The blood-stream, when propelled into the aorta, distended the sinuses of Valsalva, and, therefore, removed the valves from their proximity to the coronary orifices.

Dr. IRVINE had been unable to examine the brain.

*Cerebral Lymphoma, with Enlargement of the Pituitary Gland.*—Mr. HOWSE exhibited this specimen, taken from a woman who had been greatly subject to palpitation of the heart. She had no other illness,

except the enlarged thyroid, until eight months previous to death, when increasing emaciation was first noticed. Three weeks before death, an abscess formed in the axilla; and profuse diarrhoea came on, from which the patient died. After death, the whole mucous membrane of the intestine was found to be red, injected, and flocculent. Peyer's glands, when examined by a lens, were found to have minute superficial capillary ecchymoses, which extended about six feet above the ileo-cæcal valve. The thyroid and thymus were enlarged. The brain and spinal cord to the naked eye seemed to be normal. The spleen was enlarged and firm. He thought the condition of Peyer's glands was not due to typhoid, as there was no breach of surface. The only analogous case was one shown last year by Dr. Fagge. Was the condition due to some change in the nerve-centres? The patient had been five months in the ward in which there was no case of typhoid or erysipelas. In reply to Dr. YEO, Mr. Howse said the patient had suffered from diarrhoea previous to her entrance into the hospital, and two or three times whilst she was in the hospital; whilst, for the last two or three weeks of her residence in the hospital, the diarrhoea was incessant.—Dr. YEO said that, in many cases of exophthalmic goitre, diarrhoea was inveterate, and that the communication of Mr. Howse might be very important in throwing light upon such diarrhoea.—The CHAIRMAN said that three of his patients, suffering from exophthalmic goitre, had had severe diarrhoea, requiring two or three grains of opium daily to control it. Catarrhal affections, except in the intestine, were rather rare in this disease.

*Hypertrophy of Heart, with Atrophy of One Kidney.*—Dr. GOWERS exhibited this specimen, removed from a patient who had had cardiac symptoms for three years, with slight oedema three weeks before death. The man, who was thirty-six years old when he died, had had hæmaturia in early life. The urine was albuminous, and contained granular casts, and there was albuminuric retinitis. The man died from erysipelas. At the *post mortem* examination, one kidney was found to be completely atrophied, containing only pus-like matter. The other kidney was large and fatty. The left ventricle of the heart was especially dilated and hypertrophied, and the whole heart weighed twenty-three ounces. The large heart had occurred as a consequence of primary kidney mischief; and he would inquire, was it likely that the kidney-trouble was set up by an attack of scarlatina which had occurred six months before death?

## MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, JANUARY 17TH, 1877.

J. D. GILLESPIE, M.D., President, and afterwards A. KELLER, M.D., Vice-President, in the Chair.

*Epithelioma of Tongue.*—Mr. ANNANDALE showed an entire tongue removed for epithelioma a week ago. The patient from whom it had been taken was also shown. In the removal, he had used the new thermal cautery of Paquelin, by which the patient suffered no pain after the operation. The good result he believed to be due to the thermal cautery used, the confinement of the disease to the tongue, and the fair health of the patient.

*Traumatic Paralysis of the Arm.*—Mr. ANNANDALE showed a patient who had been admitted to his wards suffering from motor paralysis of the arm, due to the manipulations of a bone-setter, who had tried to reduce a dislocation of the shoulder by making the elbow of the affected arm touch the opposite shoulder. By this manipulation, he dislocated the elbow and caused paralysis of the whole arm, rendering it perfectly useless, the fingers being slightly flexed, and the skin painful and glistening. Galvanism was tried for a month without any effect; and the patient wished the arm removed. The question to be settled was, where should this be done. He himself at first thought the operation should be performed at the shoulder; but he ultimately amputated just above the elbow, as he wanted to leave a stump. Since the operation, the man had been able to move the stump freely. He was unable to understand the case, and had consulted Professor Turner; but no explanation could be given, unless that there had perhaps been tension of the nerves relieved by the operation. In reply to a question by the President, it was stated that the patient had feeling in the outer fingers.

*Hip-joint Disease.*—Mr. ANNANDALE showed two specimens of hip-joint disease. In the first, there were destruction and elongation of the head of the bone. As there was ankylosis, he first divided the femur below the trochanters, and then got the head of the bone out. In the second specimen, there had been destruction of cartilage and caries. In both cases, there had been suppuration, but no sinuses. He believed that the operation put them in a better way for recovery.

*Scarlet Fever Charts.*—Dr. WYLLIE showed a volume of charts he







read a paper on this subject. His first case was that of a boy aged 9, in whom necrosis of part of the upper jaw followed an attack of fever. After removal of the necrosed part and renewal of the lost soft tissues by two plastic operations, he performed Esmarch's operation for the ankylosis of the lower jaw. This consisted in removing part of the thickness of the jaw and allowing a false joint to form. This had given the patient movement of the jaw on one side of the face, and ability accordingly to chew: Two patients on whom the operation had been performed were then shown to, and examined by, the members.

# ABERDEEN, BANFF, AND KINCARDINE BRANCH.

SATURDAY, FEBRUARY 3RD, 1877.

MICHAEL W. COWAN, M.D., H.M.S. *Clyde*, in the Chair.

*Cases of Salivary Concretions.*—Dr. REID of Aberdeen contributed a paper on this subject. Most practitioners had frequently met with patients complaining of the annoyance caused by small hard projections inside the upper and under lips, which, when cut down on, appeared to be small hard concretions about the size sometimes of a hemp-seed. They were deposits of the inorganic matter of the secretion of the labial glands blocking up the ducts. The concretions, however, which he had to notice more particularly were the concretions affecting the larger salivary apparatus. As he had not seen any cases of affection of the sublingual, he would confine himself to those affecting the submaxillary gland, where the secretion had a very much longer passage to traverse, and where there was but one outlet, viz., Wharton's duct. Before, however, considering submaxillary concretions, he wished to refer to the subject of ranula. Some authorities held that ranula had its origin in the obstruction of the submaxillary duct and in the subsequent accumulation and coagulation of the secretion from the gland and dilatation of the duct, while others considered that there was no proof of dilatation of the duct, and that it was difficult to understand how so small a duct could be dilated to so large a size. Whatever was the cause of ranula, the cases he had to bring forward would show that Wharton's duct was capable of very great dilatation, sufficient, he believed, to account for the largest ranula.—CASE I. A healthy woman, upwards of fifty years of age, had a large tumour extending from near the frænum lingæ to the submaxillary gland, increasing very rapidly in size, and greatly obstructing swallowing. A small incision was made at the thinnest part, and, on inserting a blunt probe, it was felt to grate on some hard substance. The opening being enlarged, thick fluid escaped, and a greyish-white friable mass, about the size of the kernel of an average sized hazel-nut, was extracted. The relief afforded by the operation was almost immediate, and there was no return of the tumour.—CASE II. A man between thirty and forty years of age, otherwise in good health, had been troubled for several months with pain and swelling in the region of the submaxillary gland. But little swelling was perceptible between the gland and the outlet of the duct, although there was swelling in the gland itself. Liniments, poultices, warm water kept in the mouth, etc., were resorted to without any relief, and the pain and stiffening of the jaw became increased, so that swallowing was scarcely possible. A swelling beneath the tongue began to appear at this time; and, in the course of two or three days from the first appearance of this swelling, the duct being much distended, a whitish speck was seen in the sublingual caruncle; and, on an opening being made, a concretion about the size of a pea was easily scooped out. The operation relieved the pain entirely, but the swelling did not altogether subside; and a relapse took place in about a year. The concretion in this case, though small, was large enough to close up the duct and obstruct the passage of the secretion, and caused a swelling like a half-developed ranula. Had the tumour been opened at the thinnest part, the concretion would most likely have escaped observation. The case seemed to indicate that the mere size of the concretion did not determine the extent of the dilatation of the duct, but that it acted, whether large or small, as an obstruction, and might cause enlargement to any extent almost. The calculi in both the cases consisted of phosphate of lime with a little organic matter. Dr. Reid had brought these cases before the Branch on account of the analogy which seemed to him to exist between the formation of these concretions in the glands, their escape, and their slow and painful passage along the ducts, and the urinary deposits in the pelvis of the kidney, their escape, and passage along the ureters.—Dr. OGILVIE WILL exhibited some specimens of salivary concretions. He believed that ranula was not from dilatation of the duct, but from an obstructed follicle; and he had been able to pass a probe along the duct, leaving the ranula untouched. He had no doubt as to the salivary concretions mentioned by Dr. Reid. These were certainly in the duct.—Dr. ALEXANDER OGSTON had seen several cases of apparent phlegmon under the chin suddenly disappearing in a few days, and he

thought that these might very likely have been salivary concretions. He had known grains of corn enter Wharton's duct and there cause inflammation. He believed that ranula was Wharton's duct obstructed, and had cured that disease by cutting out a piece of the duct in his cases.

*Strangulation of the Musculo-Spiral Nerve.*—Dr. ALEXANDER OGSTON gave some details regarding the case of a young lad who had compound fracture of his left humerus about the middle of the bone, the muscles being much torn and bruised. He stated that Dr. Edwards of Stonehaven first saw the case, and put up the arm as usual; and that the case progressed satisfactorily, the limb becoming able to perform its functions, although the soft parts seemed more bound down than usual. Soon, however, the extensor muscles of the forearm became wasted, the flexors continuing as before, and sensibility remaining perfect over the whole limb. The extensors after a little almost disappeared, and the limb became useless. At this stage, Dr. Ogston first saw the case in consultation; and, after considering all the circumstances, it was thought advisable to cut down on the musculo-spiral nerve to try to discover its condition. A long incision was made, and the upper part of the nerve was found disappearing into the substance of the humerus at the seat of fracture, and reappearing at the other side of the fractured part lower down. The bone was cut into carefully, and the nerve was found lying right through the medullary cavity of the humerus unbroken, but reduced by pressure to about one-third of its natural size. It was lifted out and attached to the triceps by catgut sutures. The case was still under observation; and Dr. Ogston would report on it at a future period. Since the operation, there had been no increase in the power of motion of the extensors of the arm. Galvanism had not been tried, but was to be resorted to. In conclusion, he remarked on the different effects of strangulation of nerves. Sometimes intense pain and paralysis were both present; sometimes pain alone was the urgent symptom; and occasionally there was paralysis without pain.

# PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, FEBRUARY 17TH, 1877.

THOMAS HAYDEN, F.K.Q.C.P., President, in the Chair.

*Farre's Tubercle.*—Dr. FINNY showed the thoracic and abdominal organs of a man who had been short-winded since an attack of bronchitis two years ago. While he was under Dr. Finny's care, a train of symptoms appeared—namely, orthopnoea and cough, with diaphragmatic respiration. The intercostal spaces were indrawn. The percussion-note was clear, even over the heart and liver. There were no hepatic symptoms, no ascites, no varicosity of the superficial abdominal veins. In the epigastrium, a tumour, movable with the act of respiration, existed, which extended below the umbilicus. On *post mortem* examination, the lungs were found somewhat inflated, there was a (hypostatic) serous effusion in the right pleural cavity. The lungs were the seat of an extensive passive congestion. A large venous clot lay in the right heart, and extended into the right auricular appendix. There were no valvular lesions, but the myocardium was in a state of progressive fatty degeneration. No thrombus existed in the pulmonary artery or veins. The gall-bladder was normal. The left lobe of the liver, much enlarged, consisted of a mass of rounded bosses (Farre's tubercle). The lobus Spigelii and right lobe were also similarly affected, although to a less extent. Both the liver and spleen showed evidences of cirrhosis.

*Excised Hip-joint.*—Dr. E. W. COLLINS exhibited a portion of the upper end of the femur, which he had excised in the case of a girl aged 6. There was a two years' history of disease. The upper epiphysis had disappeared. The upper part of the cervix femoris had been absorbed. The acetabulum was necrosed and carious. The great trochanter was also diseased: a fact which proved the wisdom of excision below the great trochanter.

*Perforation of Pleura in Phthisis.*—The PRESIDENT exhibited the thoracic viscera of a man aged 24, who had been the subject of pulmonary phthisis. The upper lobe of the left lung was extensively excavated. There were severe hectic and colliquative sweating. On February 14th, some mental excitement brought on a paroxysm of coughing, in the middle of which excruciating pain occurred in the left chest. Pleuritis set in next day, and he quickly sank. The left apex was completely excavated, and in one place perforation had occurred, with escape of the contents of the cavity into the pleural sac. The left pleura was thickened and covered with purulent flocculent matter. Large caseous or tubercular masses existed in both lungs.

*Fracture of Costal Cartilages.*—Dr. E. H. BENNETT brought forward two cases of this injury; one illustrated by a cast; the other, by the specimen itself. The first case was that of a powerful man aged 27,



who had been struck by an iron bucket in the lower part of the right chest. The eighth rib was broken in front of the angle; but, in addition, a projection three inches outside the sternum was caused by a transverse fracture of the seventh and eighth costal cartilages. The deformity caused by this lesion did not appear until the day after the receipt of the injury, and was produced by muscular action. A severe attack of pleuritis followed. In the second case, the recent *post mortem* appearances of the injury were for the first time recorded. The fracture of the cartilages was transverse, the vertebral fragment being displaced towards the thorax under the sternum. The subject of the injury, a man aged 23, was killed almost immediately by machinery. The perichondrium at the site of the fracture of the costal cartilages was torn across on their anterior aspect, but remained intact on their posterior aspect. The fracture was caused by violent action of the external intercostal and transversalis abdominis muscles.

#### SOUTH-EASTERN BRANCH: EAST SUSSEX DISTRICT.

FRIDAY, MARCH 23RD, 1877.

H. MARTIN HOLMAN, M.D., of Hurstpierpoint, in the Chair.

*Injuries of the Eye.*—Mr. PENFOLD of Brighton read notes of two cases, where excision of the eyeball was performed for injuries from a thorn and a shot respectively; also a case of partial dislocation of the lens and general ophthalmitis, resulting from injury by a cricket-ball. Recovery ensued, the treatment being confined to rest and antiphlogistics.—Dr. ROBERTS of Eastbourne mentioned a case of laceration of the sclerotic from a flint-stone.

*Pelvic Hematocoele.*—Dr. CLEMENT GODSON of London read notes of three severe cases of pelvic hematocoele. In the first two, the effusion was large, reaching up to the umbilicus; in the third, there was no abdominal swelling; in all, the uterus was pushed up above the symphysis pubis, from which Dr. Godson concluded that the blood escaped beneath the peritoneum, and he believed this to be by far the most common situation. Two of the patients died; one probably from rupture into the peritoneum, a rare occurrence; the other from septicæmia after puncture through the vagina, and washing out the masses of blood-clot with an antiseptic lotion. The case in which recovery took place was treated simply by rest and the application of iodine over the swelling; in less than six months, no trace of the effusion remained. Surgical interference was strongly deprecated, except in extreme cases where the symptoms absolutely demanded it.—Dr. WILTSHIRE (London) made some practical remarks on the subject. He avoided purgatives, applied a bandage, fed well, etc. He also noticed the icterode look in such cases from the absorption of blood-pigment.

*Treatment of Ruptured Perinæum.*—Dr. WILTSHIRE narrated the case of a young married lady, aged 28, who had ruptured perinæum through the sphincter ani after a hurried delivery with forceps. He illustrated the great advantages of bringing the torn ends of the sphincter together, using Chinese silk, and, in addition to the ordinary external sutures, for which he used twisted silver wire, introduced by Mr. J. Lane's needles, sphincteric power was regained. Dr. T. Gaillard Thomas of New York had adopted the same plan.

*Post Partum Convulsions treated by Sedative Injections.*—Dr. CONSTANTINE HOLMAN (Reigate) read notes of four cases of *post partum* convulsions treated by sedative hypodermic and rectal injections. He preferred enemata of chloral, especially in cases of intense albuminuria with coma.

*Uterine Fibroid.*—Dr. C. HOLMAN read an account of a case of removal of a fibroid tumour from the uterus, advocating free incision of cervix uteri where room was required.

*Ovariectomy.*—Dr. C. HOLMAN described a successful case of ovariectomy, illustrating the difficulty of diagnosing ovarian disease early adherent to the uterus, the use of the solid perchloride of iron in hæmorrhage from torn adhesions within the pelvis, and the advantages of a glass drainage-tube in certain cases.

Dr. HOLMAN also exhibited Clover's ether-inhaler.

*Diphtheria.*—A discussion with reference to the local treatment of diphtheria was inaugurated by Dr. FUSSELL, who followed Trousseau, and strongly urged topical remedies.—Mr. COLLINS, Dr. MUNDIE, and others advocated the same views, though not to the exclusion of the usual internal remedies.—Dr. W. MOORE was disposed to try the Italian plan of a strong solution of chloral in glycerine locally.—Dr. WILTSHIRE mentioned that topical remedies may be of service in preventing auto-infection from putrefaction of the false membrane.

We regret to hear that Dr. William Smith, Fleet-Surgeon of the *Unicorn*, died on Sunday week.

#### BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

### BRITISH MEDICAL JOURNAL.

SATURDAY, APRIL 21ST, 1877.

#### HIPPOCRATIC MEDICINE.

THE address by Dr. Matthews Duncan on Hippocrates, delivered at the opening of the hundred and thirty-ninth session of the Royal Medical Society of Edinburgh, demands more than a passing notice. It is not so much because of the fact that the Royal Medical Society is by far the greatest students' society in the country, nor yet because the well worn subject of the position and work of Hippocrates is itself a very important one, nor even because anything new historically has been said about him, that we think this; but it is because in this address we have the statement of the opinions of one of the leading medical men of the day, who is speaking after mature experience of many years of practice, and who has himself added to our knowledge both of art and of theory, that this address seems to us worthy of attention.

We are not disposed on all points to agree with Dr. Duncan. In one of his main conclusions, we rather think that time will show him to be wrong. His scepticism as to the value of treatment is, we think, too much the end in his mind, and too little the conscious means to more rational therapeutics; and the hopelessness with which he seems to view the future of medicine appears to be greater than even the chaos in which this whole domain of knowledge undoubtedly lies justifies him in indulging. "There are," says Dr. Duncan, "two epochs, and two only, in the history of medicine: that of Hippocrates, about B.C. 400; and that of the fifteenth century." "At present," he continues, "we cannot foresee even the probability of another era so great in medicine as these." We cannot help thinking that the man who states this last opinion has somewhat failed in reading the signs of the times. Surely the history of science has a different voice than this for ears that are disposed to listen. The gradual evolution of law, the grand generalisations concerning the conservation of matter and the conservation of energy, and the continual and unmistakable tendency of science to simplify the confusion of details by reducing them to general expressions, oppose this belief as to what the future of medicine is to be. Dr. Duncan seems to us to raise the general question, Are there laws of therapeutics? and, before he has well asked it, to answer dogmatically No.

So far as we have yet gone, Dr. Duncan is certainly correct. Whatever laws there may be, they have not yet been formulated. But the whole history of science seems to us to be opposed to the view which Dr. Duncan takes of the future of medicine, although of course none can be more impressed than we are ourselves with the conviction that it is foolish to waste time in anticipations as to what the future is to show us, if such anticipations prevent the careful investigation of the phenomena under our eyes. To hope for a scientific and positive era in the history of medicine, is at least less discouraging than the views to which Dr. Duncan gives expression, and may in turn be made a part of the cause of the advent of such a time.

To the other two points raised in this remarkable address we are glad to be able to direct attention. As we have said, we do not think its main merit lies in the information given us about Hippocrates, for, in truth, there is nothing in the paper which is new on this head. For this reason, we shall say nothing on the fact that Hippocrates rescued epi-



lepsy, which was before his day called the "morbus sacer", from sacerdotal hands and placed it under those of doctors, to his own perpetual credit and the benefit of the unhappy sufferers therefrom. But we heartily commend to our readers the points raised by Dr. Duncan in his distinctions between cure and treatment, knowledge and science, and crude theory and verified hypothesis. These points, and such as these, we should like to see more constantly kept before the mind of the practitioner of medicine; and we think that Dr. Duncan has done well to attempt to impress them on the understanding of the students. To us, indeed, it appears that it is scarcely possible to have clear ideas as to the meaning of general terms without that training in philosophy which we hope to see soon the inheritance of every medical man. To the want of it is mainly to be attributed the slow progress which the science, if such it can be called, has made. The use of abstract names without definition, and chiefly the error of assuming mentally the existence of a metaphysical entity behind the term, instead of using the term as a shorthand symbol for the aggregate of the facts comprehended under the expression, have had a great influence in retarding the real advance of medicine. We should be glad if we could say that this class of fallacy exists no longer. Take, for example, the term "disease", to which Dr. Duncan directs attention. How many of us look upon it as a condition or aggregate of conditions of the body, which it really is? And how many of us assume, with Hippocrates, "that some entirely new matter or force or combination of them has been introduced into the system in disease, in order to combat or destroy it"? And how many more of us fall into the no less fatal error of assuming that our pneumonia of peritonitis is a real entity to which the sick man's condition more or less approximates, but which it may or may not reach, instead of viewing it as a departure from a more or less theoretical condition of health—as a condition of lung or peritoneum induced, as any other physiological state may be induced, by the action of certain causes? Dr. Duncan has done good service in directing the attention of the young minds who composed his audience to questions of this sort; and we sincerely hope that his hearers will take to heart the lesson so well put to them, and that we shall see abundant fruit from it when the student has become the practitioner and brings his theoretical knowledge to bedside verification.

Of the same class are the remarks of Dr. Duncan on observation. Hippocrates, he says, has given us striking evidences of his powers of observation, and has enriched the healing art by the detailed accounts of his cases. This probably all of us know and recognise. But the few sentences of this address which speak of the relation which hypothesis bears to induction are worthy of great attention, and would soon, we believe, if they were applied to every-day practice, revolutionise the whole practice of medicine. Truly, Hippocrates framed hypotheses; but, says Dr. Duncan, "he framed them very badly". That is to say, he did not subject his hypotheses to the test of verification. A man may exemplify a method without understanding the principles of its application. A man may reason well without knowing logic, or play well without knowing music. But in truth, although Hippocrates observed well and framed hypotheses on his observations, he did not test the value of his hypotheses by future observation or by experiment. But the marvel, which does not diminish but increase by long pondering over it, is to know how it happened that the idea of verifying hypothesis, which is more than hinted at by Aristotle, much of whose knowledge was derived from Hippocrates, should have been utterly lost to mankind till Bacon resuggested it about two thousand years later. Are we to gather from this fact that it is still possible for the world to lose entirely all its best knowledge until some great genius in the remote future shall again wake the music whose echoes have been allowed to die away? In fact, the time was hardly ripe for hypothesis. Fifty years later, the majestic intellect of Aristotle might perceive its applicability, but scarcely Hippocrates, who had first to make—one might almost say create—his observations, before he could frame hypotheses on them, which hypotheses might be afterwards verified.

We are not sure that we agree with Dr. Duncan's definition of a specific. He says, "A specific is a medicine of the mode of whose action we are entirely ignorant". This is certainly one mode in which the term is used; another is that of a remedy which never fails; but probably there is a scientific use of the word specific which coincides with facts—viz., when we say a remedy, such as arsenic, is specific for affections of the skin, meaning simply that arsenic acts on the skin. Specific in this sense might, and often does, mean *having a selective affinity for* a given part. All agents are not equally wide in their sphere of action. Some tend to act on one part rather than another, and are so said to be specific to that part. If there be any blot or flaw in this otherwise excellent address, it is, we think, at the passages where the word specific is referred to, and perhaps in a similar passage or two to which we should take exception. When Dr. Duncan says, for instance, that "diseases are cured we know not by what forces", is there any remnant (in expression, we mean) of the idea that disease acts otherwise than as health acts—by other "forces", that is? Surely disease is no more than contraction and relaxation, deposition and absorption, etc., as health is. The actions are increased or diminished in frequency; but surely the actions and the forces, molecular or other, are the same. On the whole, however, we are highly gratified with the masterly way in which Dr. Duncan has handled his subject, and it is chiefly because we hope a large number of practitioners will read and ponder this address for themselves that we do not now further occupy their time with a reference to the other points of it. We hope, however, that the readers of it will not fail to note the suggestions for the further employment of the numerical method and the other matters which will be observed by an attentive perusal of this masterly address.

#### PUBLIC VACCINATION.

A RECENT correspondence in the *Times*, originated by Dr. Ducat, the parochial medical officer for the Highbury district, Islington, raises the question as to the efficiency of the present system of public vaccination. Dr. Ducat says that, while "arm-to-arm vaccination has its advantages, and ought, where possible, to be employed, the Local Government Board, in instituting the present system of vaccination, with its fewer vaccinators and fewer stations than formerly, lost sight of other very great advantages under the former system which ought not to have been overlooked". His objections to the present system appear to be these. 1. The public vaccinator is not the medical officer of the district, and consequently is incapable of knowing what children are or are not fit to be used as vaccinifers. 2. At the large vaccinating-stations, there may be persons, waiting for an hour or more, who have come straight from some centre of infection. 3. In consequence of the reduction in the number of vaccinators, lymph has become very scarce. 4. During the epidemic of small-pox in 1870-71, the arrangements broke down in Islington, where the numbers of persons attending the vaccinating-stations were so great, that the guardians were obliged to call in the aid of the parochial medical officers who were not public vaccinators.

As a remedy, Dr. Ducat suggests that, while the area of vaccination districts may remain, the assistance of the medical officers of the poor-law districts—several of which are often combined in a vaccination district—may be usefully applied. He advises that they should attend at the stations and vaccinate persons belonging to their respective districts. He argues that the adoption of this plan would remove the disadvantages above mentioned, and would enable the district medical officers to meet any local outbreaks of small-pox.

The opinions of which we have above given an abstract are evidently those of a man who is honestly desirous of making vaccination as efficient as possible in the prevention of small-pox. But, when his statements and recommendations are closely examined, they will be found defective in several respects; and this has been partly shown by an anonymous correspondent in the same paper.



First, the present arrangement of vaccination districts was the outcome of an inquiry conducted in 1863 and subsequent years by Drs. Seaton, Buchanan, Burdon Sanderson, and others, into the state of vaccination in the kingdom. The result of this inquiry was unfavourable to the then existing system, under which the poor-law medical officers were as a rule the public vaccinators. The report, it is stated, showed for instance that, in London, of nearly 50,000 children examined, not more than 180 in every 1,000 presented marks of complete vaccination, and not more than one-third had marks indicating the second grade of efficiency. Among several objections brought forward against the then existing system was the difficulty, not to say impossibility, of keeping up arm-to-arm vaccination; for the stations and attendances were so numerous that the number of children presented did not amount to one for each attendance of the vaccinator.

The proposal that the parochial medical officers of a district should attend at the vaccinating stations is open to objections. One of these is, that such a plan would be opposed to what has hitherto been a chief principle of legislation and administration in vaccination matters—to keep public vaccination as distinct as possible from poor-law relief. Again, it would require an extensive alteration of the vaccination districts and poor-law districts. At present, the two kinds of district are not conterminous, either separately or in aggregation; poor-law medical districts run into vaccination districts, and *vice versa*. For instance, in Liverpool, where there are three vaccination districts, one such district runs into six or seven poor-law districts; and on the other hand there are poor-law districts in the same town which form parts of two vaccination districts. A plan similar to Dr. Ducat's was, indeed, tried before the passing of the present Act, voluntary combinations of medical officers being formed for the purposes of vaccination; but the result was not encouraging.

Even if the proposal were practicable, it would not in its present shape meet all the difficulties. The children of paupers form only a portion of the attendants at the vaccinating stations; and Dr. Ducat's suggestion would have to be extended so as to provide for the attendance of dispensary and club doctors, etc.

Dr. Ducat speaks of the liability, under the present system, to the dissemination of disease by vaccination. But, when he cites a case which occurred in 1871, in which lymph was taken for vaccination from the arm of a child who two days later was covered with small-pox eruptions, he seems not to be aware that lymph from a child incubating small-pox may be used with impunity for vaccination. Among cases proving this, we may refer to two related in the *BRITISH MEDICAL JOURNAL* of December 6th and 13th, 1873, by Mr. F. H. Alderson and Mr. Richard Alford. It was even shown long ago that vaccine lymph taken from the arm of a child who actually had small-pox would convey nothing but the vaccine infection, if care were taken not to mix the two lymphs.

In the course of one of his letters, Dr. Ducat says:

"Officialism takes away the source of the medical officer's supply of lymph, and tells him he is to vaccinate and revaccinate wherever small-pox makes its appearance in his district, and, on the other hand, puts such a superabundance of lymph in the hands of the public vaccinator that he cannot dispose of it without taking it to market, at the same time telling him that it is not for him to deal with the sudden outbreak of small-pox, but only for the medical officer."

This statement requires considerable modification. There is a clause in the Act of 1871, which permits guardians to pay district medical officers for any case of vaccination which they may perform in a house where there is small-pox; but it imposes no duty; and it is the public vaccinator that is responsible to the Local Government Board and to the law for the proper performance of vaccination when requisite. The vaccination officers in London and other large towns are instructed to report to the public vaccinator all unvaccinated cases; and if there be small-pox in the house, it is the duty of the public vaccinator—and not of the district medical officer—to vaccinate; though of course, under the permissive clause above mentioned, the district medical officer, if he become aware of the case, may perform the vaccination.

While we are willing to give Dr. Ducat credit for good intentions, we must consider it a matter for regret that, before bringing his views before the public, he did not make himself better acquainted with what has been done and written with regard to vaccination during the last twenty years. As the matter stands, he has made statements liable to mislead, and to do injury to a cause the success of which he wishes to promote.

#### WAR AND PESTILENCE.

WHEN, on Sunday last, the accustomed prayers against war and pestilence were put up in every church in this country, few, very few indeed, probably apprehended their full significance at the present moment. To most of the suppliants, the impending war between Russia and Turkey was probably alone present to the mind as the one from which deliverance was sought. How greatly would their fervour have been increased had they known, as now must be made known, that behind the looming presence of war there is the terrible shadow of pestilence! Or rather we should say the shadows of pestilence; for the two most terrible pestilences of modern times are again showing signs of an activity which forebodes mischief, it is to be feared, to Europe: a mischief which can hardly be escaped if Eastern Europe should be plunged into a long and disastrous war—a war, indeed, which would involve the Russian and Turkish possessions in Asia Minor also.

The brief announcement in the *Gazette* a few days ago of plague having broken out in Bagdad, and the subsequent announcement that the disease was rapidly increasing, and that quarantine would be imposed in ports of the Red Sea and Persian Gulf; moreover, the announcement of the *Gazette* about the same time that quarantine had been imposed in Egyptian ports of the Red Sea, and especially at Suez, upon arrivals from Madras in respect of cholera,—would convey to an ordinary reader a very insufficient impression of the serious crisis of which, in fact, these announcements were indications.

The recent visit of the Residency Surgeon at Bagdad, Surgeon-Major Colvill, to this country has given us to know the great anxiety entertained in Mesopotamia with regard to any reappearance of disease there this year. Since the renewed development of the disease in that country, it has exhibited from year to year a growing disposition to spread over larger areas. For the first time last year, since this reappearance of plague, the great centres of commerce in Mesopotamia, Bagdad and Hillah, were attacked; and south-western Persia was invaded by the disease. Hence it was apprehended that, should plague show itself again this year, beginning, as it probably would do, among the denser centres of population, an outbreak of greater gravity and of much wider diffusion might be looked for. These apprehensions, it is to be feared, are now about to be realised, for already the news has reached us that the present outbreak is not confined to Bagdad, but that it affects districts to the north of Bagdad. It will be obvious that, should Turkey be plunged into war with Russia, the condition of things favouring the development and dissemination of plague in Mesopotamia may be indefinitely aggravated.

The prospect as to cholera would appear to be not less gloomy than as to plague. Indeed, as the more modern pestilence and the one of which we can best estimate probable progress, the prospect as to cholera may be said to be more gloomy. We have more definite knowledge as to this subject, in consequence of the question having arisen at the meeting of the Epidemiological Society on the 12th instant, at which Dr. Cunningham, the Sanitary Commissioner with the Government of India, who has very lately come to this country on leave, was present. In the course of a discussion on a paper by Inspector-General Lawson (abroad) on the Cholera Epidemic of 1875 in India, it transpired that the epidemic of that year had extended into the next (1876), and had passed beyond the northern frontier of the British dominions there; and the President (Mr. Netten Radcliffe) supplied the important information that it had spread throughout Afghanistan



and Beluchistan, attacking Khelat and Herat, and was on the Persian frontier at the close of the year. In other words, the epidemic, as we may now say, of 1875-76 in India was spreading upon the northern route along which cholera finds its way into Persia, and through Persia into the Russian territories of the Caspian. This extension, it is to be remembered, is a new migration of this formidable epidemic; and the countries in its path beyond the Indian frontier and the frontier native states have been for several years wholly free from the disease. As of the Turkish dominions in Asia with respect to plague, so of the Russian territory on the Caspian with respect to cholera, war, in the event of cholera spreading into north-western Persia, will increase to an indefinite extent the liability of its extension into Europe.

HER Royal Highness Princess Christian has graciously consented to become patroness of the annual ball in aid of the funds of University College Hospital, to be held at Willis's Rooms on Thursday, June 7th.

WE understand that Mr. Ellis, the veteran Professor of Anatomy at University College, whose labours and published writings on descriptive anatomy have long been of the highest standard of estimation, has sent in his resignation.

At the closing meeting of the Congress of German surgeons, held in the theatre of the Charité Hospital, Berlin, the Emperor of Brazil was introduced by the President, Dr. von Langenbeck. His Majesty remained during the whole of the sitting, and seemed to take great interest in the various cases, instruments, etc., that were shown by the different members.

A CASE is in progress in the police-court at the Guildhall, in which Mr. Bradlaugh and Mrs. Besant are prosecuted for publishing a work recommending "physiological checks on population". Pending the proceedings, we abstain from comment; and, as the report of the preliminary proceedings presents nothing of medical interest (except the fact that a London physician has tendered himself as one of the bail), we shall not encumber our space by reproducing any part of it.

MR. SCLATER-BOOTH, M.P., received on the 17th instant a numerous and representative deputation, which submitted for the consideration of the Government certain amendments of the Rivers Pollution Prevention Act. The right honourable gentleman, admitting that further legislation was necessary, pointed out that time must be given for the working of the new law, under which no prosecution could be taken until August next.

IN reference to the extremely interesting communication which we published last week, from Dr. Greenhow of Chapel Allerton, concerning the result of the necropsy of the late Harriet Martineau, and the valuable testimony which Sir Thomas Watson this week offers as to the diagnosis during life, we hear that Mr. Spencer Wells, having the opportunity of examining the pathological parts, will make a communication on the subject to an early meeting of one of the London societies, probably the Clinical Society.

SATURDAY last was observed as Hospital Saturday in Sheffield. Besides the collections made in the workshops, the ballot-boxes used in the borough election were placed in the busiest thoroughfares, as receptacles for donations. The amount received in the bank up to Saturday night was £1,239:4:5, and it is believed, with what has yet to be added, the total will be made up to £1,500. The amount realised on Hospital Sunday, which was observed a few weeks ago, was close upon £2,200.

#### ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE Jacksonian Prize was, at a meeting of the Council of the Royal College of Surgeons, on Thursday, the 12th instant, awarded to Mr. William Harrison Cripps, F.R.C.S., of Pall Mall, for his essay on

the Treatment of Cancer of the Rectum, particularly as regards the possibility of curing or relieving the patient by excision of the affected part. Mr. Cripps, who is Demonstrator of Anatomy at St. Bartholomew's Hospital, is already well known by numerous and valuable contributions to surgery. On the last occasion of awarding this prize, it was to another industrious student of St. Bartholomew's, Mr. H. T. Butlin.

#### CHARITY AND THEATRES.

A VERY attractive amateur performance, in aid of the funds of the projected Convalescent Home for King's College, has been arranged, mainly through the exertions of Mrs. William Playfair. The performance will take place at Bridgwater House, on May 14th, when Mr. H. J. Byron's clever comedy, *Cyril's Success*, will be played by the celebrated amateurs of whom so much has been written this season—Lady Sebright, the Hon. Mrs. Wrottesley, Mrs. Monckton, the Earl of Ellesmere, Captains Gooch and FitzGeorge, Mr. W. S. Gilbert, and other distinguished amateur actors. Lord Gerald FitzGerald will superintend the musical arrangements, so that a performance of the highest artistic merit and great social brilliancy may be confidently anticipated, and one which cannot fail to yield a substantial addition to the funds of the projected Home.

#### METROPOLITAN MEDICAL RELIEF.

ON Tuesday afternoon, a special meeting of the Charity Organisation Society was held at the rooms of the Society of Arts, when a paper was read by Sir Charles Trevelyan on "Metropolitan Medical Relief". The chair was taken by Dr. Acland of Oxford; and amongst those present were Sir William Gull, Sir Joseph Fayrer, Sir Rutherford Alcock, Mr. Prescott Hewett, Mr. Erichsen, Dr. West, Dr. J. H. Bridges, Dr. A. P. Stewart, Mr. T. Holmes, Dr. Guy, Mr. Ernest Hart, Dr. R. J. Lee, and many other members of the profession who are known to take an active interest in the question of hospital reform. After the reading of the paper, the following resolution was proposed by Sir W. Gull, and seconded by Mr. Prescott Hewett: "That the improvement of the people of London in health and habits of thrift and independence demands that, while, on the one hand, out-patient departments should be regulated so as to secure the prompt treatment of cases requiring the special resources of a hospital, on the other, free dispensaries should be converted into provident dispensaries, and new provident dispensaries should be established in proportion to the wants of the population." We must, however, defer our notice, both of the paper itself and of the discussion which followed, until our next issue. The meeting closed with a vote of thanks to the Chairman and to Sir Charles Trevelyan. To the latter the thanks of the audience were due in an especial manner, not merely for the trouble he had bestowed upon the preparation of the paper, but also for the generosity with which he distributed printed copies of it amongst those who were present. The paper, together with its valuable appendices, forms an excellent summary of the present state of this important question.

#### RESISTANCE TO STARVATION.

THE catastrophe at Pont-y-pridd Colliery has drawn attention to the length of time during which life may be prolonged in the absence of food and drink. The possible duration of life after complete deprivation of food and drink is very variable, and may be stated in general terms to be from five to eight days. Authentic instances are, however, on record in which life has been prolonged much beyond this period, in persons who were so situated as not to suffer from cold, which the system under this condition has very little power to resist. In these cases, also, there was no muscular exertion, and water was very generally taken in abundance. All these circumstances have an important influence in prolonging life. In the Earl of Dudley's Locks Lane Pit, Wallows Colliery, Brierley Hill, Staffordshire, on March 16th, 1869, thirteen miners (ten men and three boys) were, in consequence of a sudden irruption of water, incarcerated in the mine for one hundred and twenty hours, without food or light, and practically with-



out water also, as that causing the inundation was of such a very noxious character that the poor men could not drink it. The whole of the men were saved except one, who died frantic. Another instance of eight miners, who survived after five days and sixteen hours of almost complete deprivation of food, is also on record. Bérard quotes the example of a convict who died of starvation after sixty-three days, but in this case water was taken.

#### ST. GEORGE'S HOSPITAL.

WE are sorry to hear that a sharp outbreak of small-pox has occurred at St. George's Hospital, and that several deaths have occurred. For the present, consequently, only the most urgent cases for admission are received in the hospital.

#### HOME HOSPITALS FOR THE WELL-TO-DO.

THERE is a decided impulse in the public mind towards the establishment in the metropolis of hospitals for the middle class under proper regulation, to be called, as Mr. Burdett suggests, "home hospitals for the well-to-do". There is much to be said in favour of this project from every point of view; but, on the other hand, to be properly carried out, it requires to be organised on a basis which places it above suspicion. We should suggest that this basis be laid at a public meeting, under the auspices of representative men; and the Mansion House, which has often been made available for similar objects of great public utility, might probably, with the approval and permission of the Lord Mayor, be the most suitable place for such a meeting; and we hope that Mr. Burdett may take steps to bring about a meeting at an early date.

#### REORGANISATION OF HOSPITAL SUNDAY FUND.

WE understand that the General Purposes Committee of the Metropolitan Hospital Sunday Fund have resolved to carry out a scheme for directly localising the appeals to the congregations of the various districts, in such a manner as to bring more vividly under notice the work done in each particular locality by the charities of the district, and thus to excite more individual interest in the fund. The means of doing this were indicated recently by Mr. H. Burdett (Greenwich Hospital) in a letter published in the *BRITISH MEDICAL JOURNAL*; and, in consequence of that publication, Mr. Burdett was invited to meet a Subcommittee of the Council, who have now resolved to act upon the scheme which he has proposed. At present, the Hospital Sunday Committee are working with a plough; by Mr. Burdett's scheme, they will be able to work with the shovel, and there is no doubt that the ground will be better cultivated and the crop larger.

#### THE CATTLE-PLAGUE.

PROFESSOR BURDON SANDERSON, Director of the Brown Institute for Animals, writes to us as follows:—At a meeting of the Veterinary Committee of the Royal Agricultural Society, at which the present alarming outbreak of cattle-plague was under discussion, Professor Brown, the energetic and able head of the Veterinary Department of the Privy Council, gave some very interesting information as to the progress of the disease in the metropolis, and particularly as to the circumstances which related to its recent extension beyond the metropolitan area. With reference to the present position of affairs, the information may be summed up in the rather alarming statement that, notwithstanding that the measures which are required for arresting the spread of cattle-plague are perfectly well known, the steps at present being taken for carrying them into effect are avowedly inadequate. In the great outbreak of 1866, a Royal Commission was, as every one remembers, appointed for the purpose of investigating the mode in which the contagium of cattle-plague spreads. It was then shown, by an accumulation of evidence, that cattle-plague is the most communicable of known epizootics, and particularly that its virus can be conveyed not only by diseased bovine animals, but by healthy animals of other kinds (*e.g.*, dogs), by persons, by manure, by milk-cans, and, in short, by all those agencies which in the case of

other contagia are known to favour the distribution far and wide of those virulent particles of which the material of contagium consists. Considering that in cattle-plague every part and every product of a diseased animal is virulent, and is evidently capable of retaining its virulence for some time after it has been removed or discharged from its living source, it is easy to understand that, as Professor Brown told the Committee, the disease is just as capable of spreading by the various modes of "mediate contagion" as by direct intercourse of diseased with healthy animals. The history of the present outbreak in the metropolis is simple. In the middle of January a cargo of infected animals was landed at Deptford. With the utmost promptitude, the Veterinary Department took measures for their immediate destruction, but unfortunately they possessed no power of preventing the persons who had come into contact with the animals from carrying the infective material to their homes. The result turned out as was at the time predicted—the neighbouring district of the metropolis became dotted with foci of contagion. If even then powers had existed for the purpose, the epizootic might have been readily extinguished by enforcing the well understood and perfectly practicable rules which are laid down in every treatise on veterinary police. This was not done, for the simple reason that there exists in this country no machinery for the purpose. What was wanted was, that each focus should be surrounded by an efficient *cordon*; that every diseased animal, and every animal which had been in contact with a diseased animal, should be ruthlessly destroyed, and that every article which had been in contact with the infected animals should be also either destroyed or disinfected. Measures of this kind were not carried out then, and are not being carried out now. The consequence is, that the epizootic has not only already destroyed a large value of cattle, but that it has assumed such unmanageable proportions, that the most indifferent must admit that there is cause for alarm. An emergency like the present cannot be dealt with by the local authorities. Even if the necessary powers were entrusted to them, they could not use them effectually. Every one who, like myself, has had large experience in the administration of sanitary laws by such bodies, must be aware that, however desirous they may be to do their duty, they cannot carry out such energetic measures of prevention as are here required with any success. It is, therefore, to the central authority that we must look. In the present case, the central authority is for administrative purposes powerless; for it consists, if I am not mistaken, of Professor Brown and his chief inspector, both able and energetic men, but not capable of being in a hundred places at the same moment. What is required is, that the Veterinary Department should be reinforced by the temporary appointment of a staff of inspectors, for which service competent veterinary practitioners could be readily found, and that it should be armed with adequate powers for stamping out each new focus as it appears; in a word, two things are wanted, money and power. It is possible that neither could be got without a special Act of Parliament; if so, the sooner a Bill is introduced for the purpose, the better for the country.

#### FORGED CERTIFICATES OF DEATH.

THE annual report for the year 1876 of Mr. George Browning, Medical Officer of Health to the Stockbridge Urban Sanitary Authority, discloses a somewhat startling statement of the fabrication of certificates of death for that district. Mr. Browning states that it has recently come to his knowledge that no fewer than fourteen deaths have been registered by means of *forged* certificates of death, such certificates bearing the signature of a medical practitioner residing at a considerable distance, who not only had not seen the patients during their fatal illness, but whose name was appended to the document in question without his direct or implied knowledge or consent. Mr. Browning further states that these facts have been brought under the notice of the Registrar-General, but intimates that no action in the way of prosecution has as yet been taken in it. He also formally directs the attention of his own Board to the matter. We shall look with some interest to the result of Mr. Browning's very proper publication



of these facts, and it will be nothing less than a public scandal if so gross an infraction of the law be not visited with condign punishment. It is a very significant circumstance in connection with this case, that no fewer than ten of the fourteen certificates forged related to the deaths of children under five years of age. We fear that this is only one of a number of other facts of a similar kind, which show the urgent necessity for an active supervision of all certificates of death, and especially of those relating to young children. No one who has had any practical experience on this subject can, we think, entertain any doubt that the certificates of infant death are too often given with a laxity which is very reprehensible on the part of those who give them, and that many infants are buried without any medical certificate at all. This is a circumstance which calls for legislation in the interests both of public health and of public morality. It is one of numerous illustrations of the need which exists for a public prosecutor. It might be thought that all such cases would come under the inquiry of the coroner, and some of them undoubtedly do; but a large number either escape his observation altogether, or are not investigated in such a way as to produce any satisfactory result. We believe that the proper remedy for this state of things is to require the medical officer of health for the district to investigate *all* cases of death in which there is no medical certificate, and to give him the power of inquiring in a formal way into all cases of death of children under five years of age, whether certificated or not. The result of any inquiries which he might so make, and in which he might think that there was a *prima facie* case for public investigation by the coroner, should be communicated to that official, who should be required to take action thereon. The medical officer of health should be able in all such cases to put himself officially in communication with persons who would be cognisant of circumstances connected with the death of the deceased child, and to extract information from them which it is impossible for the coroner with the machinery at his disposal at present to obtain. We believe that the Home Secretary has prepared a Bill for the reorganisation of the Coroners' Office, which he intends to lay before Parliament during the present session; and we trust that one of the points which will not be overlooked in this much-needed reformation of the duties of an ancient and most important public functionary, will be the co-ordination of the offices of the coroner and of the medical officer of health in such a way as to provide a more efficient safeguard than at present exists, not only against the large amount of preventable infant mortality, but against a good deal of preventable mortality amongst other than infants, which cannot now be dealt with as it should be for want of the machinery for inquiry and legal action which such a combination would afford.

#### THE HEALTH OF LONDON.

THE mortality from small-pox in London continues to decrease. The fatal cases, which had been 86 and 78 in the two preceding weeks, further declined to 60 last week, a lower number than in any week since the middle of December; 29 were certified as unvaccinated, 6 as vaccinated, and 25 were "not stated" as to vaccination. The fatality from this disease is still excessive in the east districts, while it showed a decline in all other parts of London. The Metropolitan Asylum District Hospitals contained 930 small-pox patients on Saturday last, against 988 and 956 at the end of the two preceding weeks. The number of new cases admitted during the week was 228, against 228 and 209 in the two preceding weeks. The total number of deaths registered last week was 1,714, and there were 2,654 births. Allowing for increase of population, the births exceeded by 197, and the deaths by 133, the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the two preceding weeks had been equal to 30.3 and 28.4 per 1,000, further declined last week to 25.3. The 1,714 deaths included, besides the 60 from small-pox, 58 from measles, 18 from scarlet fever, 5 from diphtheria, 42 from whooping-cough, 12 from different forms of fever, and 13 from diarrhoea; thus, to the seven principal diseases of

the zymotic class, 208 deaths were referred, against 243 and 253 in the two preceding weeks. These 208 deaths were 31 below the corrected average number from the same diseases in the corresponding week of the last ten years, and were equal to an annual rate of 3.1 per 1,000. The deaths from fever were 21 fewer than the corrected weekly average; 2 were certified as typhus, 8 as enteric or typhoid, and 2 as simple continued fever. The deaths referred to diseases of the respiratory organs, which in the two preceding weeks had been 645 and 554, further declined last week to 420, which, however, exceeded the corrected weekly average by 84; 262 resulted from bronchitis, and 99 from pneumonia. Seven deaths were caused by street accidents. The widow of a labourer died in Cleveland Street, Bethnal Green, on the 7th instant, whose age was stated to be 104 years. In Greater London, 3,207 births and 2,000 deaths were registered, equal to annual rates of 38.3 and 23.9 per 1,000 of the population. The fatal cases of small-pox in the Outer Ring, which had been 10 and 11 in the two preceding weeks, further rose to 16 last week, of which 12 occurred in West Ham and Stratford, 2 in Edmonton, 1 in Croydon, and 1 at the South Metropolitan District Schools at Sutton. Two fatal cases of diphtheria were registered in Bromley (Kent). The duration of registered sunshine was 9.4 hours, out of 94.9 hours during which the sun was above the horizon.

#### RESIGNATION OF MR. BAKER, INSPECTOR OF FACTORIES.

It is announced, and we read the announcement with deep regret, which will be shared by the whole body of certifying factory surgeons, that Mr. Baker has tendered his resignation as one of the last remaining factory inspectors. Mr. Baker has reached a ripe age, and has passed through a long service as one of the certifying surgeons, and subsequently as inspector of factories. He has rendered great services in both capacities. His resignation at the present moment has a serious and, we fear, a very unfortunate significance for the legislative solution of the grave questions now awaiting settlement.

#### HOSPITAL SUNDAY IN LIVERPOOL.

THE amount collected on Hospital Sunday in Liverpool—£9,650, being £50 more than in the previous year, has been thus distributed: Royal Infirmary, £2,991:10; Royal Southern Hospital, £1,495:15; Northern Hospital, £1,302:15; Dispensaries, £965; District Nursing Society, £675:10; Ladies' Charity and Lying-in Hospital, £675:10; Infirmary for Children, £482:10; Eye and Ear Infirmary, £386; Homoeopathic Dispensaries, £241:5; Stanley Hospital, £96:10; Hospital for Infectious Diseases, £96:10; Consumption Hospital, £96:10; Cancer Hospital, £48:5; St. Paul's Eye and Ear Hospital, £48:5; Dental Hospital, £24:2:6; St. George's Hospital for Skin Diseases, £24:2:6.

#### REFUSAL TO REMOVE A SMALL-POX PATIENT.

AT Worship Street, last week, William Worbey, labourer, of Stoke Newington, and Edward Freeman, his son-in-law, were charged before Mr. Hannay, Worbey with refusing to obey an order of the Court for the removal of a person suffering from small-pox, and Freeman with obstructing the removal by threatening the sanitary inspector. Dr. Tripe, Medical Officer of Health for the parish of St. John, Hackney, explained that on the 4th instant he came before this Court and made a certificate that, in the house No. 5, Union Place, Stoke Newington, there was a person suffering from small-pox, and that it was necessary for the safety of others in the house and the public that the person should be removed. Mr. Bushby made an order that the patient be removed in the proper way. The patient was the son of the defendant Worbey. A sanitary inspector of Hackney deposed that, having received the order and certificate, he proceeded on the evening of the 5th instant to the house in question, the ambulance for removing the patient being then at the door. He was admitted, and stated his business to the defendant Worbey, to whom he also read the order. The defendant said the boy should not go, and others there said the same. While witness was pointing out that the order must be obeyed,



some one caught him round the waist from behind and put him out of the house. He knocked again, but the door was not opened, and eventually he left with the ambulance. The following morning he went again to the house but was not admitted. Witness waited an hour and a half, and, during the time, the defendant Freeman came up and threatened him. Worbey, in answer to the charge, said the child had been ill some time, but was nearly well at the time they wanted to remove him. He and his wife objected because the doctor had said, "Keep the boy warm", and they thought he might get a chill and get bad again. Dr. Tripe said that the house in question was a small one; several persons lived in it, there were two beds in the room in which the boy lay, and the defendant's clothes were exposed, of course, at night to infection. Mr. Hannay ordered the defendants each to pay a fine of twenty shillings and costs.

#### THE SCOTCH POOR BILL.

THIS Bill was printed and issued to members of both Houses last week. We are pleased to be able to record that the clauses which relate to medical relief are drawn in the language of the Bill as amended in Committee, which, as our readers will remember, was brought in last session by Lord Gordon, and was printed on June 1st, 1876; the only alteration made being the introduction of a clause granting powers to parochial boards or combinations to build houses, etc., for medical officers, when resident in workhouses. We congratulate our Scotch medical brethren on the prospect which is opening out to them if the Bill become law, which the Government can insist on if it be so minded. The Scotch parochial medical officer will be placed on a much better footing than the majority of his southern brethren, inasmuch as his stipend will be wholly independent of the provision of medicines and appliances, which are to be supplied at the cost of the parochial boards. We would earnestly urge on all Scotch parochial medical officers the advisability of petitioning without delay in favour of the Bill as amended.

### SCOTLAND.

DR. C. L. WATTIE, of Glenbucket, Aberdeen, has been presented by the Servian Government with the Gold Cross of Takova, for services rendered to the wounded during the war.

DURING the month of March, the deaths from zymotic diseases in the eight principal towns of Scotland only reached 11.5 per cent. of the whole mortality. This is the lowest proportion during any month since the Registration Act came into operation in 1855.

DR. R. WARDLAW BRUCE of Arbroath, who died recently, has bequeathed £100 to the Endowment Fund of the Arbroath Infirmary, and £500 to the same institution, to be kept at interest until a sufficient sum is raised to enable the directors to pay for the services of a resident surgeon.

#### SIR ROBERT CHRISTISON.

WE understand that, although Sir Robert Christison is now making satisfactory progress towards recovery from an illness by which he has for some weeks past been prostrated, he has deemed it expedient to resign the Chair of Materia Medica in the University of Edinburgh, which he has held with much distinction since 1832. Sir Robert, it may be remembered, before being appointed to the Chair he has now relinquished, had filled for ten years that of Medical Jurisprudence.

#### RECTORSHIP OF THE UNIVERSITY OF GLASGOW.

THE requisition, signed by nearly nine hundred students of Glasgow University, to Mr. Gladstone, asking him to allow himself to be nominated to the office of Lord Rector, has been forwarded to him, and has elicited the following reply: "I have the honour to acknowledge your letter of yesterday, and to accede to the request you have done me the honour to make, that, in view of the requisition signed by eight hundred

and eighty-one students, I should agree to be proposed for the Lord Rectorship of the University of Glasgow." It may be worth noting that the constituency at present numbers 1,730 students.

#### FEES OF THE EDINBURGH CITY ANALYST.

THE Edinburgh Town Council, having been informed by the City Analyst that the table of fees, as fixed by the Council, was not remunerative—many of them, in fact, not covering half the expense of labour and of the chemicals used in the processes—have agreed to retain the fees at the present low rates, and to attach a salary of £100 a year to the office. This, they thought, would be in the public interest, as they were of opinion that the analysis of articles of food and drink should be made easily obtainable and at a low rate.

#### DWELLINGS OF THE WORKING CLASSES.

SOME interesting points have been brought out in the report of the Glasgow Improvement Commissioners. The original operation of the Trust contemplated the demolition of 10,000 houses, with an estimated population of 51,304 persons, to be displaced to healthier homes; and, up to Whitsunday 1877, there will have been 5,793 houses demolished, with a population of about 29,000. The scheme may, therefore, be said to be in the middle of its career. In addition to houses at present empty, about 2,150, there will be ready for occupation at Whitsunday about 3,500 more; making altogether a provision for 29,660 persons, against the 29,000 displaced. These figures take no notice of the enormous number of tenements in course of erection; but it is stated that the empty houses within half a mile of the municipal boundary afford accommodation for 14,000 persons more, so that there is now available accommodation for more than 43,000 persons. Since the year 1866, in which the Improvement Act was passed, 40,460 houses have been provided, giving accommodation for 202,300 persons, exclusive of the estimated provision for 100,000 on the margin and immediately beyond the boundary of Glasgow. Thus, in ten years, house-accommodation for 302,300 persons has been provided in Glasgow—a fact unprecedented in any city, even in Chicago itself. It is further stated that there are 73,445 houses rented under £10, giving accommodation to 367,225 persons, which discloses the fact that nearly three-fourths of the population only pay one-half of the police-rates. From these facts, it is argued that the wants of the industrial classes have not only been met, but anticipated. There has, it is true, been an increase of rents, but this arises from an increase in the expense of production. While the cost of constructing houses has gone up 60 per cent., rents have only increased 35 per cent.

### IRELAND.

#### SIR PATRICK DUN'S HOSPITAL.

AT a meeting of the Board of Governors of this Institution, last week, it was unanimously resolved, that the special thanks of the Board be given to Mr. Adam S. Findlater for his munificent gift of £500 to the funds held in trust for the various purposes of the hospital. We understand that this donation of Mr. Findlater is intended by him to form the commencement of a fund to be applied to the construction of a house for the civilian nurses belonging to the midwifery classes under Dr. Sinclair.

#### SANITARY AUTHORITIES TRAFFICKING IN DISEASED MEAT.

A CASE that came before one of the Dublin police magistrates last week, exhibits, in an alarming manner, the way in which the laudable efforts made by legislation to preserve the public health may be nullified, and disease thus propagated, by the incapacity, negligence, or greed of the officials entrusted with the administration of the sanitary laws. The Guardians of the North Dublin Union, by virtue of the power vested in them as sanitary authorities under the Cattle Contagious Diseases Act (Ireland), are enabled to grant compensation to persons who give timely notice of their cattle being diseased. A gen-



tleman reported to the guardians that a cow of his was diseased, and the animal, having been examined by the veterinary surgeon appointed by the guardians, was ordered to be slaughtered, and compensation awarded to the owner. According to the evidence before the magistrate, as soon as the cow was slaughtered, one of the officials of the union sent for a butcher, who purchased the diseased carcase for four pounds ten shillings. This was about to be sold for food, at a rate, as the butcher stated, of threepence or fourpence a pound, when a police-constable fortunately saw the meat and reported it as being diseased. Dr. Cameron deposed that the animal was in an advanced stage of pleuropneumonia, and utterly unfit for food. The magistrate, in making out the order for the destruction of the carcass, said that he believed it would be impossible to conceive for a moment that the sale of the animal had the sanction of the guardians. We cannot, however, close our eyes to the fact, that the butcher stated that he had bought twenty diseased cows from the same union within two months. Such culpable negligence on the part of so-called sanitary authorities should be most strictly inquired into, and shows the necessity for the appointment of independent district medical inspectors under the Local Government Board. It is freely stated that the Guardians of the North Dublin Union—although their *tâches* as sanitary administrators are notorious—are not the only public body in the city who allow a similar trade in diseased meat to be carried on, and thus endanger the lives of their fellow citizens.

#### ROYAL COLLEGE OF SURGEONS.

A MEETING of the Council will be held on May 1st to appoint examiners for the ensuing year. For Letters Testimonial and Fellowship, all the outgoing examiners may be expected to come forward for reelection, and we understand that they will be opposed by Dr. P. C. Little, Dr. Foy of the Carmichael School of Medicine, and Dr. Robinson, Lecturer on Surgical and Descriptive Anatomy, and one of the proprietors of the Ledwich School of Medicine. It is probable that other candidates may be added to this list in a few days.

#### THE LATE DR. FERRIS OF ATHY.

ON the 10th instant, a meeting was held at Athy, for the purpose of taking the necessary steps for erecting a suitable memorial to the memory of this gentleman. A considerable sum was received at the meeting, and the subscription list will be kept open for a short time for the purpose of obtaining further funds.

#### ATTEMPT TO "WAKE" A TYPHUS PATIENT.

THE friends of a pauper, who died last week in Belfast Union Workhouse of typhus fever, having applied to the Poor-law authorities for permission to "wake" the body, the medical officer for Ligoniel district objected, as the transfer of the body would probably lead to the spread of the disease in the neighbourhood; and as section 27, cap. 90, of the Public Health Act (Ireland), specially provided for cases of this kind, he applied to a resident magistrate, who granted a restrictive order to prevent the removal of the body from the workhouse, except for immediate burial. This is the first occasion upon which the section of the Act regulating the burial of persons dying from infectious diseases has been put into operation in Belfast; and if these energetic measures had not been adopted by Dr. Newett, to whom great praise is due, most deplorable results would very probably have occurred.

#### AMENDMENT OF THE MEDICAL ACT.

SIR D. CORRIGAN, on the 6th inst., brought under the notice of the Fellows of the College of Physicians certain proposed alterations in connection with the Medical Act, the chief being that a new Examining Board, appointed by the General Medical Council, should be instituted for the purpose of re-examining licensed practitioners who may enter the army or naval services, or be appointed to hospitals, dispensaries, lunatic asylums, etc. This proposed scheme, which has been in the hands of the Fellows since the 1st ultimo, was intended to have been discussed at the March meeting of the College, but, owing to press of

business, did not come forward until this month. The matter has been postponed until the Committee, appointed to negotiate with the College of Surgeons in reference to a combined examination between the two Colleges, shall have sent in their report. If we are not mistaken, we believe that almost the same measure was brought under the notice of the College of Physicians three years since by Sir D. Corrigan, and that it will ever be adopted we have very grave doubts indeed.

#### MILK ADULTERATION.

AT the Kingstown Police Court, last week, a dairyman was fined £20 for having sold milk adulterated with 100 per cent. of water. The plea given by the defendant, as an extenuation of his conduct, was that he only sold milk to an institution called the "Bird's Nest"; but, as the presiding magistrate very properly pointed out, this only aggravated his offence, as it was even more important that young children should obtain pure milk than adults.

#### ARTISANS' DWELLINGS ACT.

MR. O'BRIEN, an inspector under the Local Government Board, held an inquiry on the 13th instant, in consequence of a petition presented by the Corporation of Dublin sanitary authorities for the urban districts, asking for an order to apply to their various districts the provisions of this Act. Dr. Mapother having reported twelve areas as being unhealthy, the Corporation selected two to commence operations; and the inquiry held by Mr. O'Brien was for the purpose of hearing evidence as to the unhealthiness of these areas. Dr. Mapother stated that most of the houses in the districts mentioned were unhealthy, zymotic diseases being very frequent, the death-rate unusually high, and the sanitary arrangements most defective. He had examined five houses in one portion, the owners of whom had lodged objections, and he had found the sanitary arrangements exceedingly bad. Other evidence was given, completely establishing the objectionable condition of the houses in the condemned areas; the owners, however, of some of the property objecting to have it transferred, and denying that their premises were in the unhealthy condition described; and when the inquiry terminated, the report of the inspector being forwarded to the Local Government Board for their decision. The Recorder of Dublin, in opening the City Sessions last week, in alluding to the Artisans' Dwellings Act, said that a diminution of crime could not be expected, except by making the homes of the poorer classes more comfortable. The Company formed for the express purpose of erecting healthy houses for this portion of the community, taking them from squalid habitations to comfortable homes, deserves every support and encouragement in the good work they have undertaken. But before the Company can compulsorily purchase those dilapidated dwellings, they must obtain the consent of the Corporation, and the Local Government Board must have received evidence of the unhealthy condition of the tenements proposed to be removed, and that proper dwellings will be substituted. To obtain this latter information was the object of the inquiry held by order of the Local Government Board.

DONATIONS, BEQUESTS, ETC.—Dr. H. Stewart and Dr. G. H. Kidd have each given £25 towards the Building Fund of the Stewart Institution for Imbeciles; Mr. Adam S. Findlater has given £100 to Mercer's Hospital; Anne Kirwin has bequeathed £50 to the Mater Misericordiae Hospital; R. P. Bayley, Esq., has left £72:10 to the Adelaide Hospital, Dublin.

DEPUTY INSPECTOR-GENERAL OF HOSPITALS D. MACLEAN, M.D., has resigned his appointment as Surgeon of the Royal Military College, and is succeeded by Deputy Surgeon-General T. Fraser, M.D.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—The seventh meeting of this session was held on Friday, April 6th, at the Royal Kent Dispensary, Greenwich Road: W. Johnson Smith, F.R.C.S., Vice-President, in the Chair. Resolutions expressing sympathy and condolence with the widows and families of the late Dr. W. Carr and Mr. David Hope (members who have died since the last meeting), were unanimously agreed to. Dr. George Roper read a paper on *Post Partum* Illness in general and Pelvic Cellulitis in particular.



## EXPERIMENTS ON ANIMALS.

It appears from a return issued on the 17th instant, that twenty-three licences have been granted under the Act of last year to amend the law relating to cruelty to animals. Four of these are for Cambridge University, two for Edinburgh University, one for the Edinburgh Veterinary College, one for the Glasgow Royal Infirmary, one for the Gloucester County Asylum, one for a private house, five for University College, London, one for King's College, London, two for Guy's Hospital, one for Oxford University, and four in which no place is specified. Twenty-two of the licences are for experiments in illustration of lectures, and one of them is for experiments without anaesthetics. The latter is for Cambridge Museum, and the inspector under the Act has to satisfy himself, at the expiration of three months from the grant of the certificate, as to the painless nature of the experiments. The inspector for England under this Act is Mr. Busk. We have received, however, many complaints that the Act is being administered in a manner contrary to its spirit as well as to the personal explanations and pledges given by the Home Secretary to those who would otherwise have opposed its passage through the House of Commons.

At a meeting of the Scientific Grants Committee of the British Medical Association last week, it was stated that permission had been refused to carry out a research in aid of the advancement of medical and therapeutical knowledge, to which the Association had made a grant. The research is consequently being carried out abroad. It was resolved that full information should be asked from those gentlemen to whom the Association has made grants in aid of specific researches having for their object the advancement of medical knowledge, as to the manner in which the working of the Act has affected their investigations; and the information so obtained will be forwarded to the Parliamentary Bills Committee of the Association, with a view to that body taking such action as may seem desirable upon these data and others which are already before them.

## ASSOCIATION INTELLIGENCE.

## NORTH OF ENGLAND BRANCH.

THE spring meeting of this Branch will be held at the Royal Hotel, South Shields, on Wednesday, April 25th, at 3 P.M.

Dr. Eastwood will propose, "That it is the duty of the General Medical Council to prosecute unqualified medical practitioners".

Dr. Eastwood will present a petition to be signed in favour of the Habitual Drunkards Bill, 1877.

The following papers have been promised.

1. Dr. E. C. Anderson: Objection to the use of the term "Typho-malarial Fever"; that it is not a hybrid of the enteric and malarial forms of fever, but a manifestation of two separate concurrent diseases, one of which may cease to exist in the system and the other pursue its course.

2. Dr. E. C. Anderson: Notes upon a Case of Rheumatic Fever, in which after apparent complete recovery, the patient suffered from a relapse. Former attack treated with large doses of bicarbonate of potash, the latter with the salicylate of soda.

3. Dr. J. C. Reid: Milk, as a Therapeutic Agent.

4. Dr. M. M. Bradley: The relative merits of the several methods used for the Treatment of Prolapsed Funis; illustrated by Cases.

5. Dr. T. W. Craster: A peculiar case of Epileptiform Convulsions.

Dinner at the Royal Hotel at 5 P.M. Charge 6s., exclusive of wine.

G. H. PHILIPSON, M.D., *Honorary Secretary*.

Newcastle-upon-Tyne, April 10th, 1877.

## BORDER COUNTIES BRANCH.

THE spring meeting of this Branch will be held at Penrith, on Friday, May 4th. President: Dr. HENRY BARNES. President-elect: Dr. STEWART LOCKIE.

Gentlemen intending to read papers, or be present at the dinner, are requested to give notice to the Secretaries.

RODERICK MACLAREN, M.D. } *Honorary Secretaries*.  
JOHN SMITH, M.D. }

Carlisle, March 6th, 1877.

## THAMES VALLEY BRANCH: ORDINARY MEETING.

A MEETING of the above Branch took place at the Richmond Infirmary, March 21st; Dr. LANGDON DOWN in the chair.

*Communications*.—Dr. GIBBES read notes of a Case of Empyema successfully treated by Aspiration; and Dr. BARRY a paper on Diseases of the Scalp in Children.

*New Member*.—Dr. Hooper of Wandsworth was elected a member of the Association and Branch.

*Dinner*.—The members, to the number of twelve, afterwards dined at the Greyhound Hotel.

## SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT.

A MEETING of this district was held on Friday, March 23rd, at the Star Hotel, Lewes; Dr. H. MARTIN HOLMAN, of Hurstpierpoint, in the chair. There were present twenty-two members and four visitors.

*Papers* were read—1. On Two Cases of Excision of the Eyeball, by Mr. Penfold of Brighton; 2. On Three Severe Cases of Pelvic Hæmatocele, by Dr. Clement Godson; 3. On a Case of Ruptured Perinæum, by Dr. Wiltshire. Dr. C. Holman made some gynecological communications.

*Dinner*.—Twenty-seven dined at the Star, under the Presidency of Dr. H. Martin Holman.

The *Next Meeting* is to be held at Tunbridge Wells at the end of May. Dr. J. Johnson was nominated to fill the chair.

## YORKSHIRE BRANCH: SPRING MEETING.

THE Spring Meeting of this Branch was held at the Mansion House, Doncaster, on March 28th; the President, Dr. BURNIE, in the chair.

*Dr. Deville and the Harrogate Commissioners*.—The PRESIDENT stated that the Secretary had read to the Council a letter from Mr. North, President of the Yorkshire Association of Medical Officers of Health, requesting their attention to the late trial of Deville v. the Harrogate Commissioners, and requesting pecuniary assistance on the part of the members of the Branch towards defraying the heavy legal expenses which had been incurred. In consequence of this application, a resolution had been unanimously passed to the effect that they had the deepest sympathy with Dr. Deville in the treatment he had received from the Commissioners of Harrogate, and that they recommend that £5 5s. should be given from the Branch funds towards defraying the legal expenses.

*Militia Surgeons*.—The SECRETARY read a letter from the Chairman of the Parliamentary Bills Committee, requesting the influence of the members to obtain the support of Members of Parliament on behalf of the grievances of the militia surgeons, and requesting the attendance of members of the Association at a deputation to be received by Mr. Hardy, on the 23rd of April, at 3 P.M.

*Papers*.—The following papers were read:

1. Mr. Withington: On Electrification in Hemiplegia: with Cases.

2. Dr. Hime: On a Case of Ovariectomy under Antiseptic Treatment.

3. Dr. Jacob: On the Use of Salicine in Acute Rheumatism.

4. Dr. Fairbank: On a more effectual mode of treating Hernia; with Notes of a Case.

5. Dr. Banham exhibited two large Biliary Calculi, and gave notes of the cases.

*Habitual Drunkards*.—Dr. EASTWOOD presented a petition in favour of the Habitual Drunkards Bill; and the Secretary read a letter from the Subcommittee of the Association on the same subject. The petition was then handed round for signature.

*Dinner*.—After the meeting, thirty-four members dined together at the Elephant Hotel.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH:  
MICROSCOPICAL SECTION.

THE first meeting of this Section for the Session took place in Queen's College on March 23rd, 1877; Mr. LAWSON TAIT in the chair.

*Officers*.—Mr. Lawson Tait was reappointed Chairman; Dr. W. Hinds and Dr. Carter were appointed Secretaries; and Mr. Priestley Smith and Dr. Bindley were appointed Demonstrators.

*Communications*.—The following communications were made.

1. Paper on Medical Spectroscopy, by Dr. McMUNN.

2. Case of Disease of Peritoneum, by Dr. RICKARDS.

3. Duplex Embryo, by Mr. LAWSON TAIT.



## SPECIAL CORRESPONDENCE.

## MANCHESTER.

[FROM AN OCCASIONAL CORRESPONDENT.]

*The Meeting of the Association.—Manchester Royal Infirmary.—Hospital Cases.*

THANKS to the energy of the local secretaries, the Manchester meeting of the British Medical Association already bids fair to be a successful, and even eventful, gathering. The splendid hall in the municipal palace now on the eve of completion will be thrown open to the members for an evening *soirée*, and the disappointment which many have felt at the Queen not coming to open the building is tempered to us by the reflection that the corporation will have all the more attention and time to bestow upon our guests. We have reason to hope that these guests will include many very distinguished foreigners, among whom Virchow will not be the least welcome.

By the time, indeed six weeks *before* the time, of our meeting, the new Board will have undertaken the control of the infirmary, and the old *régime* will have finally passed away. It is better to have a distinctly responsible board than a practically irresponsible and vaguely constituted committee such as the now expiring body is considered to be, and we shall look for some useful reforms and improved management from the new phoenix. Still, when the history of the present management is studied, it will have to be admitted that they have neither been an idle nor an indifferent board. To them, or rather—shall we at once plainly state what is the plain truth?—to their resident medical superintendent, Dr. Reed, certain reforms are due which it is but just should be chronicled, although at present it is the fashion to ignore all good deeds on the part of him or them. During Dr. Reed's term of office—and how largely due to his energy and earnestness they best know who best know all the circumstances—the Convalescent Hospital at Cheadle and the Fever Hospital at Monsall have sprung into existence, and extensive and important alterations have been made in the infirmary itself. It is well known that Dr. Reed is in favour of an entirely new hospital being built in a healthier air than the present infirmary occupies, and there can be no doubt that this is *inter alia* brought as a railing accusation against him by the no-surrender party of "as you were". There have been succinct charges of extravagance, too, lately advanced against the management, which may or may not be true; but efficiency and thoroughness are the first considerations in a hospital, and, while it may be true that Dr. Reed has not succeeded in bringing down the expenditure to the lowest possible ebb, he has done what is a thousand times more important—created, as far as circumstances permit, a many-branched charity for Manchester of which Manchester may be justly proud.

A very curious death has occurred at the infirmary; it was that of a man who had been admitted a day or two before with a Potts's fracture of the leg. The house-surgeon experienced so much difficulty in reducing the deformity, that chloroform was administered yesterday morning to facilitate manipulation. The patient struggled while passing under the influence of the anæsthetic, and, on the completion of the necessary operations, passed at once into a maniacal condition, and died in about twelve hours. The necropsy revealed the presence of a considerable amount of serous fluid in the cerebral ventricles, and his history was that of a confirmed toper. How far the chloroform precipitated the fatal end does not seem clear.

Among the more interesting cases lately in the hospital may be mentioned two: one a case of aneurism of the common femoral artery under Mr. Heath's care, and the other a patient of Mr. Bowring with a huge strangulated femoral hernia. The aneurism was treated by compression of the abdominal aorta, combined with the use of Esmarch's bandage to the limb, and, as it at first appeared, with the brightest prospects of effecting a perfect cure; but unfortunately, just when the sac had so far consolidated as to give hopes that the pressure might be discontinued, collapse occurred, which a *post mortem* examination showed to be due to the rupture of a second abdominal aneurism situated above the point where the pad of the aortic tourniquet compressed the vessel. Mr. Bowring's case was that of a woman with a femoral hernia as large as a child's head; it was an old hernia, but had generally been reducible until a few days before admission. There were no very active symptoms of strangulation; but, as the bowel appeared to be giving way at the bottom of the sac, Mr. Bowring laid the sac open and divided the stricture. He found it, however, impossible to return the bowel, owing to inflammatory adhesions which had

taken place between the intestinal coils and mesentery. The poor woman was in a perilous state on admission, and sank about twelve hours after the operation.

Teevan's method of dealing with urethral strictures by internal urethrotomy has of late come into vogue at the Manchester Infirmary, ten or twelve operations having been performed. Up to the present, one death from hæmorrhage has followed the operation, and in another case hæmorrhage was considerable, but was arrested by pressure.

## CORRESPONDENCE.

## THE LATE MISS HARRIET MARTINEAU.

SIR,—At the close of a letter of mine, printed in your JOURNAL last July, respecting the late Harriet Martineau, I referred to some curious things which I had heard from Dr. P. M. Latham about her cure of an internal malady by mesmerism, but which had nothing to do with the main object of my letter.

I well remember, and have often mentioned Dr. Latham's report to me, after the cure by mesmerism of Miss Martineau's abdominal tumour had been proclaimed, that the tumour remained as large and palpable as ever. Dr. Latham supposed that it might in its progress have shifted its position, and that relief from the distress it had formerly produced might thus have been obtained. Whether Dr. Latham had himself had any opportunity of re-examining the abdomen, or whether he had received information respecting its condition, I do not recollect.

The very interesting communication from Dr. Thomas M. Greenhow on the same subject, contained in the last number of your JOURNAL, establishes the correctness of Dr. Latham's report.

I remain, sir, yours faithfully,

THOMAS WATSON.

April 16th, 1877.

## DEATH FROM THE ADMINISTRATION OF NITROUS OXIDE GAS.

SIR,—In your impression of the 7th instant, Mr. Clover, referring to the death of Mr. Harrison of Manchester, while under the influence of nitrous oxide gas for tooth-extraction, suggests the following explanation of the result. "The most probable explanation of this sad case is that the extractions were difficult, and that the patient, on recovering from the effect of the gas, was susceptible to the shock of a severe operation; and that this shock, and not the gas, was the cause of the syncope, which structural disease of the heart rendered fatal."

In the *Lancet* of last week, some particulars are given which are inconsistent with Mr. Clover's theory. It appears from this report that Mr. Harrison went to a dentist, Mr. Williams, and, at his own request, the gas was administered by Mr. Williams, assisted by his servant. He did not readily fall under its influence, and, when he became unconscious, Mr. Williams removed two stumps, and then observed that his patient was unusually quiet. Cold water was dashed over the face, windows and doors were thrown open, and Dr. Noble and Mr. Worsley were sent for. When the latter gentleman arrived, the face and neck were livid, the eyes fixed and open, and the pupils widely dilated. Cold affusion, artificial respiration, friction, and the galvanic battery were tried in vain. The body was examined eighteen hours after death by Mr. Jones, pathologist to the Manchester Royal Infirmary, in the presence of Dr. Noble and Mr. Worsley. On opening the chest (the cartilages of the ribs were completely ossified), there was found a large deposit of fat in the anterior mediastinum and upon the pericardium; the lungs were very dark coloured and intensely congested. The heart was slightly enlarged, soft, and friable; the left side quite empty and the right full of dark fluid blood, while there was a considerable deposit of fat in the interventricular furrows. The aorta was coated with atheromatous deposit, and the aortic and mitral valves were thickened.

These are the main facts, and, in my opinion, they afford a remarkable illustration of the particular danger to which I referred in the concluding paragraph of my lecture published in last week's JOURNAL. There can, I think, be no question that the immediate cause of Mr. Harrison's death was the impeded circulation through the lungs, the result of arterial contraction, and the consequent overdistension and paralysis of the soft and feeble right ventricle. It will be seen that the condition of the heart's cavities, the right side distended and the left empty, was precisely the same as Mr. Hamilton Cartwright said he found in the two rabbits killed by the gas. The great engorgement of the lungs was doubtless the result of *post mortem* movement and gravitation of blood. If the chest had been opened immediately after death, the minute tissue of the lungs would have been found as anæmic



as we found it in the rabbits, and as it always is in cases of sudden apnoea.

It is evident that, before medical aid arrived, the circulation had ceased and life was extinct. The only chance of saving life would have been by the instant performance of artificial respiration at the first moment of alarm. The complete ossification of the ribs must have rendered artificial respiration difficult and incomplete; but the prompt and vigorous employment of the Silvester method, with alternate compression of the chest and abdomen, might possibly have replaced the nitrous oxide in the lungs and blood by atmospheric air, and thus set free the pulmonary circulation before the distended right cavities had completely lost their contractile power. It will be seen from the published report of the case, that there is no evidence of recovery from the effects of the gas and subsequent syncope from the shock of the operation, which Mr. Clover hypothetically suggests in his letter to you.

My object in this communication is not to cast blame on any one, but to point out the immediate cause of Mr. Harrison's lamented death, and the means of averting a similar catastrophe hereafter.

I am, etc.,

GEORGE JOHNSON.

11, Savile Row, April 16th, 1877.

#### THE DENTAL REFORM ASSOCIATION.

SIR,—I beg to enclose a copy of a letter of resignation, which I have felt it necessary to place in the hands of the Committee of the Dental Reform Association—an association which, it is hoped, will conduce to the improvement of the dental branch of the profession.

The ground of my objection, and consequent resignation, is an amendment to one of the resolutions, considered carefully and passed at a meeting of the Executive Committee, and submitted to the General Committee, proposed by Mr. Tomes, and carried: "That qualified surgeons engaged in dental practice, but who have not thought it necessary to take the licentiate'ship, shall be debarred by law, and under penalty, from styling themselves 'surgeon dentists, dental practitioners, or dentists.'" Such a measure would, to my mind, be inconsistent and illiberal, and one not likely to advance the profession socially or intellectually.

It has been strongly impressed upon members of the Council of the College of Surgeons, that the suggestive resolutions which, some months since, were submitted to them for consideration by the Association of Surgeons practising Dental Surgery, to which I belong, were signed without authority. This is a mistake which, I trust, arises only from want of knowledge of the facts of the case. At a general meeting, at which a large number of members of the Association attended, the resolutions were drawn up and unanimously adopted, and it was equally unanimously carried that the names of the members should be appended. I deny, *in toto*, having an underhanded intention to degrade the licentiate'ship; but I feel that an attack has been made upon medical degrees, which seems to me to be short-sighted policy; and I do not think that vulgar journalism will mend matters.

With your permission, I may write further on this subject.

Your obedient servant,

SAMUEL CARTWRIGHT.

April 19th, 1877.

"32, Old Burlington Street, April 17th, 1877.

"Gentlemen,—I very much regret that the result of the votes on Mr. Tomes's amendment to the first resolution compels me to resign the Chairmanship of the Dental Reform Committee, and also to request that my name be withdrawn from that Committee. I feel assured that, if temperately and without prejudice carried out, the resolutions adopted by the Executive Committee, after long discussion and careful consideration, would have proved highly conducive to the best interests of our branch of the profession; and it would have been an agreeable duty to me cordially to have continued to assist in accomplishing so desirable an object. I should have thought that the object of all concerned in so important a movement would be to enlist the sympathies of *all* the profession. The course proposed and accepted cannot lead to unity, and will scarcely tend to advance the status of the dental branch of the profession.—I have the honour to be, gentlemen, yours faithfully,

"S. CARTWRIGHT.

"To the Members of the Dental Reform Committee."

THE appointment of Dr. Bremner to Haslar Hospital is for temporary service, awaiting the arrival of Deputy Inspector-General Irwin, C.B., who has been transferred from Jamaica Hospital.

DR. SHAW, the oldest practitioner in Lurgan, died at his residence last Monday after a protracted illness. Dr. Shaw commenced practice in Lurgan forty years ago; and on the death of Dr. McLaughlin, succeeded him as Medical Officer of the Workhouse, which post he held for the past eighteen years.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE Queens'town Dispensary District of the Cork Union, which recently became vacant by the death of Dr. Townsend, has been divided, and two medical officers are to be appointed at £100 *per annum* each and fees, instead of one at £130 *per annum* and fees, as hitherto.

YORKSHIRE ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—The next meeting will be held in the Board Room of the Infirmary, Halifax, on Wednesday, April 25th, at 2 P.M. The following papers will be read. J. B. Pritchett, Esq.: Isolation of cases of Infectious Disease, and its means. T. Britton, M.D.: Some thoughts about Infectious Diseases. Dr. Britton will be at the Infirmary at 11 A.M., and will be glad to take any of the members to see the Goux system in operation.

## MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS—Monday, April 9th, 1877.

*British Medical Department.*—Dr. PLAYFAIR asked the Secretary of State for War when paragraph 25 of the British Medical Department Code (India)—viz., "In order to be qualified for holding an administrative appointment in this country (India) it is required that an executive medical officer should have served as a surgeon for three years with an European regiment in India"—was made general in its application, and whether there were any medical administrative officers now holding appointments who had not complied with the condition of paragraph 25.—Mr. HARDY: It was not made general until the issue of the Warrant of 1876; but it must have been perfectly well known throughout the Department, because in 1867 it was necessary to pass over sixty or seventy officers to obtain the requisite number for India who had the qualifying service. With regard to the second part of the question, there are medical administrative officers now holding appointments who have not complied with the condition of paragraph 25; for, the necessities of India having been supplied, some of the officers who were then passed over, as above stated, were promoted to administrative rank at home and in the Colonies. The effect of this was really unfair, as it gave some men long tropical service, and others an undue amount of home service, and so interfered with the roster; and, therefore, last year I considered it advisable, with the concurrence of His Royal Highness, to establish one system for promotion—viz., by selection, one of the elements of which was the necessity of having three years' Indian service. This does not in the least set aside the conditions of paragraph 16 of the Royal Warrant of 1876, which lays down ability and merit as qualifications for promotion, as opposed to seniority, but not as excluding other grounds for non-selection—such as ill health, inability to perform tropical service, etc.

*Sanitary Condition of Portsmouth.*—Mr. SCLATER-BOTH, in reply to a question by Mr. Macdonald, as to the statements which had appeared in some of the local papers relating to the sanitary condition of Portsmouth, said his attention had been directed to the report of Dr. Thorne on the subject. In Dr. Thorne's report as to the outbreak of scarlet fever at Portsmouth, he stated that he had put himself in communication with the authorities, and had recommended that they should provide hospital accommodation for the reception and treatment of persons affected with the disease; and that they had stated, in reply, that they were taking steps to provide proper accommodation for that purpose. He did not see any necessity for strengthening the Public Health Act in consequence of what had occurred.

Tuesday, April 10th.

*Cattle-Plague.*—In answer to Sir W. Barttelot, Lord SANDON confirmed the report that there had been an outbreak of cattle-plague at Willesden, which had compelled the slaughter of a herd of one hundred and fifty-seven cattle. The Middlesex Local Authority, he said, had taken all possible precautions; and, among other things, it has stopped all fairs and markets and the transit of cattle in its district. There was no truth in the report that an outbreak had occurred in Oxfordshire. He gave notice that on Thursday he would move for a Select Committee on the causes of the recent outbreak; also into the effects of the importation of live foreign animals, and how far such importation is essential to the food-supply of the country.



Wednesday, April 11th.

*The Cattle-Disease.*—Lord SANDON informed Mr. Ridley that the attention of the Government had already been called to the fact that there was a direct communication between country dairies and infected districts of the metropolis by the daily return of milk-cans in an uncleaned state; and communications had been made to the local authorities on the subject. It was a matter of no slight importance, and would be carefully watched by the department.—In reply to Mr. W. Egerton, who complained that inspectors and others who had been in contact with diseased animals were allowed by the local authorities in London and Middlesex to leave infected premises without disinfecting their clothes, Lord SANDON said the inspectors were entirely under the control of the local authority, and they had no information which led the department to believe that the local authority had sanctioned the omission of any proper precaution. Since he came into the House, he had been informed that the Middlesex authorities had issued the strictest orders with respect to the clothes of persons in contact with infected animals.—Subsequently, in reply to Mr. Pell, Lord SANDON said that the owner of the farm at Willesden on April 3rd first observed illness in his cattle, and, on the following day, he communicated that fact to the local inspector, who visited the premises on April 5th, but he was not satisfied on his first inspection that it really was the cattle-plague. He made a second inspection on the following day, when he perceived that it did exist, and, on April 7th, he gave notice to the Veterinary Department. A copy of the declaration, dated April 6th, was received by the Government on April 10th. He had also to inform the hon. member that the Government had perceived with great concern that the cattle-plague had been lingering about the metropolis for three months, and that it unfortunately appeared to have got a hold in the dairies in the East End and in one of the leading dairies at the West End. The Government had carefully considered the matter, and on that day an order in Council had been passed whereby the Privy Council had taken upon itself the powers given under the Act of 1869, so as to be able to assume the whole of the functions of the local authorities within the metropolitan police district. It was a strong measure to take; but, considering that this fearful disorder had been lurking about the metropolis for three months, with the serious danger of its spreading around London, the House would, no doubt, think that the Government were justified in what they had done.

Friday, April 13th.

*The Late Arctic Expedition.*—In answer to Mr. Rylands (who asked a question in the absence of Dr. Lush), Mr. ALGERNON EGERTON said the outbreak of scurvy in the Arctic Expedition was first reported to the Admiralty by telegram and letter on October 27th, 1876. The date of the promotion of officers of the expedition was November 3rd, 1876, except that of Dr. Colam, which was dated March 11th, 1877, and the date at which the First Lord of the Admiralty called upon the Director-General of the Medical Department of the Navy for a report on the causes of the outbreak of scurvy was on November 9th, 1876.

*Canal Boats.*—In answer to Mr. Price, who asked whether it was true, as stated in the *Times* of April 10th, that, at an inquest held at Runcorn on the body of a child that met its death on board a canal boat, the mother stated in evidence "that herself, her husband, and three children slept in the same cabin, which was only three feet and a half wide by five feet high", Mr. CROSS said it was true that an inquest was held, and that the jury returned a verdict that the child was found dead in bed, there being no evidence to show that the mother had overlaid it. He believed the matters stated at the end of the question were substantially true, though he could not speak positively as to the dimensions of the cabin. He had already drawn up a Bill which, he hoped, would meet the case of children habitually going about in canal boats, and, at the first convenient opportunity, he would ask leave to bring it in.

Monday, April 16th.

*The Case of George Favell.*—Mr. PARNELL asked whether the attention of the Home Secretary had been directed to the inquest on the body of George Favell, a prisoner at Walton Gaol; and, if so, whether he would direct a *post mortem* examination of the body to be made and a fresh inquiry to be held.—Mr. CROSS replied that it would be impossible to order a fresh *post mortem* examination, as the unfortunate man died on the 15th of February of virulent small-pox. The inquest in the case was held by one of the most careful coroners in the country, who took the precaution of having a perfectly independent medical man, and the jury, he (Mr. CROSS) was assured, was a most intelligent one, and gave the protracted inquiry the greatest and most careful attention.—Mr. PARNELL gave notice that he should on a future day draw attention to the case and move a resolution.

Tuesday, April 17th.

*Vaccination.*—In answer to Mr. P. Taylor, Mr. SCLATER-BOOTH said: I am generally aware that Mr. Pearce of Andover has been frequently proceeded against for non-compliance with the Vaccination Acts. My opinions on the subject are well known, having been embodied for the most part in a letter to the Evesham guardians, which has been laid on the table, and they have been communicated to the guardians and to the magistrates at Andover. These authorities, in the exercise of the discretion which the law vests in them, have continued proceedings, and I have no right or power to interfere further. It is said that Mr. Pearce is an active member of the Anti-Vaccination Society, and that, not content with declining to observe the law himself, he stimulates others to do the same, and, moreover, that his fines are paid by the Association. In the face of the existing epidemic, I am not aware that the Government could usefully propose to take any step in order to stop further proceedings, or that Parliament would be prepared to sanction any such attempt.

*The Cattle-Plague.*—In reply to Colonel Kingscote, Viscount SANDON said a case had broken out near Old Oaks Common, not far from Willesden, but it had not yet been ascertained whether it was one of cattle plague or not. He was sorry to say, however, that the chief inspector had found a case of five calves being affected with cattle plague near Willesden, and these had been slaughtered and buried as soon as possible. The Privy Council had taken charge of the whole of the metropolitan district, and it had been placed in the hands of twelve veterinary surgeons, who would act under the chief inspectors who had been summoned from the country. Their orders were to visit the whole of the cowsheds and dairies. Sixty sheds had been visited, and no case of disease had been discovered.

Wednesday, April 18th.

*The London Dairies.*—In reply to Sir George Bowyer, Lord SANDON said: A large number of cowsheds in London are, I fear, in a very defective condition in regard to sanitary arrangements—a condition of things not altogether unknown, I am afraid, in other districts, both town and country. The question, however, of prohibiting the keeping of any cattle whatever within the metropolis is a very large one, and though the Government are taking very stringent measures to deal with the cattle-plague in London, we are not prepared, with our present information, to propose to Parliament to take the extreme measure of forbidding all cattle being kept within its limits.

#### NOTICES OF MOTION.

*Friday, May 11th.*—Earl PERCY: To move, That it is expedient that an inquiry should be instituted into the practice of vaccination for the purpose of ascertaining whether it cannot be conducted in a more satisfactory manner than it is at present.—Mr. PEASE: As an amendment to Earl Percy's motion on vaccination, to move to add "and as to how far the existing law permitting the accumulation of penalties carries out the object for which it was enacted".

Mr. BRUEN (Pauper Lunatics in Workhouses): To call attention to the maintenance of pauper lunatics in workhouses in Ireland and in Scotland, and to move, That the contribution out of imperial funds, which is given in aid of the maintenance of lunatics in the insane wards in workhouses in Scotland, is consistent with the principle of a capitation grant towards the support of lunatics already sanctioned by Parliament, and this House is of opinion that this principle as applied in Scotland ought to be extended to Ireland under parallel circumstances.

Mr. ERRINGTON (Medical Act Amendment): Bill to amend the Medical Act.

## OBITUARY.

WILLIAM CARR, M.D., BLACKHEATH.

DR. CARR was born at Leeds in 1814. He received his medical education at York, as pupil of the late Mr. Needham, and at the School of Medicine in that city. Having passed the then usual examinations in 1837, he became assistant, and soon afterwards partner, of the late Mr. Barnett of Blackheath. This connection proved a most happy one, and led to an intimacy and affectionate regard which was interrupted only by the death of Mr. Barnett in 1873.

Possessed of great medical abilities, untiring energy, and of a frank and genial manner, Dr. Carr acquired the large and successful practice in which he was actively engaged almost down to the day of his death.

In 1862 he received the appointment of medical attendant to H.R.H. Prince Arthur (then living at the Ranger's House, Blackheath). This



post he continued to hold until the Prince finally left the neighbourhood eight or nine years afterwards.

Though immersed in practice, and an active member of various medical societies, Dr. Carr's energy was inexhaustible. No movement could arise, local, professional, or even national, which he approved, into which he did not throw himself with characteristic ardour. When the Volunteer movement arose, the first meeting to inaugurate the 3rd Kent Rifles was held at his house, and no one set a better example of regular attendance at early drill than himself. To the last, he attended every field-day of his corps as surgeon to the battalion.

In 1865, when the cases, now almost forgotten, of Gibson and Daly, were exciting the public indignation against the state of the metropolitan workhouse infirmaries, Dr. Carr was appointed by Mr. Farnall (the Inspector of the Poor-law Board, who conducted the inquiry) as his medical assessor. Shortly afterwards, he was associated with Mr. Ernest Hart and the late Dr. Anstie as one of the *Lancet* Commission of Inquiry into the state of the infirmaries. It was greatly due to the astonishing revelations made by those gentlemen, in their able and laborious report, that the present amelioration of the lot of the aged and sick poor of the London workhouses was made.

As local treasurer and general promoter of public and local charities, Dr. Carr was equally unwearied. But the medical profession is especially indebted to him for his labours in promoting the cause of the Royal Medical Benevolent College at Epsom. Nor were they confined to raising in an unprecedented manner the number of its subscribers, and to an unflinching attendance at its Council meetings. In connection with the College, he not only obtained free scholarships at the chief London hospitals, which liberally responded to his appeal, but, at the time of his death, had far advanced in raising a sum of £7,000 as a fund for the support of the scholars during their studies and for giving them a start in life. In the furtherance of this scheme, he not only contributed himself in a most liberal manner, but, by the infinite correspondence and labour it entailed, we fear he greatly shortened his useful and well-spent life.

To his sorrowing family and many friends, both far and wide, his loss is simply irreparable.

## MEDICAL NEWS.

**ROYAL COLLEGE OF PHYSICIANS OF LONDON.**—The following gentlemen were admitted Licentiates on April 16th, 1877.

Baker, John Henry, Hockley  
Beverley, William Henry, 144, Albany Street  
Cane, Howard, 15, Queen Square  
Cusack, Robert Oriel, Bedford  
Farbstein, Henry, Hull  
Forrest, John George Stracey, 19, Bessborough Gardens  
Gay, Charles William Ebenezer, Townsend, St. Alban's  
George, George Aldridge, 8, Albert Street  
Job, John, Dowlais  
Jones, Roger Hughes, 26, High Street, Denbigh  
Laybourn, William Kirkus, 25, Grafton Street East  
Lee, Charles George, Liverpool Road, Chester  
Le Quesne, Edwin Joseph, Metropolitan Free Hospital  
May, Arthur William, South Peterwyn, Llancaeron  
Munro, Alexander (M.D. Montreal), 10, Woburn Place  
Patmore, Tennyson Deighton, 131, Gower Street  
Pickering, Charles Frederick, Guy's Hospital  
Reynolds, William Percy, Berkeley Lodge, Norwood Road  
Sandwith, Fleming Mant, 142, York Road  
Sherrin, Francis Mark, University Hospital  
Steele, Henry Frederick, Dispensary, Carlisle

**ROYAL COLLEGE OF SURGEONS OF ENGLAND.**—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on April 13th; and, when eligible, will be admitted to the pass-examination.

Messrs. H. T. Preston, C. C. Shepherd, G. L. Pardington, and W. T. Freeman, students of St. Bartholomew's Hospital; W. T. Crew, H. E. B. Flanagan, W. H. White, and L. C. Woolridge, of Guy's Hospital; A. E. Permesyan, A. E. Buckell, and C. J. Bond, of University College; A. M. Shield, C. L. S. Branson, and F. J. Bennett, of St. George's Hospital; Takaki Kanehiro, R. J. Boyd, and H. A. H. Fenton, of St. Thomas's Hospital; John Davidson and J. F. W. Silk, of King's College; and E. R. Cree, of the Middlesex Hospital.

The following gentlemen passed on April 16th.

Messrs. James Mudge, H. C. Nance, E. M. Cuffe, J. D. Priest, Arthur Franklin, and P. A. Holland, M.A. Oxon., of St. Bartholomew's Hospital; P. E. Shearman, B. H. Mumby, Reginald Pratt, and Angus Money, of University College; Thos. Fort, S. F. Harvey, and F. W. Lerew, of St. Thomas's Hospital; Norman Dalton and A. T. Sloggett, of King's College; I. E. Dickinson and A. E. Evans, of St. George's Hospital; F. B. Jones and J. T. Bishop, of Guy's Hospital; J. T. James, of the Middlesex Hospital; and Joas Henrique Fialho, of the Bombay School.

The following gentlemen passed on April 17th.

Messrs. D. A. Gresswell, B.A. Oxon., T. H. T. Mudge, G. E. Fooks, G. H. Bar-

ling, and A. J. Wharry, of St. Bartholomew's Hospital; T. D. Acland, B.A. Oxon., C. B. Richardson, G. Stokes Hatton, and Arthur Purkiss, of St. Thomas's Hospital; T. H. Saunders, William Pasteur, J. T. Easmon, and J. J. Paddle, of University College; G. A. Buckmaster, C. A. Webb, and F. C. Fisher, of St. George's Hospital; H. E. Wright and E. O. Jago, of Guy's Hospital; J. H. Nankivell and W. J. Penny, of King's College; E. J. H. Midwinter, of the London Hospital; and W. H. Day, of the Charing Cross Hospital.

The following gentlemen passed on April 18th.

Messrs. A. A. Bowley, Edward Little, and Gerard McKee, of St. Bartholomew's Hospital; D. S. Davies, F. W. Sutton, and Ho Kai, of St. Thomas's Hospital; Andrew Baird and C. D. Adam, of St. Mary's Hospital; S. E. Pritchard and A. E. Hoets, of the London Hospital; Charles Curde and F. W. Brookes, of the Charing Cross Hospital; F. P. Wightwick and E. W. Alden, of the Middlesex Hospital; G. H. Butler and A. M. Davies, of the Westminster Hospital.

**APOTHECARIES' HALL.**—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, April 12th, 1877.

Blackmore, Alfred, Quay Street, Manchester  
Lawless, Edward James, Cadogan Terrace, South Hackney  
McGachen, Frederick William Dobson, Bethnal Green  
Steele, Charles Edward, Rodney Street, Liverpool

The following gentlemen also on the same day passed their primary professional examination.

Gimlette, Thomas Desmond, St. Thomas's Hospital  
Sinaie, Morton Alfred, St. Mary's Hospital

## MEDICAL VACANCIES.

The following vacancies are announced:—

**BECKETT HOSPITAL and DISPENSARY, Barnsley**—House-Surgeon. Salary, £140 per annum, with furnished rooms, attendance, and gas. Applications to be made not later than May 1st.  
**BIRMINGHAM, Parish of**—Assistant Medical Officer to the Workhouse.  
**CENTRAL LONDON SICK ASYLUM DISTRICT**—Principal Medical Officer to the Highgate Asylum. Salary, £400 per annum, with furnished house, coals, and gas. Applications to be sent in on or before May 1st.  
**COUNTY AND COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY**—House-Surgeon. Salary, £125 per annum, with lodging, fire, and lights. Applications to be sent in on or before May 2nd.  
**DAVENTRY UNION**—Medical Officer for the Workhouse and First and Second Districts.  
**DONCASTER GENERAL INFIRMARY and DISPENSARY**—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be made on or before May 5th.  
**GLOUCESTER COUNTY INFIRMARY**—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to be sent in on or before the 21st instant.  
**KENT and CANTERBURY HOSPITAL**—Assistant House-Surgeon and Dispenser. Salary, £50 per annum, with board, lodging, and washing. Applications to be sent in on or before the 27th instant.  
**NOTTINGHAM GENERAL HOSPITAL**—Resident Surgeon-Apothecary. Salary, £150 per annum, with furnished apartments and board.  
**ROTHERHAM HOSPITAL and DISPENSARY**—Assistant to House-Surgeon. Salary, £25 per annum, with board, lodging, and washing.  
**ROYSTON UNION**—Medical Officer for No. 5 District. Salary, £70 per annum, and fees. Applications to be sent in on or before the 24th instant.  
**ST. GEORGE'S and ST. JAMES'S DISPENSARY**—Physician. Applications to be sent in on or before the 26th instant.  
**ST. GEORGE, HANOVER SQUARE, PROVIDENT DISPENSARY**—Physician-Accoucheur. Applications to be sent in on or before May 5th.  
**SOUTH MOLTON UNION**—Medical Officer for the Fourth District.  
**TEIGNMOUTH, DAWLISH, and NEWTON INFIRMARY**—House-Surgeon. Salary, £50 per annum, with board, lodging, and washing. Applications to be made on or before the 26th instant.  
**WOODBIDGE UNION**—Medical Officer for the First and Second Districts.

## BIRTHS, MARRIAGES, AND DEATHS.

*The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.*

### BIRTHS.

**DAVIES**—On April 7th, at Hillside House, Ebbw Vale, Monmouthshire, the wife of John W. Davies, L.R.C.P.L. and M.R.C.S., of a son.  
**KERR**—At 42, Grove Road, Regent's Park, London, on April 15th, the wife of \*Norman Kerr, M.D., of a daughter.  
**SPURGIN**—On April 17th, the wife of \*W. H. Spurgin, M.R.C.S.Eng., of Maryport, of a son.  
**WARD**—On April 15th, at Saltburn, Twickenham Common, the wife of \*Martindale C. Ward, M.D., of a daughter.

### DEATHS.

**BARNES**—On April 14th, at Mayow Lodge, Sydenham, the residence of her son, Eliza, the beloved wife of \*J. Wickham Barnes, F.R.C.S., of Bolt Court, Fleet Street, and Stanwell Moor, Middlesex, aged 43.  
\***HAWETT**, Thomas, M.R.C.S.Eng., at Wigan, aged 77, on April 14th.  
**OWEN**—On April 14th, suddenly (of angina pectoris), at 60, Cleveland Square, Hyde Park, Mary, the beloved wife of William B. Owen, L.R.C.S.Eng.

**VACCINATION.**—Dr. R. P. Tyley, of Wedmore, Somerset, has received from the Local Government Board the sum of £8:2 for efficient vaccination: this being the second grant he has received.—The Local Government Board has awarded to Mr. W. Drinkwater £10 3s. for successful vaccination in the Bicester District of the Bicester Union.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—Charing Cross, 2 P.M.
FRIDAY.....	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Vandyke Carter, "On the Delhi Boil"; Dr. Andrew and Dr. Duckworth, "On a Case of all but Universal Paralysis in a Child following exposure to Heat, with complete recovery"; Dr. Laidlaw Purves, "An International Calculating Scale for Ophthalmological Purposes".
- WEDNESDAY.—Hunterian Society, 8 P.M. Mr. Rivington, "Case of Imperforate Anus, the Rectum communicating with Urethra"; Mr. W. Adams, "On Infantile Paralysis"; Association of Surgeons Practising Dental Surgery, 8.30 P.M. Mr. Fairbank, "On the various Morbid Conditions of the Tooth-pulp, and their Treatment"; and other communications.
- FRIDAY.—Quekett Microscopical Club (University College, Gower Street), 8 P.M. Mr. T. Charters White, M.R.C.S., "A Contribution to the Life-History of Botryllus"; Clinical Society of London, 8.30 P.M. Dr. Southey, "A case of Idiopathic Tetanus successfully treated by large doses of Bromide of Potassium"; Dr. Southey, "A case of Parenchymatous Nephritis, in which the Dropsy was combated by Drainage-tubes"; Mr. Christopher Heath, "A case of badly united Fracture of the Bones of the Leg treated by the Excision of a Wedge by Linhart's Chisel (a living subject)"; Dr. Day, "A case of Ascites in a Young Child treated by Paracentesis and Copaiba: Recovery (a living subject)".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

- CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.
- AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.
- PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.
- CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.
- WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.
- COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## THE ANTIVIVISECTIONISTS.

A SCOTCH contemporary states that one night last week a lecture was to have been delivered against vivisection, in the Literary Institute, Edinburgh; but before the hour of meeting the hall was crowded almost entirely by students, who prevented the lecture from taking place. The lecturer, it is said, was received with such interruptions by hooting, yelling, ringing of bells, and playing of instruments, that he was unable to proceed, and left the hall along with his friends. The students afterwards marched to the residence of Professors Lister and Grainger Stewart, whom they loudly cheered. They perambulated the streets for two hours, followed by a large crowd. We had occasion a few weeks ago to disapprove of conduct of this kind (not, of course, the demonstration in favour of esteemed professors, but the proceedings in the lecture-room). However wrong the antivivisectionists may be in their facts and arguments, they have a right to be heard; and they should be met by correctly stated facts and sound reasoning. To do any thing which can give them a plea for complaining of persecution is most injudicious.

## CONGESTION OF THE OPTIC NERVE AND RETINA.

SIR,—Will any of your correspondents kindly inform me what are the best means for removing venous congestion in the optic nerve and retina in an aged dyspeptic patient, and whether it is considered a removable disease?—I am, etc.,  
Enfield, April 16th, 1877. A NORTHERN M.D.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## THE COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN MARCH 1877.

The following are the returns made by Dr. C. Meymott Tidy to the Society of Medical Officers of Health.

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, etc.	Nitrogen		Ammonia.	Hardness. (Clarke's Scale.)	
			As Nitrates, &c.	Saline.	Organic	Before Boiling.	After Boiling.
<i>Thames Water Companies.</i>	Grains.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction ..	22.90	0.503	0.195	0.001	0.008	13.7	4.2
West Middlesex ..	21.40	0.073	0.168	0.001	0.006	14.3	4.6
Southwark and Vauxhall .....	20.50	0.071	0.198	0.001	0.007	14.3	4.6
Chelsea .....	21.20	0.054	0.165	0.000	0.008	14.3	3.0
Lambeth .....	22.10	0.070	0.186	0.000	0.009	13.7	4.2
<i>Other Companies.</i>							
Kent .....	30.10	0.007	0.375	0.000	0.002	18.8	4.6
New River .....	21.20	0.006	0.168	0.000	0.006	14.8	4.2
East London ....	22.50	0.070	0.150	0.000	0.006	13.7	4.2

Note.—The amount of oxygen required to oxidise the organic matter, nitrates, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters, the quantity of organic matter is about eight times the amount of oxygen required by it. The water was found to be clear and nearly colourless in all cases but the following, when it was slightly turbid—namely, the Grand Junction, the West Middlesex, and the Lambeth.

## ANATOMY IN QUEEN'S COLLEGE, CORK.

SIR,—In your issue of December 30th, 1867, I see a complaint from "A Cork Student" that the Professor of Anatomy has debared "senior students from entering the dissecting room unless on payment, for the third time, of the full fee for the course of anatomy." "A Cork Student" seems to think this a hardship, and, from the tone of his letter, I gather that such is the general opinion of the students. As a graduate of the Queen's University in Ireland, I desire to protest most strongly against such ideas. There can be no hardship in paying for the article you wish to buy, but very great hardship to the seller if you insist on taking his property without paying for it. In my time, when we wanted a third session of anatomy, we paid for it as a matter of course, and never dreamt of any hardship. I may add, that all students who wished to take a good place in their examinations usually took a third course of anatomy, two courses being quite inadequate to enable one to gain a thorough knowledge of the subject. The fee for the third term is less than for the first, if I remember rightly.—I am, etc.,  
THOS. BROWNE, M.D.  
Hong Kong, February 28th, 1876.

DR. ROWE (Margate).—The weights and measures used in America are those of the old London Pharmacopœia—the Apothecaries' weight. The ounce contains 480 grains, and is subdivided into 8 drachms or 24 scruples. The grain is the same as in England.

## REGISTRATION IN BRITISH COLUMBIA.

THE following extract from an official record of registered medical practitioners, published in the *British Columbia Gazette* for February 10th, seems to indicate some laxity in the admission of persons to the practice of medicine in that part of her Majesty's dominions. "Philip James, Victoria; application received March 30th, 1876; diploma registered March 30th, 1876. A diploma from the Reformed Medical College of New York; date obliterated in original."

## OBSTRUCTION OF THE NOSE.

SIR,—I should feel obliged if any of your readers would kindly suggest treatment in the following case. A boy aged 13 has his left nostril closed by bulging of the bony septum of the nose. How it became so I cannot say, but there is no disease, and never has been. He is unable to run any distance with his mouth closed; his tongue is unpleasantly dry in the morning, owing to his sleeping with his mouth open. Could the nostril be moulded into its proper shape, and if so, how?  
PREGUNTA.

April 19th, 1877.

## TOOTH-FORCEPS.

SIR.—Requiring to purchase some tooth-forceps lately, I consulted my old friend Dr. Druitt's *Surgeon's Vade Mecum*; and, according to the advice I there found, I ordered Tomes's set of seven pairs from Messrs. Maw; and for completeness, excellence, and economy, they cannot be surpassed. The cost of the forceps was five shillings each pair; and of a morocco pouch with strap and buckle, six shillings. The only improvement I can suggest is, that the forceps should be nickel-plated to prevent corrosion. This would probably cost about ten shillings extra for the seven pairs. According to my experience, these seven pairs of forceps are sufficient for the extraction of teeth and their fragments under all circumstances; and I am surprised that they have not become the rule with surgeons, and that they are not to be found in surgical catalogues without the claw and elevator. I regard the claw as barbarous, and the elevator as unnecessary and objectionable. The cost of forceps and pouch complete would not exceed two guineas (or nickled, say two-and-a-half guineas); and they are fully sufficient for the purpose. According to the vague ideas prevalent amongst surgeons and instrument-makers as to how many instruments really are necessary for tooth-extraction, a so-called complete set of forceps, etc., costs double or treble this amount—and most unnecessarily.—I am, etc.,  
W. J. M.

LINIMENTUM AMMONIÆ.—W. J. M. writes that equal volumes of water and olive oil with ammonia (and turpentine), at discretion, answer very well. The *Pharmacopœia* preparation does not contain nearly sufficient water for solution of the soap formed in the process.



**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to **Mr. FOWKE**, not later than *Thursday*, twelve o'clock.

#### ON THE RELATION OF ALCOHOL TO MEDICINE.

**M.D. LOND.**, referring to the letter of "A Physician" in the **JOURNAL** of March 24th, says:—Every medical man knows the value of bitter infusions in atonic dyspepsia. What scientific proof is there that the improvement was due to the alcohol in the Burton ale, and not to the infusion of hop? Again, it is quite consistent with a thorough advocacy of general total abstinence to admit that alcohol acts as an anæsthetic to the nerves of sensation in the stomach (thereby sometimes relieving unpleasant sensations), and also as a temporary local irritant, producing a variable amount of determination of blood, just as mustard or pepper will. Such a hyper-irritant action is unnecessary for the digestion of proper food in a normal stomach, is apt to produce chronic congestion of the stomach and liver if pushed beyond very small (probably) but indeterminate limits, and makes itself necessary for even average digestive efforts the more regularly it is applied. All medicinal uses of alcohol are legitimate, but ought to be under the control of the profession. The outcry of teetotallers against its medical use is simply because medical men will persist in ordering all kinds of mixtures, and in sending the patient to the public-house or wine-merchant to obtain them. It is a *petitio principii* to adduce the text "which maketh glad the heart of man" in proof of Divine approval of mid intoxication, as though no property of grapes or unfermented wine can cheer or cause gladness. "Corn" (the harvest, *vide* "Harvest Home") "shall make the young men cheerful, and new wine" (Heb. *tiros*, the vintage fruit) "the maids." A Scotch minister is said to have been much puzzled by this verse: he said he could understand how new wine (if intoxicating) could make the young women cheerful, but could only account for corn having the same effect on the supposition that it stood for "whisky."

"Another Physician" writes:—When a young man, I was very delicate, and from nineteen to twenty-three years old seldom free from some ailment, due to general weakness. As I was a firm teetotaler, my convictions became a source of dispute with my friends, and, under the orders of two medical advisers, I sacrificed my own preferences by taking a daily quantum of sherry; and subsequently I was in the habit, until the summer of 1875, of swallowing my dose of beer or wine with each day's dinner. So far, however, from being secured by this in the enjoyment of health, I have always had excessive sensitiveness to atmospheric changes, and have again and again been laid up for two or three weeks at a time. Two years and a quarter since, I resolved to drink nothing stronger than good filtered water, except a morning and evening cup of tea. The result is, that indigestion, headache, sleeplessness, and fear of weather, are all things of the past. Not only have I had splendid health, but now, at fifty-four years of age, I have more energy than I had at thirty, and I can do a day or a night's work, or a succession of them, with any man you please.

**CENSOR.**—Misprints and misunderstandings in Shakespeare are very numerous. The following occur to us. In *Macbeth*, Act 4, sc. 1, is, "Though bladed corn be lodg'd." This word "lodg'd" can only mean that the corn has been placed or stacked somewhere, which would be a most advantageous position for the husbandman. But the sense of the passage requires that the "bladed corn" shall be utterly destroyed by the wind. Shakespeare's thought clearly is, that the ears of corn shall be beaten together by the wind and the kernel threshed out, thus rendering it only fit to turn cattle into. Instead of "lodg'd," "threshed" or "husked" would give the meaning, but probably neither is the exact word of Shakespeare. Some one in the Midland Counties connected with agriculture might be able to supply the word for which "lodg'd" has been mistaken. In *Hamlet*, Act 3, sc. 1, Hamlet says: "You should not have believed me; for virtue cannot so inoculate our old stock, but we shall relish of it." The last clause of the preceding is a mere jumble of words without meaning. By omitting the comma and substituting "that" for "but" in the brackets—thus rectifying a very easy transcriber's or printer's mistake—the sense will be rendered manifest to all who understand the theory of grafting. The next example also occurs in the glorious play of *Hamlet*; and probably a more curious instance of the perpetuation of a blunder never occurred in literature. It is in Act 5, sc. 1, the scene in the churchyard with Yorick's skull—the situation in which Sir Thomas Lawrence chose to represent John Philip Kemble, who with other great actors must have thought over the passage thousands of times, leaving out of count the millions of outsiders. The speaker is Hamlet. "He hath borne me on his back a thousand times; and now how abhorred my imagination is! my gorge rises at it. Here hung those lips that I have kissed I know not how oft," etc. From which it appears that Hamlet's gorge rose at having been carried pickaback by the defunct long years before, than which nothing can be imagined more absurd or opposite to the sense of Shakespeare. The reminiscence is undoubtedly a pleasant one, and its antithesis is the holding the stinking skull in his hand and pointing out where "hung those lips that I have kissed so oft!" this is the circumstance that naturally excites his sense of loathing. The passage can be set right without changing a word of the author, thus:—"He hath borne me on his back a thousand times;—And now!—How abhorred my imagination is!—my gorge rises at it! Here hung those lips that I have kissed so oft!—" etc. Surely no great author was ever so ill served as Shakespeare.

#### TREATMENT OF RINGWORM BY PERCHLORIDE OF IRON.

**SIR.**—It has been declared by an ancient authority that "there is nothing new under the sun". Under your heading of "Therapeutic Memoranda," two of your correspondents have recorded their experience of the treatment of ringworm by the local application of perchloride of iron as being "attended with very excellent results." There is something to me intensely funny in reading this announcement in the year 1877, remembering, as I do, that when I was a student, more than forty years ago, this was recognised as a very effective treatment of ringworm. I may go still further back—to my school-days—when the same treatment was adopted in the form of *ink* "with excellent results."—I am, etc.,  
Sunbury, March 31st, 1877.

JOSEPH SEATON, M.D.

#### BUGS.

**SIR.**—Perhaps some of your readers will kindly state what, in their opinion, is the best to use as a "preventive of bugs," and also what is the most useful chemical for destroying them when located in a large building such as an hospital. Of course, patients constantly bring along with them these uncomfortable vermin; and I should take it as a great favour if I shall be able to obtain a complete ridance of such troublesome tenants.—I am, sir, your obedient servant,  
March 31st, 1877.

HADBERRY.

**NOTICES OF Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.**

#### CAUSATION OF GOUT.

**SIR.**—Dr. C. R. Drysdale calls attention to the marked immunity from gout enjoyed by the Parisian workman as compared to the London, and invites opinions as to its cause. I quite agree with him that Dr. Potain is wrong in attributing it mainly to the excess of animal food consumed by the English workman. I have treated many cases of well marked gout amongst the agricultural labourers in Gloucestershire, whose dietary certainly contained less animal food than that of a Parisian workman, who finds a plate of animal food of some sort in the *menu* of the very humblest restaurant. I cannot speak from personal experience of the London workman, but I believe it would be difficult to show that his indulgence in animal food bore the same proportion to that of the Parisian, exhibited by their relative proneness to gout. Are we not justified, then, in assigning as the chief factor the difference as to quality and quantity of the liquor consumed in the two countries respectively? The wine usually drunk by the French workman is thin and poor, but I believe not inferior in alcoholic strength to the family cider of the Gloucestershire labourer. But I am satisfied, from actual observation, that in the quantity respectively consumed lies all the difference. Two gallons of cider *per diem* is a very ordinary allowance in Gloucestershire; and the labourer will not only consume this amount, but clamour for more. The French workman never consumes anything like this amount of wine habitually, and so I conclude that his comparative immunity from gout is in exact proportion to his temperance. And I deem it not improbable that Dr. Drysdale will find, upon inquiry amongst London hospital cases of gout, that the patients will admit the consumption of an amount of beer or porter which few French workmen ever equal, and which the majority would rightly regard as simply bestial.

To conclude—while admitting that gluttony plays an important part in the production of gout—I believe the chief factor to be the inordinate imbibition of liquor of any sort; and that when those of our countrymen, who have not yet done so, come to realise the fact that Nature did not intend them to be used as mere casks, gout will be as rare in London as it is in Paris.—I remain, yours, etc.,

C. M. CAMPBELL, M.D.

17, Belgrave Terrace, Torquay, March 24th, 1877.

**IODINE AND ITS APPLICATIONS.**—W. J. M. writes:—A saturated solution of iodine in methylated spirit (one ounce in a half-pint) is an efficient substitute for the more costly preparation of the *Pharmacopœia*. The odour of the methylated spirit is concealed by the iodine.—Water (pure or distilled), saturated with iodine by maceration and agitation, is very agreeable to take, and will as effectually produce the toxic and medicinal effects of the element as the more costly iodine. Lugol was, I believe, the author of this simple formula; but, like many other useful things, it seems to have been lost sight of. The ordinary adult dose of aqueous solution of iodine to begin with is two tablespoonfuls, increased if necessary. The addition of a small quantity of rectified spirit to the water increases its solvency, but is, according to my experience, unnecessary and objectionable.

#### CANADIAN SURGEONS.

We take the following from a Canadian paper:—The London (England) Board of Trade has notified the Allan Steamship Company that henceforth none of its ships would be allowed to clear at the Custom House, unless the surgeons on board are provided with diplomas from some college in England, Ireland, or Scotland. Sir Hugh Allan has written to Dr. Campbell, Dean of the Medical Faculty of McGill College, a letter, in which he says: "I am totally ignorant of the reason why this regulation is proposed, or of any good to be attained by it. We have for the last twenty years carried Canadian surgeons on board of our steamers, as well as English ones, and the result of our experience is, that the Canadian surgeons are quite equal, both in professional acquirements and gentlemanly bearing, to those we receive from the colleges in England." Canadians will quite agree with Sir Hugh Allan in the estimate he forms of the qualifications of the graduates of our medical colleges. They will appreciate the course marked out in the following portion of his letter. "I therefore am not disposed to submit to this requirement, inasmuch as I think it is a great injustice to the institutions of this country, as well as to the young men who study therein, and, in point of fact, it is a slight upon the dominion itself. I have written to the government urging them to take action in this matter without delay, and I write this letter to you with the view that you should bring it before the authorities of the University of McGill College, or in any other way that you think most likely to attain the object I have in view, and that is a full and perfect recognition of our own medical men as being equal to any others." It will be the duty of the Dominion Government to record at once its sense of the humiliation of the Board of Trade's order, which ought to be revoked without delay. The assumption of British superiority is too impudent to be tolerated for an instant.

#### SPASMODIC MUSCULAR CONTRACTION.

**SIR.**—I shall feel obliged if any member can throw light on the following case with respect to its cause, and any means likely to prove of therapeutic value. A gentleman, solicitor, forty years of age, well built and of apparently good constitution, began to complain four years ago of stiffness in the right arm and difficulty in raising it above the head, supposed to have been caused by slipping off the step of an omnibus whilst in motion, the arm being jerked in the effort to prevent a fall. These symptoms were soon followed by certain muscular contractions, which I will describe: their connection, however, with the above accident may be only a coincidence. He came under my care two years ago, when his symptoms were much the same as they are at the present time, though latterly they have been worse in some particulars. At first sight, the case appears like "writer's cramp." On watching the movements, however, in the act of writing, it is plainly seen that the thumb and index finger are not at fault, but that the contraction commences in the third and fourth fingers, which become strongly flexed upon the palm after writing a few lines, and then carry with them the second and index-fingers, thus causing the pen to fall from between the latter and the thumb. If the third and fourth fingers be stretched out and rested on the table, the act of writing can be more easily accomplished. Similar phenomena are observed when the patient takes hold of the stem of a wineglass or any thin object: latterly, when an attempt has been made to use a carving knife, the flexor carpi ulnaris has come into strong action and frustrated the attempt. In short, from close observation of the case, it would seem that there is some abnormal irritability of the ulnar nerve. There is a good deal of shooting pain in the forearm when any of the above-mentioned actions are attempted; also some pain where the ulnar nerve winds round the elbow-joint: slight decrease in the cutaneous sensibility of the palmar surface of the forearm. There is no loss of muscular power in grasping any large object. A



London physician, whom the patient consulted, described the ulnar nerve as thickened, where it can be felt subcutaneously in the upper arm; but I have not been able to satisfy myself on the point. There is no history of syphilis; no enlarged glands in the axilla. The patient's father suffered from gout, but the patient himself has never had an attack.

As regards treatment, numerous tonics (nervine and otherwise) have been given: bichloride of mercury and iodide of potassium extensively; locally, both the continuous (strong and weak) and interrupted currents. The former appeared to do good for a time, but afterwards the patient thought it aggravated the symptoms. I also constructed a light gutta-percha splint for the support of the third and fourth fingers (extending from the wrist), which seemed to give some relief in the act of writing. Scott's dressing has been applied to the upper arm, on the supposition of the ulnar nerve being thickened. Iodine and pustulating ointments, also, I believe, were used before his coming under my care. He has rested the arm as much as possible, only writing what is absolutely necessary. Any suggestion as to treatment will be thankfully received.—Yours, etc., M.B. LOND.

#### MUSSEL-POISONING.

SIR,—In answer to the inquiry of "Medicus" as to the most useful treatment in cases of mussel-poisoning, I can say, after some experience (having seen in nearly thirty years' practice about one hundred and twenty cases), that the following treatment is most successful. As soon as the first signs of poisoning (viz., swelling of the face and urticaria) appear, give an emetic of ipecacuanha and tartar emetic. After this has taken effect, give a mixture of spiritus minderici  $\text{r}\frac{1}{2}$  grammes, sulphuric ether 3 grammes, and any aromatic water 140 grammes. I never required to give anything more. Such cases are pretty frequent here, as the poorer classes of our population eat mussels during nine months of the year, and all the inhabitants during July, August, and September, mussels being then fat and of the best taste. Mussel-poisoning is easily prevented: when they are boiled with an onion and a piece of bright silver (spoon, fork, or money), and the onion and silver remain white, then the mussels are good; on the contrary, should either of them or both turn brown, then there is poisonous matter present, and the whole should be thrown away. Should mussels be eaten raw or fried, then it is impossible to apply this test.—I am, etc., A. MAYER, M.D.

Antwerp, March 27th, 1877.

COMEDONES.—Dr. E. Drummond, of Dronfield, suggests to "Inquirers" the following treatment. Carefully extract them with a small watch-key by a gentle but rapid pressure (the knack is soon learned). Bathe the face with a warm sulphur or salt-bath; or apply sulphur-soap in the evening, leaving the lather to dry on the face, and wash off with warm water in the morning. It is useful to pencil the affected part with spirit, in which a little soft soap has been dissolved. In severe cases, a paste may be similarly applied, composed of milk of sulphur, glycerine-spirit, carbonate of potash, and sulphuric ether, in equal parts: wash off in the morning. There is no permanent cure—"R. J. W. O." suggests a trial of the following: Cream, sulphur, bicarbonate of soda, glycerine, rectified spirit, and cherry-laurel water, of each equal parts. It is applied before going to bed and left on for the night, the part affected being first carefully washed with soap and warm water.

#### CONSULTATION FEES.

SIR,—To Mr. Mr. Cosgrave's query in the BRITISH MEDICAL JOURNAL of the 14th instant, relative to "consultation fees", under the circumstances alluded to I think that I may venture to affirm, with some degree of confidence, that no member of a firm of practitioners whose opinion and advice are sought for a patient under the care of a partner in the firm is entitled, by professional usage, to claim the customary fee of a consultant. Such advisory visits, indeed, if within the prescribed distance of an ordinary visit, are generally regarded as complimentary (and, perchance, necessary as "patient-retaining") ones.—I am, sir, yours truly, M.D.

#### FATTY DEJECTIONS.

SIR,—The letter of Octogenarius M.D., recalls to my mind a very similar case which I had under my care in 1874. I was consulted on February 20th of that year by Mr. W., a well-to-do farmer living in my neighbourhood. He complained of feeling very ill, and dreaded the return of an attack he had had ten years previously, which was pronounced by his then medical attendant to be the passage of a gall-stone. On questioning him with regard to the character of his motions, he replied that they were very loose, more like oil than proper motion, smelt very badly, and were pale in colour. I diagnosed that he was suffering from some obstruction in the bile-duct. I prescribed for him a saline aperient, and advised his entire withdrawal from business, and complete rest. Two days after I had first seen him, he was sent for, and found him in bed, suffering most excruciating pain in the region of the liver and stomach, constantly vomiting, and in a cold clammy perspiration. Under the influence of calomel and opium, iced soda-water, and hot poultices, the symptoms were much relieved, and on the following day he described himself as being free from pain. Just previously to my visit, he had passed, as he said, before he could help himself, about a tumblerful of oily, highly offensive, pale coloured fluid; and this corresponded in character, his wife told me, to what he had passed on some occasions before. His urine was scanty, high coloured, and loaded with lithates. On the second day, he being free from pain, I ordered a full dose of sulphate of magnesia and senna, and gave directions that any motion that resulted should be saved. It was not long before an effect was produced; and I carefully passed a somewhat copious pale coloured most offensive stool through muslin, and I found three gall-stones, each about the size of a pea—two of them having single facets, the other not being so marked. For some days he remained under my care, but eventually became able to visit Harrogate, which he did with much benefit. The motions had become quite normal, and continued so as long as I had the opportunity of seeing him.

The peculiar oily character of this patient's motions, similar to what your correspondent relates, reminded me of a statement I had read somewhere (but where I now forget), that obstruction of the common bile-duct frequently gave rise to the presence in the motions of fatty matter; and upon this fact I founded my diagnosis at his first visit, verified by subsequent events. I would therefore suggest to your correspondent that perhaps his liver is at fault. There may be an obstruction in his common bile-duct, but of what nature I could not venture to state. With regard to the attack of pneumonia from which he suffered, it may be that this "local inflammation" to which persons who suffer from faulty action of the liver—indicated by copious deposits of lithic acid in the urine—are prone, may have arisen from the same faulty action of the liver. Again, too, in persons who have been infected by specific poisons, typhoid fever, and the like (your correspondent's diarrhoea, caused by his superintending the opening of a cesspool, to wit), how often are they sufferers from congestion of the liver? The English translation of his signature may also give some clue to the cause of his ailment, for advancing age does not increase functional activity—it rather impairs it. I

cannot therefore help thinking that this discomfort is to be traced to the liver. The "liver", I know, "covers a multitude of sins", but the symptoms point most distinctly to this organ being the probable seat of the mischief. To help him out of his difficulty is another question. I should advise him to abstain from oily and saccharine food, to drink small quantities of seltzer-water and brandy, to take plenty of open-air exercise, and occasionally in the early morning a full dose of mineral water, made warm—the Hunyadi János for preference; above all, not to be disconsolate about his state, but to remember "three score years and ten is the allotted time for man".—Yours truly, W. B. HOLDERNESS.

Huntingdon, April 9th, 1877.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Scarborough Daily Post; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; The Hull Criterion; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The High Peak News; The Metropolitan; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Middlesex Advertiser; The Rock; The St. Andrew's Gazette; The West Cork Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Warrington Express; The Croydon Chronicle; The Northampton Herald; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Richmond and Twickenham Times; The Western Morning News; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; The Manchester Free Lance; The Belfast News Letter; The Malvern News; etc.

\*.\* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

#### COMMUNICATIONS, LETTERS, etc., have been received from:—

Sir Thomas Watson, London; Dr. J. Braxton Hicks, London; Mr. T. Annandale, Edinburgh; Dr. George Johnson, London; Dr. Gillespie, London; Mr. A. W. M. Robson, Leeds; Mr. Greenough, London; Dr. Parsons, Goolie; The Secretary of Apothecaries' Hall; Dr. J. Milner Fothergill, London; M.D. Ed.; The Secretary of the Quekett Microscopical Club; Mr. R. Barwell, London; Mr. J. A. Spencer, Ballinasloe; Dr. Edis, London; Good Friday; Mr. Eastes, London; An Old U. C. H. House-Surgeon; Dr. Tripe, London; Dr. Collicie, Homerton; Dr. J. Burdon Sanderson, London; The Secretary of the Hunterian Society; Dr. Hitchcock, Lewisham; The Registrar-General of England; Dr. Chavasse, Berlin; Ubique; Dr. Ogston, Upper Norwood; Dr. Kelly, Taunton; Mr. Wanklyn, London; The Registrar-General of Ireland; Dr. Wilson, Alton; Dr. W. Fairlie Clarke, Southborough; Dr. Wardell, Tunbridge Wells; W. W.; Dr. Winn, London; T. S. P.; Mr. R. Wooton, London; Dr. J. Crichton Browne, London; Curiosity; Dr. Broom, Clifton; The Registrar of the Royal College of Physicians; Mr. Inghen, London; Our Edinburgh Correspondent; Mr. J. Netten Radcliffe, London; Dr. Bond, Gloucester; Dr. Taaffe, Brighton; Dr. Robertson, Glasgow; X.; Dr. J. W. Moore, Dublin; Dr. Munro, London; Dr. Shinkwin, Cork; L. M. D.; Mr. Hodson, Bishops Stortford; Mr. Cribb, Bishops Stortford; Dr. Drummond, Dronfield; Dr. Rutherford, Edinburgh; Mr. G. H. Evans, Birmingham; Dr. Goodchild, Leamington; Mr. T. P. Lucas, London; Mr. Hamilton S. Cartwright, London; An Old Member of the College; Mr. H. Wordsworth, London; Associate; Mr. S. M. Bradley, Manchester; Dr. Joseph Rogers, London; Mr. W. Martindale, London; Mr. Bushell Annington, Cambridge; N.D.; Dr. A. Campbell, Navenby; Our Dublin Correspondent; Mr. Cooper Todd, Folkestone; The Secretary of the Royal Medical and Chirurgical Society; Dr. Gore, Dublin; Dr. Cayley, London; Mr. F. Pope, Durham; R. J. W. C.; Mr. H. J. Ashburner, Horsham; Mr. Rothwell, Bolton; Mr. C. W. Chubb, Torpoint; A Country Practitioner; Mr. Drinkwater, Bicester; Fair Play; Mr. Edmund Lloyd, London; Dr. Stamford Felce, London; Dr. Joseph Bell, Edinburgh; Dr. Sawyer, Birmingham; etc.

#### BOOKS, ETC., RECEIVED.

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Fowles's Manual of Chemistry, Theoretical and Practical. Vol. 1. By H. Watts, B.A., F.R.S. London: J. and A. Churchill. 1877.  
A Practical Treatise on Operative Dentistry. By J. Taft. Third Edition, 128 Illustrations. London: J. and A. Churchill. 1877.  
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What is Vital Force? A Short and Comprehensive Sketch, including Vital Physics, Animal Morphology, and Epidemics. By R. Fawcett Battye. London: Tribner and Co. 1877.  
Gout: its Cause, Nature, and Treatment. By John Parkin, F.R.C.P.E., F.R.C.S. London: Hardwicke and Bogue. 1877.  
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Preliminary Report of the Mortality Experience of Mutual Life Insurance Company of New York. By I. S. Winston, M.D., and E. J. Mar-h, M.D.  
Clinical Records of Injuries and Diseases of the Genito-Urinary Organs. By Christopher Fleming, A.M., M.D., M.R.I.A. Edited by William Thomson, A.B., M.D. Dublin: Fannin and Co.



## THE LUMLEIAN LECTURES

## THE MUSCULAR ARTERIOLES:

THEIR STRUCTURE AND FUNCTION IN HEALTH  
AND IN CERTAIN MORBID STATES.*Delivered at the Royal College of Physicians of London.*

By GEORGE JOHNSON, M.D., F.R.S.,

Fellow of the Royal College of Physicians; Professor of Clinical Medicine and  
Senior Physician to King's College Hospital; etc.LECTURE II.—*Concluded.*

*The Relation between Renal Disease and Hypertrophy of the Heart.—Various Hypotheses.—Hypertrophy of the Muscular Arterioles: its Relation to Renal Disease and to Cardiac Hypertrophy.—Results of Arterial Tension in Bright's Disease. 1. Degeneration of Arterial Walls. 2. Cerebral Hemorrhage. 3. Reduplication of the First Sound of the Heart: its Cause and its Practical Significance.*

I HAVE already referred to the hypertrophy of the left ventricle as an intelligible physiological result of the more forcible muscular effort required to propel the blood through the resisting arterioles. During the progress of the cardio-vascular changes, it happens not unfrequently that the walls of the large arteries undergo more or less of structural change. They become thickened and indurated, and, as a result of these textural changes, their elasticity is more or less impaired. These structural changes in the walls of the larger arteries may be partly caused by the excessive strain to which they are subjected under the influence of the high tension resulting from the antagonism between the resisting arterioles and the hypertrophied ventricle. It is a matter of common observation, that the walls of the arch of the aorta not unfrequently have their texture injured and their elasticity impaired by the forcible distension to which they are subjected when, in consequence of incompetence of the aortic valves, the left ventricle has become much dilated and hypertrophied.

In part, perhaps, the arterial degeneration in cases of Bright's disease may be excited by the morbid quality of the blood which they are continually transmitting—the same morbid quality of blood as that which not uncommonly sets up inflammatory changes in the lining or the investing membrane of the heart itself. Whatever may be the determining cause of the structural changes in the larger arteries, it is certain that, since the elasticity of the large arteries is a force which aids the heart in propelling the blood onwards, the loss or impairment of that elasticity must add to the work of the heart, and thus tend to increase the hypertrophy of the left ventricle. Hence the resistance to the blood-current resulting from the excessive contraction of the muscular arterioles is still further increased by the not infrequent complication of degeneration of the walls of the large arteries.

Dr. Galabin, in the pamphlet before referred to, has shown, from a comparison of the *post mortem* records at Guy's Hospital, that hypertrophy of the left ventricle is more frequently associated with granular kidney and healthy large arteries than with atheromatous arteries and healthy kidneys. He also shows that the hypertrophy of the ventricle, which results from degeneration of the arteries alone, is less in amount than that which is often associated with disease of the kidney while the large arteries are healthy. This result might have been inferred from the experiments on apnea referred to in my last lecture. For, since it has been proved that the combined force of contraction in the muscular arterioles is greater than that of the ventricle, it is evident that the contracting arterioles would impede the circulation, and so add to the work of the ventricle in a greater degree than the degeneration and impaired elasticity of the large arteries.

In the advanced stages of renal degeneration, some of the muscular arterioles may undergo degenerative changes, partly perhaps due to the impure blood which they transmit, and partly to the excessive strain to which they are subjected by the forcible contraction of the hypertrophied heart. In the so-called lardaceous form of renal disease, the muscular arterioles very early undergo this degenerative change, and their contractile power being thus impaired, they are unable to regulate or to impede the circulation. Hence it happens that hypertrophy of the heart is rarely associated with this lardaceous form of disease.

Amongst the accidental injuries which result from the high arterial tension associated with renal disease, one of the most frequent and most serious is the occurrence of *rupture of one or more intracranial arteries*, and consequent hæmorrhage into the substance or on the surface of the brain. It has been a debated question with some writers on cerebral hæmorrhage, whether the occurrence of that accident is favoured by hypertrophy of the left ventricle. When hypertrophy of the heart is a result of disease of the aortic valves, or of degeneration with impaired elasticity of the walls of the large arteries, it is generally no more than sufficient to overcome the impediment thus offered to the circulation. The strength of the left ventricle, therefore, in such cases is not a true measure of the force with which the blood is sent into the distal arteries. On the contrary, it is a measure of the difficulty with which the blood is transmitted through the primary branches, and, therefore, through the entire system of arteries. When hypertrophy, thus originating, is associated, as it sometimes is, with cerebral hæmorrhage, the reason is that the hypertrophy and the hæmorrhage are joint results of one common cause, namely, degeneration pervading more or less extensively the arterial tree. The hypertrophy of the left ventricle is a consequence of degeneration of the aorta and its primary branches. The cerebral hæmorrhage is a consequence of a similar degeneration of the arteries of the brain.

The state of the circulation is very different when the left ventricle has become hypertrophied, in consequence of the impediment resulting from contraction of the hypertrophied muscular arterioles in connection with degeneration of the kidney. In this state of things, while the arterial stopcocks are resisting the passage of the morbid blood, the strong left ventricle is forcibly driving it onwards. There is thus an excessive strain upon the whole length of the arterial pipes, between the stopcocks and the cardiac forcing-pump. One of the bits of arterial tubing being overstretched, becomes brittle, and breaks; then the powerful ventricle forces the blood through the ruptured artery into the yielding tissue of the brain, and a rapidly fatal sanguineous apoplexy is the result. It is a well known fact that some of the most formidable cases of cerebral hæmorrhage are those which are associated with granular contraction of the kidney.

Here it may be convenient to discuss the phenomena called *reduplication or doubling of the first sound of the heart*, which many observers have noted as being one of the most frequent results of the high arterial tension associated with various forms and stages of Bright's disease. Dr. Sibson devoted much time and labour to the investigation of this physical sign of arterial tension, and he discussed it at length in his Lumleian lectures. He explains the reduplication of the first sound by stating that the left ventricle, owing to the resistance offered by the tight arteries to the expulsion of its contents, continues its contraction later than the right, which has expelled its blood into the pulmonary artery with comparative ease. The shock of the first sound is heard at the end of the contraction of the ventricle. Hence, in consequence of the left ventricle contracting more tardily than the right, there is a doubling of the first sound.

Dr. Sibson admits that there is a difficulty in reconciling this explanation of doubling of the first sound with the absence of doubling of the second sound in the same cases. If the left ventricle contract more slowly than the right, so that the sound of the two ventricles is separated by an appreciable interval, it would seem that the aortic valves must close later than the pulmonary, and there should be a double second as well as a double first sound. Dr. Sibson endeavoured to meet this difficulty by the following argument. "In these cases, the systemic arteries are always in a state of great tension. When the blood ceases to be sent into the tight aorta, the instant contraction of the walls of the arteries sends the blood back upon the aortic walls and valve. The pulmonary arteries, at the commencement of the systole, are comparatively flaccid, but become tense at the end of it. The walls of the pulmonary artery begin to contract and send back a reflux wave again upon the trunk of the artery; but, as these walls are not always in a state of tension, they take a longer time to contract than those of the aorta and its branches. Owing, therefore, to the slowness of the pulmonary and the quickness of the aortic contraction, the latter, which is already heavily handicapped, makes up in speed what it loses in time, and the two systems of arteries deliver their back-stroke at the same instant."

Now, it seems to me that this explanation, while it apparently removes one difficulty, raises another of a very formidable character. If the greater tension of the aorta, in the cases of renal disease under consideration, enable it to overtake the earlier but less rapidly and forcibly contracting pulmonary artery, it seems obvious that, in the normal condition, when the aorta and the pulmonary artery commence their elastic contractions at the same instant, the much greater tension of the aorta, with its thicker and stronger walls, should react



upon and close its valves before those of the more feebly contracting pulmonary artery are closed, and the result would be reduplication of the second sound as a constant and normal condition. During the last two years, since my attention has been particularly directed to this subject, I have met with numerous instances of an analogous doubling of the first sound in cases of general emphysema of the lungs, with impeded pulmonary circulation and resulting fulness and hypertrophy on the right side of the heart. In these cases, the increased tension of the pulmonary artery consequent on the obstruction in the lungs can never equal the normal tension of the aorta. However great may be the hypertrophy of the right ventricle in cases of emphysema, the thickness of its wall is never equal to that of the left ventricle. If, then, in accordance with Dr. Sibson's theory of asynchronous ventricular contraction, the right ventricle, in consequence of increased tension in the pulmonary artery, complete its contraction later than the left, and thus cause the doubling of the first sound, the closing of the pulmonary valves must inevitably be effected later than that of the aortic, and the second sound must also be doubled. The reverse, however, is the case. The second sound is single in these cases of emphysema, while the first is distinctly reduplicated.

There are anatomical difficulties in the way of accepting the theory of an asynchronous contraction of the ventricles in explanation of doubling of the first sound. The muscular fibres of the two ventricles pass from one side to the other and interlace in such a manner as appears to render the synchronous contraction of the ventricles a physical necessity. And, in watching the exposed heart of a living animal in the different stages of apnoea—first, in the stage of systemic obstruction, with distension of the left cavities, and later, during the period of pulmonary obstruction, with great distension of the right cavities and comparative emptiness of the left—I have particularly observed the uninterrupted exact synchronism of the contractions on the two sides.

A consideration of the difficulties which present themselves in relation to Dr. Sibson's theory of reduplication of the first sound in connection with Bright's disease led me to seek for another explanation of the phenomena;\* and last year I ventured publicly to suggest that the true explanation is to be found in the fact that the contraction of a *living*, and especially of an *hypertrophied auricle becomes audible*, and thus the first division of the double first sound in the cases under consideration is the result of the auricular systole. I believe that this explanation of reduplication of the first sound will be found consistent with all the ascertained facts. I was led up to this explanation by observing that the rhythm of the heart's sounds in cases of reduplication is precisely the same as that of the triple pericardial friction-sound which may often be heard in cases of pericarditis, the first element of the triple friction-sound being caused by the systole of one or both auricles roughened by lymph.

This triple pericardial friction-sound may require here a few words of explanation. For some years past, when describing the friction-sound of pericarditis, I have been in the habit of speaking of it as not merely double—to-and-fro—but, in a large proportion of cases, as triple, a third sound often intervening somewhere between the other two. I said "somewhere", because until recently I could not tell at what period of the heart's revolution the third sound occurred. I got the first hint towards the solution of the problem from a very interesting clinical lecture published by the late Dr. Hyde Salter (*Lancet*, July 29th, 1871, p. 151). In that lecture, Dr. Salter described a case of rheumatic pericarditis, in which a friction-sound double over the mid-sternum became triple over the right third intercostal space, close to the sternum; and, as this triple character of the friction-sound was most marked when the stethoscope was placed directly over the right auricle, Dr. Salter said: "I feel no doubt that the third element of the sound, on passing from the surface of the ventricle to that of the auricle, is due to auricular pericardial friction." This patient recovered.

In a second case of renal pericarditis related by Dr. Salter, a single pericardial friction-sound of distinctly presystolic—that is, auricular systolic—rhythm was heard over the third costal cartilage, about an inch to the left of the sternum; and, the patient dying a few days afterwards, the left auricle was found covered and roughened by lymph. "The roughening was confined to the surface of the auricle, and, therefore", Dr. Salter remarks, "the friction-sound coincided with the movements of the auricle."

Not long after the publication of Dr. Salter's lecture, a man was admitted under my care with granular kidney in an advanced stage. A few days after his admission, I noted a presystolic friction-sound, most distinct between the left nipple and the sternum; and, as the

sound was evidently synchronous with the auricular systole, I stated at the bedside that it was probably caused by recent lymph on the surface of one auricle. Three days later, in addition to the presystolic friction before noted, there was a systolic friction-sound heard most distinctly over the apex of the heart, just to the left of the mammary line, the heart being enlarged. I then expressed my belief that, besides the roughening of the auricle by lymph, there was a patch of lymph near the apex of the ventricle. In the course of about a month, first the presystolic friction ceased to be heard, and then the systolic friction ceased and was replaced by a systolic blowing murmur at the apex. The patient died after being rather more than two months in the hospital; and, at the inspection, we found, as we had expected, that the right auricle and the apex of the right and left ventricles were covered by lymph, the smoothing down of the surface of which by friction accounted for the cessation of the friction-sounds which were distinctly audible when the surfaces were roughened by recent exudation. The margins of the mitral valve were thickened by lymph, and thus the regurgitant mitral murmur was explained.

And now, having learned from the study of Dr. Salter's recorded cases, and from the observation of this one case under my own care, that an auricle covered by lymph may cause a friction-sound of presystolic rhythm, I saw that in this sonorous influence of the contracting auricle was to be found the interpretation of the triple friction-sound of pericarditis with which I had long been familiar as a clinical fact, although I had not heretofore been able to explain it.

When the general surface of the heart, including both auricles and ventricles, is covered by recent lymph, the friction-sound is distinctly triple, *rub-rub-rub*, reminding one, as Dr. Salter says, of the triple sound of a canter. The first two divisions of the triple sound occur in quick succession, the third after a longer interval; then follows a pause, and again the *rub-rub-rub* occurs. Now, if, while we are listening to this triple sound, we place our finger over the heart's apex, or over one carotid artery, and at the same time bear in mind what we have seen of the rhythmical contractions of the exposed heart of a living or a recently dead animal, we can readily perceive that the first element of the triple sound is auricular systolic, the second ventricular systolic, and the third ventricular diastolic; while the silent interval which follows coincides in time with the post-diastolic pause. The relation of the triple friction-sound to the heart's movements may be represented as follows.

Rub	}	Auricular systole.
Rub		Ventricular systole.
Rub	}	Ventricular diastole.
Rub		
Rub	}	Auricular systole.
Rub		Ventricular systole.
Rub	}	Ventricular diastole.
Rub		

I have thus briefly referred to the triple friction-sound of pericarditis, for the purpose of pointing out that the rhythm of the heart's sounds in a case of reduplication of the first sound is precisely the same as that of the triple friction-sound. The triple friction-sound being represented by *rub-rub-rub*, the triple sounds in a case of reduplication may be expressed by *rat-tat-tat*. The cantering character of the sounds may be imitated by bringing down sharply upon the table in quick succession the ends of three flexed fingers, making the two first taps nearer together than the second and third. The friction-sounds are longer and more nearly continuous, but I repeat that the rhythm is precisely the same in the two classes of cases. The relation of the triple sound to the heart's movements may be represented as follows.

Rat	}	Auricular systole.
Tat		Ventricular systole.
Tat	}	Ventricular diastole.
Tat		
Rat	}	Auricular systole.
Tat		Ventricular systole.
Tat	}	Ventricular diastole.
Tat		

The reduplication of the first sound in cases of Bright's disease is usually heard most distinctly between the mamma and the sternum in the third left intercostal space; that is about the line of junction between the auricle and ventricle. The sound may be single or indistinctly double at the apex, while it is decidedly double at the third in-

\* A Clinical Lecture on Triple Pericardial Friction-Sound, and on Reduplication of the First Sound of the Heart (*Lancet*, May 13th, 1876).



terspace and again single over the aorta. This statement of the position in which the reduplication is best heard accords with Dr. Sibson's account; but our explanations differ essentially. He states that, in this position, the asynchronous contraction of the two ventricles is best heard, while I maintain that the contraction of the tense, dilated, and often hypertrophied auricle is there heard immediately before the sound of the ventricular systole.

The question then arises, Does the contraction of the auricle afford a satisfactory explanation of the first division of the reduplicate sound? I believe that it does. It is of course admitted that in the normal state the contraction of the auricle, contrary to Laennec's original theory of the heart's sounds, is inaudible; but we have positive evidence of sound resulting from the auricular systole in two distinct morbid states. First, as a result of constriction of the mitral orifice, we have the now well-known presystolic—or, as Dr. Gairdner happily designates it—the auricular systolic mitral murmur. In these cases, the impediment resulting from mitral constriction causes a slow but forcible auricular systole with a resulting presystolic, that is, preventricular systolic murmur, followed by a short first sound, the result of rapid contraction of the partially filled left ventricle. Second, when the surface of an auricle is roughened by lymph, there occurs the presystolic, or rather the auricular systolic friction-sound. Third, as a result of obstruction in the systemic arteries, and consequent distension of the left auricle, either with or without hypertrophy of its walls, we have, as I believe, an audible auricular systole, constituting the first division of the reduplicate first sound in cases of Bright's disease. The rhythm of this auricular systolic sound—its place in the heart's revolution—is precisely the same as that of the auricular systolic mitral murmur, and of the auricular systolic pericardial friction-sound; and this identity of rhythm in the three classes of cases affords one of the strongest proofs that the sound in each case is caused by the auricular systole. The triple friction-sound of pericarditis, and the triple sound associated with doubling of the first sound, are alike suggestive of a canter.

I have before stated that the reduplication of the first sound occurs not only in connection with Bright's disease, but it is very commonly associated with the impeded pulmonary circulation resulting from advanced general emphysema of the lung. I have observed it frequently in elderly persons with degeneration and rigidity of the arterial walls; also very distinctly above and to the right of the left nipple in some cases of mitral regurgitation. There is one feature which is common to all these cases, and that is an impeded circulation either pulmonary or systemic, and the obstruction acting backwards causes distension, and by degrees hypertrophy of one or both auricles. It is obvious that an impediment commencing in the systemic arteries, or on the left side of the heart, may by a retrograde influence extend through the lungs to the right cavities of the heart.

In some cases of coexisting emphysema of the lungs and chronic Bright's disease, both sides of the heart become simultaneously hypertrophied, and the reduplication of the first sound is distinctly heard over an extensive surface. During the last year I have seen several examples of this complication. It is obvious that the theory of asynchronous ventricular contraction entirely fails to explain the reduplication which results from a simultaneous—equal or nearly equal—impediment in the systemic and in the pulmonary vessels. An equal retardation of the two ventricles would not throw one behind the other. But the auricular theory completely explains the phenomena. That a distended and especially an hypertrophied auricle should produce sound by its contraction, is quite consistent with what we know of the causation of the normal sounds of the heart. While the first sound is caused by the tension of the ventricular walls and the auriculo-ventricular valves during the systole of the ventricle, the second sound results from the sudden tension and vibration of the arterial valves and walls during the diastole of the ventricle. In like manner, it is maintained that when, in consequence of excessive arterial pressure, there is great distension of the heart's cavities, the tense auricle contracts audibly and causes the earlier division of the double first sound, the double sound being the result of the auriculo-ventricular systole.

That the contraction of the terminal muscular arterioles, excited by blood-contamination, the result of renal disease, should act backwards through the systemic arteries, and the left ventricle and auricle, so as to cause an appreciable modification of the heart's sounds, and ultimately hypertrophy of the muscular tissue of the propelling heart and of the resisting and regulating arterioles, is an interesting illustration of the correlation of physiological forces and of the intimate relation between physiology and pathology.

In confirmation of the explanation which I have given of the so-called reduplication of the first sound, I may mention that, after I had written the lecture in which I first publicly propounded this theory, my

attention was directed to a recently published thesis by Dr. Exchaquet of Paris, entitled *D'un Phénomène Stéthoscopique propre à certaines Formes d'Hypertrophie du Cœur*, in which I found that my explanation of the phenomena had been anticipated.

The author of the thesis gives the results of numerous observations made by his teacher M. Potain on that modification of the heart's sounds which Dr. Sibson called reduplication, but which the French observers designate *bruit-de-galop*. Dr. Exchaquet quotes Dr. Sibson's Lumleian Lecture, raises various strong objections to his theory of asynchronous ventricular contraction, and maintains that the pre-systolic element of the double first sound is caused by an *abnormally energetic and forcible contraction of the left auricle*. I was much interested to find that my explanation, arrived at quite independently, had thus been anticipated and confirmed by M. Potain, who points out that, when the chest is not thickly covered by fat, the pre-systolic contraction of the auricle may be seen and felt in the third left intercostal space, where, in the same cases, the *bruit-de-galop* is also most distinctly heard.

I find, however, that M. Potain looks upon this modification of the heart-sounds as being almost invariably associated with certain forms of albuminuria. As an exaggeration of a normal phenomenon, he has observed it to a very slight degree, and as a transient condition in persons free from organic disease and from functional disorder of any kind; but when the *bruit-de-galop* is pronounced and permanent, he believes it to be invariably associated with albuminuria and resulting distension of the left auricle; and, in fact, he looks upon this acoustic sign as diagnostic of certain forms of albuminuria. The author makes no reference to the very frequent association of the *bruit-de-galop* or doubling of the first sound with emphysema, and other conditions, resulting in an impeded circulation through the lungs, and consequent distension of the right auricle, but often unassociated with albuminuria: a class of cases of very common occurrence to which I have directed attention in this lecture.

The reduplication of the first sound, upon the interpretation of which I have dwelt so long, is not without its practical prognostic significance and value, in so far as it affords undoubted physical evidence that the impediment to the circulation, whether in the pulmonary or in the systemic vessels, is acting backward through the ventricle upon its associated auricle, and is causing some degree of auricular dilatation and hypertrophy; and, on the other hand, the cessation of the reduplication, as, for instance, in some cases of acute and transient Bright's disease, is evidence of returning freedom of the circulation, and is thus far of favourable omen.

Again, it is obviously important to observe and study this peculiar modification of the heart-sounds with sufficient care to distinguish it from any form of valvular murmur. I do not doubt that a modification of reduplication, by which the two first elements of the triple sound are blended together, so as to give the first sound of the heart a prolonged character, has often been mistaken for the murmur of mitral regurgitation; and this error of observation has been made the basis of an alarming, but wrong, prognosis. I scarcely need add that our interest and our duty alike prompt us to avoid so serious a mistake.

## AN ANOMALOUS CUTANEOUS ERUPTION IN VARIOLA.

I WISH to call attention to two cases of variola lately under my care, in which the first appearance of any eruption was a symmetrical erythema of the flanks and loins. In one of the cases, which was confluent and very severe, the true papular eruption seemed to commence just above the erythematous patches and spread upwards, and, contrary to the usual rule, appeared on the face last. The most curious point, however, about this case was, that the erythematous patches, after becoming more livid, gradually returned to the normal colour of the skin, which they attained on the eighth day of the disease, and remained from first to last perfectly free from the specific eruption. In another case, just as the papules were appearing on the face, I noticed a patch of erythema along the anterior border of each axilla; the subsequent condition of these patches, however, I am unable to state, as the patient was sent into hospital. A friend of mine also had two cases with patches of erythema in the flanks; and Trousseau refers to the subject in his *Lecture on Modified Small-Pox* (vol. ii, p. 81), under which category my cases would come, having all been vaccinated in infancy. A common point of interest in these cases is that the patches of erythema appeared at or about the juncture of the trunk with the extremities.

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# CLINICAL LECTURES ON ANTISEPTICISM IN SECTIONS AND RESECTIONS.

BY RICHARD BARWELL, F.R.C.S.,  
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## LECTURE I.

GENTLEMEN,—It may be that the title of this lecture will strike you as somewhat fantastic, but I think when I have finished what I have to say, you will see that it expresses, in as short terms as possible, the gist of the subject matter. I propose, then, firstly to relate to you some cases of section of bone, or, as it is also termed, osteotomy; then certain resections of joints; lastly, I shall gather together the results of a number of major operations, and show you what effect antisepticism has had upon my practice.

Osteotomy is by no means a novel invention. But endeavour has only of late years been made to render the method of its performance such as to ensure, or almost to ensure, rapid and easy recovery. The operation is not like many that we have to perform, necessary for the preservation of life, or even of health; it is undertaken for the cure of deformity or of inconvenience. As such, it is above all things requisite that we should be able to secure very great freedom from danger, and this is only to be done by the avoidance of suppuration. The patient, after the surgeon has done his work, is left with a compound fracture—the broken bone lying very deeply—and if, in this depth, pus form, the patient may perhaps escape with his life, but only after long illness and much suffering; or he may die, exhausted by discharge and pain. Now, this avoidance of suppuration may be aimed at by making only a very narrow and valvular wound through which to introduce an instrument for division of the bone; such instrument being either a saw set on a long stalk, or a chisel. Certain writers speak of these operations as subcutaneous; it is not my wish to quarrel with a mere word, yet a well-established term should be kept to its legitimate meaning. A subcutaneous operation is one performed through a little puncture of the skin; it certainly is possible to introduce a saw capable of dividing a large bone through a small wound but not through a puncture; while the in and out movement of the instrument, obviating exclusion of air, is quite contrary to the idea of subcutaneous surgery. To call the removal of a wedge of bone a subcutaneous operation, is to give language an elasticity beyond all warranty. The chisel, which has the advantage of leaving no sawdust behind it, requires a rather larger wound than the saw.

Of those operated on with the saw, about 9 per cent. have died; some escaped by the skin of their teeth after long suppuration; a very great majority have done well. Yet the results are not sufficiently favourable to recommend to my mind that form of operation. The chisel, on the other hand, has proved a more satisfactory weapon. Mr. Maunder and myself have used it in several cases without fatal issue; a little suppuration followed, I believe, in one of the former gentleman's cases. All the operations above referred to, except my own, were performed either high up in, or at the neck of, the femur.

Professor Volkmann was the first to apply antisepticism to osteotomy, and to employ it in the neighbourhood of the knee-joint. To me belongs the priority in England of using that method of operation, and of applying it to the species of deformity which results from ankylosis at the knee. For I have often considered that the removal of a wedge of bone in such cases is a severe measure, and generally, unless disease also be present, hardly a warrantable one. It is probable that section of the bones, if the operation prove equally favourable in other hands, will supersede the more formidable proceeding.

CASE I.—Catherine G., aged 14, was admitted into Charing Cross Hospital under my care, December 5th, 1876, with the right knee fixed at about 80 degs. The photograph from which this illustration was taken foreshortens the thigh a little and causes the angle to appear wider than it was in nature. It appears that, in the year 1870, she was in the Shrewsbury Infirmary under the care of Mr. Samuel Wood, who kindly replied to my inquiries that, owing to the rebuilding of that institution, he was unable to get at the records; but that he remembered the girl as having strumous disease of the joint, which was bent at an angle; he excised the knee with the patella, and the case was doing well. But her parents, finding that they obtained more pity and money when the child was with them, took her out, and, of course, allowed the leg to remain in any position, the result being as depicted (fig. 1).

I found between the tibia and fibula so slight mobility, that it could not have been distinctly verified if the flexors had not twitched on any attempt to straighten the leg. The limb had lost in length probably

as much from disease as from the excision. The measurements were as follows: Left limb—femur, 16 inches; tibia, 14½ inches: right limb—femur, 11¾ inches; tibia, 13¾ inches.

I had chloroform administered, in order to detect if it might be possible to straighten the knee, but found there was no more motion without that than with the anæsthetic, and that the ankylosis was, to all practical purposes, immovable.

December 21st. I chose a place about two inches above the lower end of the femur, and on the outer and anterior face of the limb made a transverse incision a little more than half an inch long, quite down to the bone through the periosteum. Keeping the knife upon the bone, I used it as a director, and glided along it: the blade of a chisel one-



Fig. 1.

third of an inch broad, thus securing that the instrument should pass into the same periosteal wound. The bone was now, by repeated blows of the mallet, divided, except a thin layer at the back and inner side, where the presence of the artery rendered further intrusion of a chisel dangerous; this small portion was easily broken by a sharp jerk upward of the leg. On trying to straighten the limb, the semitendinosus impeded. I divided its tendon, and put the parts in such position by bringing the foot forward, as gave it the straightest appearance attainable. Even at the expense of a considerable bend of the femur, the leg would not come straight; that is to say, it could not be so placed that the tibia ran in a direction parallel with that of the upper femoral fragment. I considered the advisability of dividing, also, the tibia and fibula; but, as the desired straightness was nearly gained, and as the dimensions (given above) showed that the limb must necessarily be a short one, I thought an additional half inch would be dearly purchased by increasing the gravity of the operation. The wound was, therefore, dressed antiseptically; the limb put into a plaster of Paris bandage, and held in the required position until consolidation took place.

For two hours the girl (in a very excited condition from the ether) made a great noise, sometimes shrieking as in pain, sometimes singing; after that interval she went to sleep, and has not had a moment's pain since. The drainage-tube was kept in the wound for ten days; in thirteen days healing had taken place. On January 30th, she was discharged, but, finding the photographer had failed to get a picture, I kept her another week.



Fig. 2.



The patient, as seen now, presents a remarkable condition; it is impossible by eye to detect any of that angular bend of the femur which was so evident immediately after the operation (fig. 2). Manual examination reveals only a slight incurvation. The figure gives an accurate representation of the limb—it looks like that of a knee very slightly bent. The child is under my supervision at the Cripples' Home; she is just now at the seaside retreat, and I have not seen her very lately, but I know (April 4th) that she is able to get about wonderfully well considering the shortness of the limb.

**CASE II.** John B., aged 11, came under my care into Charing Cross Hospital with a knee falsely ankylosed at a right angle. In consequence of old disease, there were many cicatrices about the joint. The condyles of the femur had become elongated into that form which renders forcible extension impossible without producing at the same time posterior dislocation; nevertheless, I thought it only right to try if some reposition of parts might, under chloroform, be effected (fig. 3). Although both hamstring muscles were divided, it was found impossible to alter the angle at the knee. As soon as straightening began, the tibia commenced to glide backward towards posterior dislocation. After about a week, the puncture for division of the outer hamstring suppurated. The mother of this lad, residing in Ireland, positively

Fig. 3.

forbad, through the lady who asked me to take him in, any operation for the removal of parts, though, as long as nothing was taken away, she did not object to any measures for straightening the limb. I was thus limited to a proceeding I might not otherwise have chosen; nevertheless, the soft parts about the knee, and the lower end of the femur, though not diseased, were hardly sound enough to embolden me to cut through them; I, therefore, determined to divide, firstly, that bone a little higher, and, after an interval, to cut through the bones below the knee.

January 25th. I cut through the femur about four inches above the joint, and put the limb into plaster of Paris, with such bend of the femur as seemed to promise, after



Fig. 4.

the second operation, most straightness of limb with least subsequent projection of the knee. The result is here seen (fig. 4). The bone had become firmly united, and the splintage was removed on March 1st; but, owing to certain circumstances unconnected with the case, I could not perform the second operation immediately.

March 15th. I divided the tibia and fibula, the former from a wound on its outer side just below the tubercle; the latter also from a wound on the outer side below the transit of the external peroneal nerve.

The limb was straightened. Owing to the plaster of Paris supplied being of a poor quality it did not fix quickly, and some subsequent flexion took place. However, the bones reunited well; on April 12th, the plaster was removed, and the photograph, from which this figure is engraved, was taken (fig. 5).



Fig. 5.

I will only remark that, even in the few days that have elapsed since then, the angles at the femur and tibia are very much decreasing, as also is the projection at the knee. Nature seems undertaking, as in the case of Catherine G., a modelling process which, in time, will almost abolish the angular appearance. As it is, the left limb is only about an inch and a half shorter than the other, and when he has a high shoe the boy will walk very well.

In my next, a few more words will be said about this operation, previously to passing to another subject.

**LEEDS.**—Dr. Goldie's report for the four weeks ending December 30th was satisfactory, as it showed an unusually low death-rate of 25.0 per 1,000 living, and a smaller proportion than usual of deaths under five years. There were no deaths from small-pox or diphtheria, but there had been as many as twenty-one from fevers. He reports a few cases of typhus, but says that the disease had not assumed an epidemic character, and that, therefore, there is no need of alarm, as sporadic cases will occasionally occur in large towns like Leeds; that a strict supervision will be kept over the cases and the houses in which they occurred, so as to prevent any further spread of the disease, as he believes that, although typhus fever "ranks higher in the infective scale, yet, if early notice is given of cases, it can be readily stamped out like small-pox. The statistics of fever printed in the last report of the Registrar-General show that there has been a greater continuous decrease in the number of deaths from 'fever' than in any other disease of the zymotic class, as in the decennium 1851-60 the death-rate in England per 10,000 population from the seven chief zymotic diseases was 38.6, whilst in 1861-70 it was 4.16, and in 1871-4, 35.6; whilst from fever in 1851-60 it was 9.26; in 1861-70, rather less, viz., 9.05; and in 1871-4 it was 6.19. In none of these last four years was it as high as 7.0, whilst in only one of the previous twenty years was it below this number." Time only can show if the diminution depends on the more energetic carrying out of sanitary measures throughout England or on temporary circumstances; but we shall certainly be disappointed if Dr. Goldie's opinion be not verified to a greater or less extent—viz., that typhus fever can readily be stamped out, provided that early notice be given to the medical officer of health, and that isolation and disinfection be promptly carried out. Dr. Goldie also refers to a conviction which he had obtained for the selling of milk that was contaminated with epithelial cells and pus-corpuscles.



## THE USE OF THE FORCEPS IN THE FIRST STAGE OF LABOUR.\*

By JOSEPH GRIFFITHS SWAYNE, M.D.,

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"THE first stage of labour must be perfectly finished before we think of applying the forceps." This is Denman's fourth aphorism, and is a rule of practice which has held almost undisputed sway for nearly a hundred years. In the present day, however, the motto of the accoucheur may be said to be "Nullius in verba magistri". No truth is considered to be so firmly established that it is taken for granted and allowed to pass without question. The modern accoucheur does not feel bound to swear by a particular rule of practice because it was that of his "old master" at London, Edinburgh, or Dublin, as the case may be, but reserves his judgment until he has had frequent opportunities of testing it for himself by his own experience. This is the case very much with the use of the forceps. In no branch of obstetrics have we departed so much from the precepts and practice of our forefathers as in this. The forceps is now used with much greater freedom than it was formerly, and, as experience has abundantly proved, with the best effects. For instance, about thirty years ago, according to Dr. Churchill's statistics, the forceps was not used in British practice as often as once in three hundred cases. A reluctance to resort to this instrument was at that time the especial characteristic of the Dublin school. This, no doubt, was greatly due to the precept and example of Dr. Joseph Clarke, who was master of the Rotunda Hospital from 1787 to 1793. According to the first report of that hospital published by him, he used the forceps only once in every seven hundred and twenty-eight cases, and his biographer further states that he only used it "once in the multitude of cases under his care in private". Dr. Collins, who was master of the Rotunda from 1826 to 1833, scarcely employed the forceps with greater frequency; for he records but twenty-four forceps cases in a total of 16,414.

In the present day, on the contrary, the Dublin School of Midwifery is pre-eminent for skill and boldness in employing and developing the great capabilities of this most valuable aid to labour. We find, from Dr. George Johnston's report of the Rotunda Hospital for 1869, 1870, and 1871, that, of 3,338 women delivered in the hospital during that period, 227 were assisted by the forceps, being at the rate of 1 in 14.74. This increased use of the forceps is attended, as Dr. Kidd has pointed out, with a diminished maternal mortality, but more especially with a most important saving of infant life, chiefly because the forceps is now employed in Dublin in difficult cases, which would formerly have been delivered by the perforator.

Within the last five years, however, a still more startling innovation has arisen in obstetric practice; viz., the use of the forceps in the first stage of labour. In his report of the Rotunda Hospital for 1872, Dr. George Johnston remarks: "In thirty-five instances, we were obliged to employ the forceps before the os was fully dilated, twenty-seven being primiparæ and eight multiparæ. In thirty of these, the interference was considered necessary, in consequence of the os uteri continuing undilated, apparently the result of the too early rupture of the membranes and the escape of the liquor amnii."

In his report for 1873, Dr. Johnston again gives thirty-six cases in which the forceps was applied before the os uteri was fully dilated, and remarks: "As there may still be many who will be astonished at this apparently bold mode of practice, and mayhap question its justifiability, I beg leave to assure them that, having adopted it for the last two years, during which time we delivered seventy-one such cases, we are more and more convinced every day of its great advantage in saving the lives both of mother and child." He then gives an analysis of the above thirty-six cases, and calculates the amount of expansion of the os uteri in each at the time of the operation, four inches being assumed to be the utmost dilatation of the os uteri, and this diameter of four inches is divided into five parts. "In eleven instances, the forceps was applied when the os was but two-fifths dilated, when, in fact, we were obliged to expand it with our fingers before we could pass the blades, and in every instance both mother and child were saved, with one exception, a case of convulsions, which was brought in comatose. In twenty-two instances, where the os was three-fifths dilated, all the mothers recovered but one, and all the children but two, which were cases of prolapsed funis. In three instances where the os was four-fifths dilated, the mothers recovered and children lived. The position of the head, with regard to the pelvis, at the time when the forceps was employed:—In two cases, the head was above the brim; in fourteen, in the brim, and in twenty it was in the cavity.

\* Read before the Bath and Bristol Branch.

Result: All the mothers recovered but two, one of which, a primipara, who was very delicate and anæmic on admission, died of peritonitis, with uterine diphtheritis; the other, also a primipara, was admitted comatose and in convulsions."

Before a mode of practice so contrary to all precedent can be regarded with favour by obstetric practitioners, it is necessary that the experience of a great number of observers should be recorded. As a report even of a limited number of cases in private practice is of use in this respect, I propose to give my own experience of it, first premising that I adopted this novel method of using the forceps with my mind strongly prejudiced against it as a piece of "meddlesome midwifery" of the most dangerous description. The following cases will show whether my prejudice was well founded.

1. About 1 A.M. on July 16th, 1875, I received a message from Mr. James, requesting me to see Mrs. S., Windsor Terrace, Woolcott Park, whom he was attending in her first confinement. The pains first commenced at 9 A.M. on July 14th, and, when I saw her, the os uteri was only dilated to the size of about three inches in diameter. The pains had gone on continuously and she was feeling exhausted. We, therefore, determined to apply the long forceps. The presentation was natural, the head tolerably low in the pelvic cavity, and I could just reach the ear behind the right pubis. I used Simpson's long forceps. There was not much difficulty in applying it, and in less than an hour I delivered her of a male child alive and tolerably vigorous. The os uteri and the perineum presented very little obstacle to the passage of the head. She did well.

2. On July 21st, 1875, I attended Mrs. T., Miles Road, in her third confinement. The labour began at 4 A.M. on July 31st. The first stage was tedious, and, for four hours after the membranes were ruptured, the head remained high up in the pelvis and the os was scarcely dilated to three inches in diameter. As no progress appeared to be made, I applied the long forceps, and, after some difficulty, delivered her of a very large male child, alive and vigorous. The os was dilated to about three inches in diameter when the forceps was applied, but it did not present any difficulty, as it was soft and dilatable. She recovered well.

3. On June 28th, 1876, I attended Mrs. C., Clifton Park Road, in her first confinement. Labour began at 4 A.M. on the day previously, but the os uteri was very rigid, and, though there had been regular pains throughout the day, it was not dilated larger than a shilling at 10 P.M. I was called up to her at 1.30 A.M. The membranes had just ruptured and the pains were much stronger, but the os was not larger than a half-crown. I then felt the anterior fontanelle towards the right acetabulum, and, by pressure on the right parietal eminence, succeeded in bringing the occiput round to the left acetabulum. The os uteri still continued very rigid, and by 7 A.M. was not larger than a crown-piece. I therefore used Dr. Barnes's long forceps, and, after some time and trouble, delivered her of a large male infant, alive and well, about 8.45 A.M. The pelvis was not very roomy. Some *post partum* hæmorrhage followed. It was restrained by cold, pressure, and ergot. The perineum, notwithstanding careful support, was lacerated nearly to the sphincter. I therefore used three wire sutures. The tear healed by the first intention, and the patient made a good recovery.

4. On September 3rd, 1876, I attended Mrs. S., in Caledonia Place, in her first confinement. She was a blonde, tall, robust in make, and about 36 years of age. Labour commenced five days previously, and the pains of the first stage continued at intervals all that time. The os uteri was rigid and yielded very slowly. About 5 P.M. on September 2nd, it was dilated to the size of a crown. About 9 P.M., it had dilated to the size of the bottom of a tumbler, or a little over two inches in diameter, and the membranes gave way. The pains were regular, but not very frequent. The os uteri continued in much the same state until the next morning, the head being in the pelvic cavity. I could not reach the ear, but I could feel the great fontanelle opposite the right acetabulum. The os uteri was now about two inches and a half in diameter. As the labour had become very tedious, I applied Dr. Barnes's forceps, and, after about four hours, delivered her of a large male child that had apparently been dead for some hours. I concluded that such was the case, because the liquor amnii was much coloured with meconium, and the skin had peeled from a considerable part of the head. The patient made a good recovery.

The above cases, it will be observed, corroborate the testimony which Dr. Johnston has given in favour of the employment of the forceps, under certain circumstances, during the first stage of labour. In all, the result was good as regards the mothers, and also the children, with the exception of No. 4, in which the child was still-born; but, in this case, the death of the infant appeared to have occurred before the forceps was used. It will be observed also that, in one case (No. 2,



a third confinement), the delay in the labour did not arise from a rigid os, but from a disproportion between the head and the pelvis, causing the head to be arrested at the pelvic brim. The diameter of the os uteri did not exceed three inches, simply because the head did not press down sufficiently upon it after the waters had escaped. This incomplete dilatation of the os uteri in cases of contracted pelvic brim has long been familiar to accoucheurs, and has not been considered to be an obstacle to the performance of craniotomy, or even to the careful employment of the long forceps. It is far different, however, in the other three cases, which were primiparae, and in which the insufficient dilatation was the result of rigidity. In these, the forceps would have been formerly considered to be quite inadmissible, mainly, no doubt, for two reasons: first, because the dangers and difficulties attending its use are much greater in the first than in the second stage of labour; and, secondly, because, as Dr. Churchill's statistics show, a protracted first stage is not *per se* dangerous either to the mother or the child. He admits, however, that a protracted first stage may, by inducing fatigue and exhaustion, act unfavourably on the second stage. I had once a well marked instance of this kind. The patient, a primipara aged 30, had been in labour five days before the os uteri became dilated to the size of a crown. The anterior lip of the rigid os uteri then gave way, and a considerable rent took place. The second stage went on well for a time, until the pains almost ceased from sheer exhaustion. I then applied the forceps and delivered her, but the prostration which ensued was so great that the patient nearly lost her life. In this case, all the usual remedies for relaxing the os uteri had been tried, but without effect. I have little doubt that, if the forceps had been applied during the first stage, the result would have been much better. One great object in using the forceps is to anticipate evil rather than to remove it when it exists. Before adopting craniotomy, the accoucheur should be satisfied that urgent symptoms exist which render prompt delivery imperative. With the forceps, however, it is far different. It is so safe an instrument in moderately skilful hands, that it ought to be employed before any symptoms of powerless labour set in. No one in the present day would think of endangering a woman's life by waiting, as Denman recommended, until the pains of labour had ceased and the head had been six hours as low as the perineum. It is quite a sufficient justification for using the forceps that the progress of the labour has been arrested for a time, and that the head has ceased to advance. When the forceps is thus employed in good time, the accoucheur can take time about the operation and imitate nature as closely as possible; but, if he wait for symptoms of powerless labour, he will have to deliver in too great a hurry, and when his efforts are not efficiently seconded by the pains. In the first stage of labour, above all, the delivery should be effected slowly and cautiously. Urgent symptoms have not yet set in, and the accoucheur can, therefore, afford to wait. He should only extract during the pains, and should not mind if the operation occupy three or even four hours, as it did in my last case. He will thus give ample time for the soft parts to dilate and avoid the danger of lacerations.

My experience, then, of the application of the forceps during the first stage of labour is, that the operation, when properly performed, is safe and often very useful, although seldom imperatively demanded; moreover, that it requires a considerable amount of that *tactus eruditus* which can only be acquired by practice, and, therefore, it should not be performed by any man until he has used the forceps at least a dozen times during the second stage of labour; and I am induced, on the whole, to agree with Dr. Playfair's conclusion that, "if the os be not fully dilated, but is sufficiently so to admit of the passage of the forceps, the operation, under urgent circumstances, may be quite justifiable, although it must necessarily be a somewhat anxious one".

#### COMPOUND COMMUNUTED FRACTURE OF THE TIBIA CURED, WITHOUT SUPPURATION, WITHOUT REGULAR ANTISEPTIC TREATMENT.

By J. EATON, M.D., Cleator, Cumberland.

ON reading an article in the BRITISH MEDICAL JOURNAL of March 24th by Surgeon-Major Sinclair, M.D., entitled "Compound Fracture occurring in India: Closure of Wound with Compound Tincture of Benzoin", I am prompted to forward a brief report of the following case.

On July 9th, 1875, R. I., aged 30, an iron-ore miner, sustained a compound comminuted fracture of the left tibia by some iron-ore falling on his leg. A piece of the tibia about two inches long was broken from about the middle of the bone; the upper end of the fragment being slightly de-

pressed, and its lower end protruding a quarter of an inch through a small circular opening in the skin. There was no laceration, nor disturbance of the relations of the muscles of the leg. The whole leg was more or less bruised from the knee to the ankle. Above and below the wound, there existed an abrasion of the skin three inches and a half long; and a continuous stream of blood, free of all appearance of air-bubbles, issued freely from the orifice of the wound.

No difficulty was experienced in reducing the fractured fragment; and, from the favourable condition of the soft parts, it was easily retained in position. As the wound was small and blood issued freely, and as almost certainly no air had got among the tissues, I aimed at healing the wound by "scabbing", and therefore covered it with a fold or two of dry lint. The foot and leg were then carefully bandaged to an external hollow wooden splint (Cline's), which had been well padded by a layer of cotton and a layer of tenax; the wound remaining exposed, so that the lint could be easily changed, if necessary, without the splint being disturbed. An internal (Cline's) splint, similarly padded, was then applied and bandaged on, and the leg placed on a pillow.

The case went on favourably till the evening of July 13th, four days after the accident, when the patient became restless and slightly delirious, was thirsty, had a hot skin and a quick pulse. I took off the internal splint, and found the leg hot and tender to the touch around the seat of the fracture. I did not remove the lint, which had become saturated with blood and formed a hard crust over the wound, but poured carbolic oil, of strength one of acid in twenty of oil freely on the lint, and applied more lint soaked in the oil over the part. The splint was reapplied, but not quite so firmly as before. The patient had a mixture containing thirty-minim doses of spiritus chloroformi every four hours; and a towel wet with equal parts of vinegar and water was kept constantly applied over the front of the leg outside the bandages, and frequently changed, so that it might always be cool. The patient's bowels were also attended to, and his diet consisted principally of milk. For three or four days and nights, he did not sleep soundly; but, after this, each successive night seemed quieter than its predecessor. On July 21st, I again removed the internal splint, and also removed the whole of the lint from the surface of the wound. Not one drop of pus had formed; but the surface of the skin from three to four inches in extent was red and tender. I then applied an alum lotion of strength twenty grains to the ounce, and so arranged the bandages that the lint could be changed twice daily by the patient without removing the splint.

August 14th. I removed the splints; found the skin sound, the bone well united and straight, but the leg weak. I reapplied the bandages without splints, and allowed the patient to move more about on his crutches.

The patient returned to his work November 6th, seventeen weeks after the accident.

#### THE TREATMENT OF INTERMITTENT OR FEN FEVER BY SALICINE.

By W. THOMSON, M.D.,

Consulting-Surgeon to the Peterborough Infirmary; Medical Officer of Health, Peterborough Urban and Rural Sanitary Authorities, etc.

ON making the acquaintance of Dr. MacLagan at Dundee last spring, and discussing the now recognised curative power of salicin in acute rheumatism, I gave it as my opinion that we have in it a remedy equally energetic in staying or cutting short the paroxysm of ague. I determined that, as soon as cases presented themselves, I would give it a fair trial, acting on Dr. MacLagan's suggestions as to its administration in full doses. And I hope that the following cases will prove that the failure of the old-fashioned decoction of willow-bark, both in the hands of the inhabitants in the marshy districts and of the medical men, was from the want of concentration, or the inability to prescribe a sufficiently large dose of the specific drug.

CASE 1.—R. B., aged 32, a native of the Isle of Ely, had been twice under my care, first in November 1875, and, secondly, in March last, for severe attacks of ague. He was treated with quinine, and was three weeks under treatment on each occasion. He said that was a shorter time than usual. On October 2nd, I was sent for to see him at 10 A.M. I found him in bed shaking all over, his teeth chattering, with the painful unhappy expression of countenance one invariably finds in these cases; the skin was moist and clammy; temperature 103 deg.; pulse weak and frequent, 110. He had a hot bottle to his feet, and had taken hot port wine without feeling better. I told him I was going to send him a new remedy, and he was to be



very particular in following the directions and noting his feelings after each dose. I sent him twelve powders, with thirty grains of salicine in each one, to be taken every two hours. I saw him again at 6 P.M., six hours after the first dose. His temperature was 99 deg.; pulse 80. He said he had taken only four powders; he felt so much better after the first. The chilliness began to abate; three hours afterwards, all unpleasant feelings had vanished, and he thought he need not go on with the medicine. He was ordered to leave off the salicine, unless he felt worse. On October 3rd, at 10 A.M., I found him up by the fire, looking weak and tired, but saying he felt well. I told him to be careful, as next day he might have a relapse. On October 4th, at 10 A.M., I found him as on my last visit; he, however, told me that, at six in the morning, he had "the same old feels" come on, and, had it not been for the powders, of which he took two, he was sure he would have had it again. He was ordered to take a powder night and morning, and come and see me on the 6th, which he did, looking much better. He went from home for a week, and, when he came back, he said he had not had such a short autumnal touch for five years, and asked me for some of the medicine to keep.

CASE II.—Jane G., aged 40, was seen on October 10th in bed. Her skin was wet with perspiration, and she was very shaky. She could with difficulty sit up. She had been ill every other day for a week. She was ordered to take thirty grains of salicine every two hours until I saw her again, which I did on the morning of the 12th, when she gave me the following account. "After the second powder, the perspiration stopped, and, after the fourth, the chilliness had gone and the stiffness in the limbs was much relieved." Next day, she was comparatively well. The next morning, she was surprised to find herself equally so. She was ordered to stop the medicine, and only take it again if she had any premonitory symptoms. Four days afterwards, she was quite well.

CASE III.—The following case I consider very satisfactory. W. A., aged 74, had been subject to ague at times for years. He had now been six months under treatment. Quinine had been administered in full doses, until he vowed he would take no more, as he believed he felt worse after it. Nitro-muriatic acid agreed better. The paroxysms of ague occurred every three or four days, generally three times a day. As the next would be his bad day, I ordered him to begin the salicine to-night (thirty grains every two hours, if awake). I saw him at 4 P.M. next day. He had had only one fit, and that the powder seemed to stop short. He felt and looked much better. He was ordered to take thirty grains every four hours until after his next bad day; if not well then, to continue the medicine until seen again. I visited him on December 9th. He said he had a slight feeling of chill the fourth day after beginning the salicine, but yesterday (the 8th) he felt as well as to-day, and that was better than he had done for six months. In fact, he said his limbs were not so stiff as usual, and he walked much better.

As the last two cases occurred in the fen, five miles distant, I could not see them sufficiently often to note with the thermometer the antipyretic effect, or to record the cases in regular hospital form. However, I think my first case shows salicine to have an almost magical effect in restoring the equilibrium of the circulation, making normal the temperature, and checking this troublesome disease, as my last case shows it to be superior to quinine even in cases of genuine ague of old-standing in an aged patient.

My excuse for bringing the above cases before the profession is, that I feel perfectly confident that we have in salicine a most valuable remedy, especially in all malarious fevers, and that I am in hopes these remarks may encourage my professional brethren resident in those districts where both willow-bark and fever abound to give it a fair trial, and record the results of their experience.

MARYLEBONE.—In the four weeks ending February 24th, Dr. Whitmore reports that there were 379 births and 217 deaths, which would give an annual death-rate of 22.12 per 1,000 population. There were only four deaths from small-pox, one of which occurred in a young lady aged 22, who was the daughter of an M.D. and unvaccinated, which Dr. Whitmore justly considers to have been "somewhat unaccountable". The four deaths from small-pox were in addition to those that had taken place amongst the thirty-eight cases sent to the hospital, of which Dr. Whitmore has received no returns. Two of the deaths occurred in unvaccinated children who were allowed to remain at home, although the mother (a widow) and her four children occupied only one room. Dr. Whitmore says that, if more promptitude had been used in removing these and other cases, much sickness would have been prevented; but does not seem conscious that it was the duty of the sanitary authority to have taken these children away, as they were without proper lodging and accommodation.

## THERAPEUTIC MEMORANDA.

### FAILURE OF SALICIN AND SUCCESS OF COLD PACKING IN A CASE OF RHEUMATIC HYPERTYREXIA.

I HAVE read with much interest Mr. Daruty's communication on the Failure of Salicin and Success of Cold Packing in a Case of Rheumatic Hypertyrexia, in the JOURNAL of April 14th. In my paper, from which Mr. Daruty quotes a paragraph, I did not suggest the use of salicin (of which I have no experience personally), but only of salicylate of soda or salicylic acid. I am aware that salicin often produces similar results, but I believe that its action is not so strong as that of the acid, and that disappointment from its use is consequently more frequent. Salicylate of soda, it is true, was at first tried by Mr. Daruty, but scarcely in adequate doses. Fifteen grains every four hours may prove sufficient in some instances, but patients vary considerably in their susceptibility to the drug, and I have found larger doses advantageous in most cases. I have been accustomed to give half a drachm every two hours (*i. e.*, four times as much), and consider this a moderate dose; forty grains, or even more, every hour, for several doses, having been often given with good results.

The same number of the JOURNAL contains an account of a case of rheumatic hypertyrexia treated by salicylic acid, by Dr. Russell. In this case the acid was given in scruple-doses and with sufficient frequency, but death resulted. I must confess that I doubt whether this case should be considered one of hypertyrexia at all. The temperature when Dr. Russell first saw the patient was 105 deg., and this point was not exceeded in the subsequent course of the illness. I think hypertyrexia can hardly be said to exist without a temperature of 107 deg., or at least more than 106 deg. In Dr. Russell's case, the temperature was rapidly brought down from 105 deg. to 100.5 deg., but symptoms of collapse came on, with extremely rapid pulse and laboured breathing; these bad symptoms were successfully combated by brandy and warm applications, but the temperature again rose to 105 deg., and, notwithstanding two more doses of the acid and subsequent fall of temperature, the patient died. There was, I presume, no *post mortem* examination; but it would have been most interesting to know the precise state of the heart and lungs in this case. Bronchitis is said to have existed, but it would have been more satisfactory to have definitely excluded pneumonia; and, although no heart-affection was noted during life, may there not have been some pericarditis with exceptionally rapid effusion? At any rate, I think a temperature of 105 deg. could not of itself have proved so rapidly fatal. The mode of death, again, is not stated by Dr. Russell, nor is the amount of food and alcohol given noted. The above, I think, are points on which readers of the JOURNAL would be glad of further information.

The great importance of alcohol in all cases of excessive fever, especially when accompanied or succeeded by signs of collapse, is well known. I had a case under my care in St. George's Hospital some time ago in which this was well illustrated. A young woman with acute rheumatism, after progressing favourably under alkalies for some time (I was not then acquainted with salicylate of soda), got pericarditis, pleurisy, and in all probability pneumonia; she was too ill to be completely examined. Her temperature went up to 106 deg., and on one occasion reached 107 deg.; we may therefore say that there was hypertyrexia. The only treatment adopted was milk, beef-tea, brandy, and egg and brandy mixture given at very frequent intervals (every half-hour). She was certainly in extreme danger, with dry tongue, sordes on the lips and teeth, short shallow breathing, extremely rapid fluttering pulse, picking at the bed-clothes, etc. My prognosis was that death was imminent; and yet she gradually got better, and ultimately made a good recovery. It appears, therefore, that hypertyrexia may be recovered from under food and stimulants only, without having recourse to quinine, salicine, etc., or the cold bath; and that it may prove fatal (as in a case recently published by Dr. Sturges) notwithstanding the assiduous and timely administration of any or all of these remedies.

JOHN CAVAFY, M.D., Upper Berkeley Street.

### TREATMENT OF PSORIASIS BY GOA POWDER.

WHILE chrysophanic acid and Goa powder are under trial in some skin-diseases, I think it incumbent on every one who has had the opportunity of trying them to publish their experience. I have had as yet only one opportunity of giving the Goa powder a fair trial; but the result in this case has been so marvellous, that I do not hesitate to send it for publication. My patient is a retired merchant, sixty-three years of age, and of ample means. Just nine years ago, he presented him-



self in my consulting room with a large patch of psoriasis on the outer aspect of the right knee, scattered spots about the size of threepenny-pieces on the trunk, and the palms of the hands dry, hard, and fissured. To save occupying too much space, I may say in a sentence that I tried all the known remedies, including a close-fitting dress of India-rubber, without the slightest benefit. I sent him to several specialists, but, in spite of their treatment, the disease steadily progressed, till, in the course of twelve months, he was covered from head to feet, lost his hair and nails, and in short presented a most abject wretched appearance. I now ordered him to Strathpeffer to drink the water and take baths, which he did for three months, and at the end of that time returned home very much improved. By way of variety, he next year went to Harrogate, and twice every year since then he has, for a month or two, gone to either one place or the other. The water-treatment had the effect of slightly keeping the disease in check till within the past twelve months, when it ceased to be of use, and the body became gradually covered over again, so much so, that he declared to me that night and morning he "rubbed off a hatful of skin". On the legs and arms he had numerous very painful fissures, so that movement gave him exquisite pain and caused great restlessness at night. About two months ago, I resolved to try Goa powder, simply rubbed up with hog's lard in the proportion of ninety grains to an ounce. This ointment was cautiously tried on the worst places; and, finding them improving, my patient, of his own accord, soon had himself freely anointed over the body nightly, wearing the ointment-saturated under-clothing night and day. In the course of ten days all the painful cracks were healed, not a raw spot to be seen; and now, at this date, his skin is as smooth and fresh as a baby's.

I may state that he did not quite use up four ounces of the ointment. During the course of the latter treatment, several curious phenomena presented themselves. After he had been rubbed for a week, his face, and more especially his upper eyelids, swelled very considerably, and the skin assumed the appearance of having been exposed to a tropical sun for days on end; his urine was the colour of weak senna-tea, and his finger- and toe-nails were dyed a deep purple. After the psoriasis had disappeared, a rash exactly resembling scarlatina appeared on the back of both arms and shoulders, as low as the angles of the scapulæ. The irritation from this eruption was so intense, as to necessitate almost constant scratching; but a few applications of atropine ointment effectually removed this. To descend to a domestic matter, I wish to ask what will remove the stains of the Goa powder from linen. The only objection to the Goa powder ointment is its colour and stains; and, should chrysophanic acid ointment be equally efficacious, it will certainly be a great advantage. I mean to try the latter on another patient.

A. D. KEITH, M.B., etc., Craigveigh, Aboyne.

## CLINICAL MEMORANDA.

### VITALITY OF MEASLES-CONTAGIUM.

ON December 30th, 1876, I saw H. S., aged 7 months, the child of English parents, hitherto very healthy. She had sneezed much during the morning and had now slight coryza—as I then thought, "a cold". On Wednesday, January 3rd, 1877, I received a note stating, "The baby has such a decided rash this morning.....On Saturday (December 30th) morning, she had a great sneezing while having her bath..... On Sunday and Monday, she was very feverish and disposed to sleep. Yesterday, about midday, a rash like pin-points or dots came out on her face, neck, and back; the fever quite subsided, and a comfortable moisture on the skin. This morning, she seems very sensitive to the light; her eyes and nose watery and sore; and the rash larger and more decided, very full about her head and body, none on her legs."

On January 4th, the father called on me and said the rash was appearing on the legs, and that about the face and chest was in blotches of more or less circular shape. On January 6th, I visited the child and saw a few fading spots on the legs, which left no doubt in my mind of the diagnosis: measles. I had never heard of measles in this island; and my colleague Dr. Johnson had not heard of a case during more than twelve years' residence (nine years as the only practitioner). On inquiring, I found that the patient had used on December 22nd, for the first time, a bed, a basket "panier", etc., which had just been landed from England, and into the history of which the patient's mother was good enough to inquire. The result of these inquiries was embodied in a note I received from her, from which I extract the following. "By the last mail, she heard the baby (ten months old) of the basketmaker who made the panier had the measles at the time the panier was made. *It was laid in the bottom as a measure.*"

Although the little patient spent several hours with other children on the first day of premonitory fever (December 30th), yet no further case has occurred; but a strict isolation was maintained after the rash appeared.

F. H. EDMONDS, Montserrat, West Indies.

## REPORTS

OF

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.

MELANOTIC SARCOMA OF THE CHOROID: ENUCLEATION: NO RECURRENCE OF THE DISEASE FOURTEEN MONTHS AFTER THE OPERATION.

(Under the care of Mr. W. SPENCER WATSON.)

A NEEDLEWOMAN, aged 60, and a widow, who was admitted on January 18th, 1876, had noticed a defect in the sight of her right eye for about a year. Four or five days before her admission, she had struck her eye with one of the bristles of a hair-brush, and there had ever since been severe pain and increased dimness of sight.

January 18th, 1876. On admission, the patient, whose hair, eyes, and complexion were dark, was well nourished, and had no cachexia. The pupil of the right eye was slightly irregular towards the upper and temporal side, but dilated evenly under the influence of atropine. At the outer and upper quadrant of the sclerotic was a pigmented spot of the size of a pin's head, level with the surrounding surface. *Tension*, T<sub>2</sub>. The ophthalmoscope revealed a dark rounded mass occupying the outer and upper part of the fundus, and an imperfectly defined optic disc was seen through a slightly turbid vitreous humour. *Vision*: Letters of No. 20 Jäger were seen and named when viewed at the outer side of the field, but the whole of the inner and lower part of the "field of vision" was a blank.

January 25th. Vision was entirely lost in the affected eye. The eyeball had a sudden attack of acute inflammation with redness and congestion of the sclerotic and oedema of the conjunctiva. Associated with these symptoms was very severe pain; but the tension of the globe was now below the normal standard. The iris was thrust forward, and the anterior chamber partly filled with blood. Enucleation was performed; the patient being under the influence of ether.

She made a good recovery, and has remained well ever since. An examination of the socket on March 9th, 1877, gave not the slightest ground for supposing that there was any return of disease in the orbit. An artificial eye has been worn constantly since a week after the operation. There is no evidence of any implication of the viscera, the patient's health being fairly good for her age.

The excised globe was opened on the nasal side, when a tumour was seen through the perfectly transparent vitreous body occupying the whole of the outer side of the posterior chamber, from the region of the optic nerve to the posterior surface of the lens, with which it lay in close apposition. The tumour was covered by a slightly opaque retina, easily peeled off, and had a smooth brownish surface. It was either embedded in, or lying immediately behind, the choroid. Its section showed a perfectly black uniform texture of the consistence of firm cheese.

Mr. Nettleship thus described the microscopic appearances of sections of the diseased mass. It "consists entirely of cells of two types. 1. Spindle-shaped or sometimes multipolar cells with long processes and a large oval nucleus. These constitute the largest part of the growth. Most of them are more or less pigmented; a few contain little or no pigment. 2. Round or oval masses of coal-black colour, varying in size a good deal, and usually wider than the widest part of the spindle-shaped cells. They appear to be very highly pigmented round cells. They seem too uniform in outline to be mere aggregations of pigment. The tumour throughout is more highly pigmented than is usual in the pigmented tumours of the choroid.....It is a pigmented spindle-celled sarcoma of the choroid."

*Remarks.*—The transparency of the dioptric media, when the patient first presented herself, afforded a somewhat unusual opportunity for diagnosis. With the increased tension and the associated pain, the aspect of the case was very much that of acute glaucoma; and, had the aqueous humour been turbid, or the lens or vitreous body less transparent, this resemblance to idiopathic glaucoma would have been much strengthened. If, therefore, the patient had been seen for the first time only during the later stage of the case, when the aqueous humour



had become turbid and partially filled with blood, it would have been difficult to avoid falling into an error of diagnosis; though it must be borne in mind that at this stage the tension had become below the normal standard.

Instances have been recorded in which acute glaucoma has been followed by the symptoms of intraocular tumour. May not the intraocular disease in such instances have really been the exciting causes of the glaucoma?

It is too early at present to give an absolutely favourable prognosis in this case, but the lapse of fourteen months is already a longer period than is usually observed after the removal of melanotic growths in the eyeball. This case having the feature that the tumour had not invaded any of the orbital tissues, the prognosis is on that account more hopeful.

#### GLASGOW WESTERN INFIRMARY.

##### ANEURISM OF PULMONARY ARTERY; AND THROMBOSIS OF PULMONARY ARTERY, ETC.

(Under the care of Dr. FINLAYSON.)

**CASE I.** *Aneurism of Pulmonary Artery in a Phthisical Cavity: Frequent and Severe Attacks of Hæmoptysis: Ulceration of Vocal Cords, and Ulceration of Bowels: Enlargement of the Spleen.*—The diagnosis of pulmonary aneurism was arrived at in this case with a very considerable degree of certainty. The young man, aged 21, had been in the ward in November, 1875, with all the signs and symptoms of an acute pneumonia of the right side, evidently supervening, however, on chronic disease of the lung; for, after recovering so far, it was clear that a cavity existed in the upper part of the right lung. There was a good deal of blood in the sputum during the acute illness, but no severe hæmoptysis had occurred. He was dismissed on December 17th, but he seems never to have been fit for work, and was readmitted to the same ward on August 18th, 1876, having begun in June to spit up large quantities of blood, and, on the day of admission, he had brought up, he said, two pints of blood. After admission, not a day passed without some blood being noticed in the sputum, but, on the 20th, he brought up a pint, and, on the 31st, as much as thirty ounces. During the visit hour on September 6th, he was seen vomiting up large quantities, and from this time till his death, on September 27th, he had large bleedings on three occasions, smaller bleedings of about ten ounces each on two or three other days, and at two other times slighter attacks still. On the day of his death, he brought up forty ounces of blood, and he died during this attack. It was remarkable in the presence of such hæmorrhages how well the patient seemed to bear them, although he certainly became much paler while in the ward, and he had at times, especially just before the bleedings began, a sense of great discomfort in the chest, and after the attacks he complained of cold sweats.

The physical signs in the chest still remained much as they were during his first residence; retraction of the chest-wall, dull tympanic percussion, and cavernous signs on auscultation, continued well marked on the right side, but not more so, or perhaps even less so, than before. Enlargement of the spleen was detected, and the blood was examined; the excess of the white blood-corpuscles was but slight. The urine was frequently examined, but no albumen was found. The patient had suffered from hoarseness for a short time before his second admission, and the vocal cords were seen to be ulcerated. The bowels had been loose before admission, but gave no trouble in this respect afterwards. The liver was not enlarged. The temperature continued throughout to be slightly elevated, but there was no high fever. A severe shivering occurred on September 13th, of which no proper explanation was discovered. The treatment was chiefly by ergot, tried both by the mouth and subcutaneously in large doses; latterly, so much irritation was produced by the injections that they were discontinued. No certainty of benefit from this drug could be made out.

The *post mortem* examination by Dr. Joseph Coats revealed catarrhal ulceration in the large bowel. The liver, although very pale, and the kidneys, were normal. The spleen was large (18 ounces) and soft. The larynx presented slight ulcerations. The heart was very pale, and some of the columnæ carneæ had the appearance of fatty degeneration. The left lung was overdistended, and had a few patches of nodular condensation scattered throughout its extent. The *right lung* was adherent and considerably retracted; the adhesions being so bulky that the two layers of pleura measured in some parts nearly a quarter of an inch in thickness. An irregular cavity towards the lower part of the middle lobe in its posterior aspect was found; it contained altered clot, and, on the careful removal of this, two aneurisms were seen at the lower part of the cavity attached to a bridge of tissue which crossed the cavity. The larger aneurism projected downwards

from the bridge, and the smaller one upwards. The former was of the size of a large filbert, and its surface had a dead white colour; the smaller one was of the size of a hazel-nut. The aneurisms did not lie quite free in a large cavity, but almost filled the spaces where they were situated. The walls of the cavity were very irregular, and the lung-tissue of the lower lobe condensed, and with two or three small cavities. The colour in both lungs was light grey.

**CASE II.** *Failure of Health for Six or Eight Months: Symptoms of Peritonitis before Admission: Sudden Development of Oedema of Left Leg: Superintention of Cough, Fetid Expectoration, etc., after Admission: Detection of Spinal Curvature of Unknown Duration: Great Weakness and some Sickness: Sudden Death Preceded by Feeling of Faintness: Post Mortem: Thrombosis of Veins of Leg and of Pulmonary Artery: Pulmonary Phthisis: Old Peritonitis: Caries of Vertebrae and Incipient Psoas Abscess: Purulent Accumulation in Left Kidney.*—A married woman who had borne children was admitted on July 21st, 1876. She was forty-six years of age. Her health seems to have been exceedingly good till the beginning of the year, apart from an inflammation of the left lung three years before, from which she supposed she had recovered completely. Her health began to fail at the beginning of the year, apparently from domestic troubles. She had been married a second time three months before, and her menses ceased along with her failing appetite and strength. Five weeks before admission, this condition was aggravated by a severe attack of vomiting, associated with obstinate constipation for a fortnight, and this again succeeded by severe diarrhoea. This left her much exhausted, but during a gradual improvement her left leg began to swell eight days before admission, after some exposure in connection with washing it in warm water. The swelling was associated at first with coldness, and for a day or two some pain was experienced at the back of the left knee. On admission, there was no coldness, but very marked oedema; no obliteration of the arterial pulse, no hardness in the course of the veins, and only very slight varicosity; in the absence of any morbid signs connected with the heart or kidneys, thrombosis of the deep veins appeared the most likely diagnosis, due to the debilitated state of the patient brought on probably by the obscure illness from which she had suffered before admission. Quinine and subsequently wine were ordered, but the patient seemed to become weaker, although the oedema was slightly reduced; it was noticed, also, that since admission she had begun to cough and to spit up some fetid, almost gangrenous, expectoration. On examination of the chest on August 17th, it was noted that there had been a succession of somewhat variable physical signs in the chest, the general opinion formed being that there was some phthisical consolidation of the upper part of the left lung. On the same date, a marked curvature was detected for the first time in the lumbar region; it had evidently escaped notice during previous examinations of the chest on account of its being so low, and the patient knew nothing of it and could throw no light on the date of its appearance. On consultation with one of the surgeons, the opinion was expressed that probably it was of old standing. Some suspicion of paralysis of the legs, indeed, was entertained, from the great unwillingness and apparent inability of the patient to get out of bed; but, on more careful examination, there seemed no special loss of muscular power, but rather a general weakness. The temperature was somewhat elevated throughout, but seldom exceeded  $38\frac{1}{2}$  deg. C. ( $101.3$  Fahr.). The urine was carefully and repeatedly examined; its specific gravity was normal, it never contained albumen; it had frequently a sediment of urates; scaly epithelium and white cells were occasionally found; the reaction was always acid. For a week or two, she complained at times of pain in the epigastric and umbilical regions. On the morning of September 11th, after sleeping well, and having been on the previous night as well as usual, she complained suddenly, after she awoke, of being faint, and of there being something queer at her heart; she asked for some wine, which was at once given by the night-nurse, who then went for some water to bathe her face, and on her return found the patient just dying. She had not been out of bed at all that morning, or indeed for some days.

The *post mortem* examination by Dr. Joseph Coats showed caries of the lumbar vertebrae, with considerable displacement, but no evidence of affection of the cord; a small collection of pus was found in both psoas muscles when these were cut into. The left kidney was found converted into a large cyst, full of thin pus, which did not escape by the ureter when pressure was made on the cyst; no obstruction, however, existed in the ureter, which seemed to be closed in a valvular manner. The right kidney was normal; also the liver and spleen, the latter somewhat enlarged. The peritoneal surface of the intestines showed a general irregular thickening composed of new formed fibrous tissue, the result apparently of chronic inflammation without any distinct tubercles. The heart itself was normal, except that the right



ventricle and the tricuspid orifice were somewhat dilated. The pericardium contained a little clear fluid. Both lungs contained small cavities, and considerable condensation existed, chiefly in the upper part of both; the left was more condensed and more firmly adherent than the right. In both lungs, thrombosis of the pulmonary artery existed, affecting chiefly the middle and large branches; the thrombi were mostly red but firm, with occasionally a grey granular surface, and likewise adherent to some extent. The veins on the left side were thrombosed from the middle of the calf of the leg up to the bifurcation of the vena cava, but no extension to the right iliac vein could be seen. The clots were brown, and generally firmly adherent to the wall, and at two points in the calf of the leg, apparently at the valves, there was very great distension by firm clot. The tissues around the veins showed evidence of chronic inflammation.

REMARKS.—When this patient began to suffer from cough and copious foetid expectoration, associated with obscure signs of pulmonary consolidation, one could not help suspecting that thrombosis was going on in the pulmonary artery as well as in the veins in the leg; this opinion was frequently announced at the bedside although no very definite proof could be submitted. When the sudden death occurred in the way it did, it was almost certain that some thrombosis or embolism had occurred. The existence of such active caries of the vertebrae apart from any very obvious symptoms was very striking. The dilated kidney was not recognised during life; no symptoms led to any very critical examination of the renal regions, or no doubt the tumour would have been easily discovered.

## REPORTS OF SOCIETIES.

### PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, APRIL 17TH, 1877.

CHARLES MURCHISON, M.D., F.R.S., President, in the Chair.

*Minute Anatomy of Scarlatina.*—Dr. KLEIN stated that the experiments of which he should give an account were undertaken for Mr. John Simon. They consisted of observations on the anatomical changes in visceral organs caused by scarlatina. They extended from cases which died within two days after the appearance of the disease, to one which succumbed forty-four days after. The organs examined were the kidneys, liver, spleen, and lymphatic glands of the throat. The cases numbered twenty-three in all, and were cases of undoubted scarlatina from the Fever Hospital at Islington. The changes consisted of early and late appearances. In the kidney, these changes were vascular and glandular, there being an increase of nuclei in the glomeruli, and of the elastic tissue of the arteries of the cortical area. A hyaline degeneration of the arterioles, afterwards becoming fibrous, could be detected at the earliest date. Then there was gemmation of the nuclei in the arterial walls, at the entrance into the Malpighian bodies, at Bowman's capsule; in some there was detachment of the epithelium. There were also other changes described by George Johnson and other writers. Only small portions of the capillaries were affected. According to Nielson, the substance possessed the chemical properties of elastic tissue. They were certainly not colloid changes. The hyaline change took place at the point of branching in the arteries. The hyaline change described by Sir William Gull and Dr. Sutton could be seen going on in the elastic layer in scarlatina. The question, "Are the muscle-nuclei increased?" must be answered in the affirmative. The nuclei of the muscular coat could be readily distinguished from those of the intima. There were also nuclei of lymphoid cells from the tissues around the visceral arterioles. As to the question "Are the muscular fibres increased?" that is, "is there real hypertrophy?" the early date of the appearance was against it; whilst in favour of it was the fact that this and the hyaline changes went together. In cases which died of uræmia before the kidneys became involved, these organs were found slightly enlarged and hyperæmic, but the tubules were not changed; there was no interstitial change nor proliferation of epithelium. The glomeruli were filled with angular nuclei in granular masses. He himself had found them in few glomeruli. He thought the uræmia rather caused by a changed state of the arterioles than by compression. The parenchymatous changes were slight in the early stages. A second set of those who died after the first week showed interstitial changes, and the tubules were affected. Round cells were found in the interstitial tissue, and portions of the cortex were altered till the tubules were lost. There were cylinders in other tubules. The infiltration at first was around the vessels. There were also cellular masses like adenoid structure. In one case, a child aged 5, who had been ill thirteen days, the interstitial changes were well marked, and there were emboli in the

arterial trunks composed of fibrine. The interstitial changes were the more marked, the larger the kidney. The muscular corpuscles underwent fibroid degeneration. Lime matter was to be found at a very early period in the epithelium of the tubules. In those who died after nine or ten days, the interstitial nephritis was well marked. As to the lymphatic glands of the neck, there was general inflammatory enlargement, chiefly in the central parts. The one-nucleus cells gave way to granular cells. There were also fibrinous thrombi in the vessels. The liver was examined in eight cases. It was found enlarged, with swelling of the liver-cells, which became opaque. The arteries were affected as in the kidney. There was thickening of the connective tissue in Glisson's capsule. In the spleen, there were uniform and constant enlargement of the Malpighian corpuscles, and thickening of the arteries till their lumen was nearly lost. There was thickening of the adventitia around the arteries. There were changes in the cells like those in the glands of the neck.—The PRESIDENT said that this interesting communication tended to show that at the very commencement of the disease there were changes in the minute vessels. Did the same changes occur in cases that recovered? Did they perfectly recover? In a fourth of all cases, albumen was found in the urine. Was this an indication that serious changes are inaugurated? Such were the questions suggested by these observations.—Dr. GREENFIELD said he could not add much to the account given of the changes in the kidneys in scarlatina. He agreed with Dr. Klein's observations. In one case which had slight scarlatina, the patient left the hospital apparently well; but in a year came back again with well marked Bright's disease, and finally died. The change consisted almost entirely of interstitial nephritis. Charcot held this opinion. But in other cases he had failed to find this. There were mere parenchymatous change. In the liver, Glisson's capsule was chiefly affected. In the spleen, the lining membrane of the vessels was affected. As to the cervical glands, the same changes were found in diphtheria.—Dr. MOXON said that much that Dr. Klein had said was new to him. He had not had at Guy's Hospital much opportunity of making such pathological observations. There they often found the mottled kidney in scarlatinal dropsy. The pathological explanation of the changes which follow scarlatina and other forms of disease which more rarely result in recovery had long been sought for. There was never any large amount of new growth in cases which had come under his observation. How did Dr. Klein identify in the embolon at the branching of a vessel the fibrous matter as being that of the embolon?—Dr. KLEIN replied that, forty-four days after scarlatina set in, there were slight parenchymatous changes and some interstitial changes. The patient had recovered from the scarlatinal nephritis. Many tubules were filled with casts. The albumen remains arrested in the kidney. When there was no albumen in the urine, the kidney might be full of casts. He was glad to find Dr. Greenfield in agreement with him. At first, there was slight accumulation of cells in the connective tissue, which began with a slight deposit of round cells in cases which die of scarlatinal nephritis. As to Dr. Moxon's inquiry, there was a huge embolon at the branching of a vessel; behind, the vessel was much distended, and in front it was very small.

*Pig-Typhoid.*—Dr. KLEIN related the results of an experimental and anatomical inquiry into the disease called pig-typhoid. The hypothesis that it was like man's typhoid was first started by Dr. William Budd. It was a good example of infectious disease in animals. The disease was an infectious fever, which had an incubation period of from three to fourteen days. In a few days, patchy redness of some portions of the skin could be seen. Later on, there was an eruption. Then there was pyrexia. The red spots were from one to three lines in diameter. Some only were acuminated; the majority were just round spots. They were firm, and disappeared on pressure. They came out in various crops. A small brown mark remained at the seat of each vesicle. The cuticle desquamates. There was fever and diarrhoea, and in severe cases blood in the feces. There was delirium, too, and the animals died from prostration. A *post mortem* examination was made in twelve cases; the skin was mostly affected, it was of a diffused red, and in various parts there were necrotic patches. In the small intestine there were spots of hyperæmia; and in the large intestine, small or large ulcerations, especially near the ileo-cæcal valve. The ulcers extended to the rectum. The mucous membrane was thickened. This disease was not to be confounded with human typhoid. Even to the naked eye the changes were quite distinct. Under the microscope, the lymphatic follicles were found not to be affected as in man. In a few cases there was ulceration of the throat. The ulcers were of a dark-grey colour, and symmetrically distributed over both sides. The mesenteric, bronchial, and other glands were affected. They were swollen, and red or purple, and a red fluid oozed out on pressure. There was probably bursting of the blood-vessels. Blood was extravasated, as in anthrax. The changes in the lungs were constant. There was a



mapping out of the lobules. The lung-tissue was hyperæmic, hepatised, and opaque white patches showed themselves. On section, the bronchial tubes were found filled with a brittle cheesy mass. The pleuræ were inflamed, thickened, and even bore ulcers. The pleural exudation was thick and yellow. The pericardium and the peritoneum were covered with pus. The spleen was enlarged, dark, and had nodules in it. The liver and kidneys were hyperæmic, with hæmorrhagic spots. The skin and viscera were most affected. On microscopic examination, the capillaries were found distended, and even ruptured in the intestine. In some cases, there were spots of necrosis of the mucous lining. There were giant cells in the lymph-spaces and in the mesenteric glands. The lungs were the seat of lobular pneumonia. In the liver, the interlobular tissue was full of lymph-cells. The infection could be carried through the air, or the disease could be inoculated; or it arose from the alvine excreta. It was not always produced by scraping the intestines and adding this material to the food. The spleen also carried infection. When the blood and juice of glands were injected, no results followed. Inoculation with the fluid from the intestinal ulcers was readily induced. The disease was not identified with anthrax.—The PRESIDENT said that, ten years ago, he brought the subject of pig-typhoid before the Society. It had nothing to do with human typhoid. There was no typhoid rash on the skin; indeed, the rash was more like that of scarlatina. It was popularly termed the "red soldier".—Mr. AXE said he was pleased to hear Dr. Klein's paper. He should like to make some remarks, which he must reserve for some future time. It was not merely a question of morbid anatomy. He was inclined to favour Dr. Budd's view, that it was typhoid in the pig.

*Pathology of Contagium.*—Dr. BRAIDWOOD (Birkenhead) related briefly his contribution to the intimate pathology of contagium, which has been published with the JOURNAL. He stated that his mounted slides were examined when put up, and then again afterwards to see what changes took place. The tissues were always put in spirits within twenty-four hours after death. In some, a double tinging with hæmatoxylin and carmine was practised. In the human being, vaccinia and variola were different. In variola, the upper surface of the rete was separated from the lower. Lymph had been exposed to various physical experiments, as exposure to air, water, and germicides. In vaccinia, the local changes consisted of corpuscular infiltration of the skin, with corpuscles in the hair follicles and the glands. Elongating corpuscles became fibres. There were no bacteria. First, there was swelling of the true skin, and then the number of corpuscles was increased. He compared bits of human skin with bits from the heifer. There was a separation of the rete Malpighii to form vesicles. On the tenth day, agglutination of the rete and corium was effected, and on the nineteenth day the true skin was destroyed and cicatrix had begun to form. The cicatrix was formed by the adhesion of the two layers of the true skin. On the fourth day, in truly variolous human skin, there was corpuscular infiltration of the rete, with the lymph-spaces filled with nucleated cells, in which an increase by gemmation could be detected. On the seventh day, processes extended from the corium down into the subcutaneous areolar tissue. There were irregular nucleated cells. The corium became matted up. On the seventeenth day, the hair-follicles and glands were nearly destroyed. In these two diseases the pathological changes were much alike; there was a separation of the true skin, with development of connective tissue and destruction of the skin. If to the lymph water were added, all attempts to inoculate with the upper layer of fluid failed; while revaccination with pure lymph six days later succeeded. The activity of lymph was not due to microzymes developed in it. Exposure to heat of 134 deg. Fahr. did not destroy the activity of lymph; at 139 deg. it began to lose its power, and after 143 deg. Fahr. it was inert. Intense cold, to 100 deg. below the freezing point of mercury, did not affect it. Germicides of various kinds were employed with varying results.

## CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 13TH, 1877.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

*Subperiosteal Resection of the Shaft of the Tibia.*—Mr. CHRISTOPHER HEATH read notes of this case, which was that of a boy aged 10, who had been kicked on the leg a month before admission. The shaft of the tibia was found to be bare, and separated from the epiphysis at both ends, and was removed in May 1876, by separating the periosteum with the handle of the scalpel. The whole of the shaft was no necrosed, the back part having new bone adherent to it. The patient made a good recovery, and was shown to the Society. There was still

an open sinus, but the boy was able to walk without assistance, and the length of the limb was the same as that of the opposite side. Mr. Heath referred to a similar case recorded by Mr. Holmes, and recommended the proceeding in appropriate cases, pointing out the necessity for obviating shortening by maintaining the full length of the limb by the use of a splint during healing.

Mr. HOWARD MARSH related the particulars of a case in which he had removed a portion of the femur, including the whole thickness of the bone, and extending from the lower epiphysis to the lesser trochanter. The patient, a boy aged 9, had been attacked a month before with diffuse periostitis of the bone, with the formation of a large subperiosteal abscess, and was at the time of the operation in so exhausted a state from profuse suppuration that there was a question whether amputation should not be performed. The piece removed was seven inches and a half long. A new shaft was rapidly produced, and the limb was shortened only three-quarters of an inch. The boy left the hospital with all the parts soundly healed. Mr. Vincent, formerly surgeon to St. Bartholomew's Hospital, had published a case in which he removed the whole bulk of the femur, from the trochanter to the lower epiphysis, in a child four years old, who had had subperiosteal abscess. Here also a new shaft was quickly developed, with scarcely any shortening. Mr. Marsh stated that he had seen several cases in which, although, in consequence of acute subperiosteal abscess, large surfaces of the long bones, the femur and tibia, had been completely stripped of their periosteum, this membrane, when matter was let out, had settled down again and become adherent, so that no necrosis had occurred; and Sir James Paget had mentioned to him that he had had several similar cases. Two or three years ago, a case—that of a girl aged about 6—was admitted into the Children's Hospital, in which a large abscess had formed around the ends of a fracture of the femur that had been overlooked. When the abscess was opened, the ends of the bones were found bare for a considerable distance, yet the fracture speedily united when the limb was kept at rest, and no necrosis took place. All these cases, and others like them that he had seen, made him quite sure that the periosteum of the long bones in children, after it had been stripped off by diffuse suppuration, might settle down and become reattached, and that no necrosis might take place.—Mr. BARWELL had already described cases in which he had removed the whole shaft of the tibia. As to the reattachment of periosteum after diffuse periostitis, there was no doubt about it; its occurrence was generally recognised, if the matter were let out at an early date. Even in a man sixty-seven years of age, it had occurred when a subperiosteal abscess of the lower part of the femur had been opened, and some carious bone removed. In any case of doubt as to whether bone was necrosed or not, if it were struck with a small steel instrument, a distinction would be made; necrosed bone gave out a musical note almost like a tuning-fork, whilst from living bone the steel instrument elicited a dull note.—Mr. BRYANT said it was sometimes doubtful as to when one should interfere in these cases. It was impossible to determine beforehand how much of a bone exposed would die. Years ago, he had given an extensive trial to the early separation of supposed necrosed bone. In the case of a boy with abscess of the femur, which was opened, the periosteum was found to be completely separated from the bone; and the case took then a favourable turn. The early removal of the shaft of the bone was attempted, and the bone was divided in order that both sections might be easily removed. But the centre of the shaft was found to be living and healthy; only its circumference was dead. He consequently readjusted the fragments. A small case of new bone was formed around the old bone, and finally a little necrosed bone came away. Since then, he had been chary of removing supposed necrosed bone. In a similar case, of a boy with acute abscess of the fibula and tibia, a good free incision was made down to the bones; and eventually only the lower part of the shaft of one bone and a small shell of the other were removed. But, if he had acted in that case on Mr. Heath's suggestion, he would have removed a large quantity of viable bone. He now ranged himself on the side of the teachers who would leave the bone until it was certainly necrosed, but would make very free incisions and expose the bone.—Mr. HEATH asked if, in Mr. Bryant's case, the shaft was separated from the epiphysis?—Mr. BRYANT replied that the shaft was quite loose, and he had simply cut it through in order to remove it more easily.—Mr. CROFT inquired why the operation was specially called *subperiosteal*, since all operations for the removal of dead bone from the shafts of necrosed bones were subperiosteal. No one in his senses would in such cases dream of removing the periosteum. He wished to confirm the experience of Mr. Bryant, that apparently dead bone would recover. After extreme separation of periosteum, if the pus were evacuated, the periosteum would often settle down again and become re-attached to the bone.—The PRESIDENT remarked that the question to which he had referred in his introductory



address arose again out of Mr. Heath's case, viz., the asymmetry of limbs. He had had sent to him from the Hospital at Philadelphia a statement as to the great difference of the length of healthy limbs on the opposite sides of the body in many cases.—Mr. BARWELL observed that, in his work on Curvature of the Spine, he had shown that many cases of that affection were due to asymmetry of the lower limbs.—Mr. HEATH, replying to Mr. Croft, read an extract from Holmes's *Surgery*, which justified his use of the term *subperiosteal*; the difference from the ordinary operation for necrosis was that in his case the necrosed bone was removed before the formation of the new bone around it by the periosteum. In his case, possibly some of the bone which was removed might, if left, have recovered. But he believed he had done the best for his patient, as he was suffering from the rubbing together of the epiphysis and diaphysis. He had never before had a case in which he had thought it advisable to remove the whole shaft, the shaft being movable at both ends. But the result was good; the boy now (April 1877) walked fairly well. Had he waited for the repair of bone and the subsequent removal of the dead portion, he thought recovery would have been much longer deferred.

*Myeloid Tumour of Left Ulna.*—Mr. CLEMENT LUCAS exhibited a patient from whom he had removed the lower half of the left ulna on account of a myeloid tumour which had commenced in the interior of the bone. The case was of interest from the rare occurrence of myeloid disease in the lower end of that bone, but chiefly from the very serviceable limb which remained after the operation. Allusion was made to a paper by Mr. Cock in the *Guy's Hospital Reports* for 1861, in which mention was made of three cases of compound fracture of the bones of the forearm, for which excision of the lower ends of both radius and ulna was performed, and in every case an useful hand remained. There was a preparation in the Museum of the Royal College of Surgeons, contributed by Mr. Hancock, and called *osteo-aneurism*. It consisted of the lower ends of the radius and ulna, which had been excised for a tumour commencing in the radius of a woman aged 25. The microscopic appearances were not well described, and it was not improbable that this was a case of myeloid tumour commencing in the lower end of the radius, where it was not unfrequently met with. Mr. Henry Morris had performed a similar operation (see next paragraph of this Report). Several cases were on record where the greater part of the ulna or radius had been removed; but each of these operations appeared to have been undertaken for injury or necrosis, so that the periosteum was preserved and the bone reproduced. Mr. Lucas had been unable to find any recorded case in which the lower end of the ulna alone had been removed for a tumour involving that bone. Mr. Lucas's patient was a healthy-looking married woman aged 29, who was admitted into Guy's Hospital August 11th, 1876. About nine or ten months before admission, she first noticed a slight swelling at the lower third of the left ulna. This swelling was accompanied by a gnawing pain, and it gradually, but very slowly, increased in size. In April 1876, she first sought advice at another metropolitan hospital, where she attended as an out-patient for ten weeks. She was then admitted into the same hospital; but left a fortnight later upon a suggestion having been made to her that amputation would be necessary. When admitted into Guy's Hospital in August, the patient was found to have a firm, dense, but somewhat elastic swelling occupying the lower part of the left forearm on the ulnar side. It projected more posteriorly than anteriorly, and extended upwards for about two inches and a half above the wrist joint. It was smooth and convex towards the inner side, where the tumour was slightly red and inflamed, but the skin was not adherent to the tumour, except over a small cicatrix. The circumference of the forearm over the centre of the tumour was two inches greater than the corresponding part of the opposite limb on the same level. Pronation and supination were somewhat interfered with, but the movements of the wrist joint were perfectly free. The tumour was not particularly painful upon pressure. The glands above the tumour were not enlarged. On August 15th, chloroform having been administered, Mr. Lucas made a longitudinal incision about four inches in length on the inner side of the forearm, so as to expose the tumour between the flexor and extensor carpi ulnaris muscles. In doing so, the posterior branch of the ulnar nerve was exposed and divided. The muscles and skin were now retracted to the sides, and the bone exposed above the level of the tumour. In order to clear the bone above the tumour, it became necessary to make a short transverse incision at the upper part of the wound. A blunt knife was then passed between the radius and ulna, and the latter bone was divided with a saw. The piece of bone connected with the tumour was now seized and drawn out of the wound, whilst the interosseous membrane connecting it to the radius was divided, and the extensor indicis on the posterior aspect and the pronator quadratus on the anterior were separated from the periosteum enclosing the tumour. On dividing the ligaments of the

lower radio-ulnar joint, the tumour dropped away from the triangular fibro-cartilage; and, on dividing the attachment of this cartilage to the styloid process and also the internal lateral ligament of the wrist-joint, the excision was completed. The wrist-joint was thus left intact, being protected by the triangular fibro-cartilage. The operation was not performed antiseptically, but carbolic dressings were afterwards employed. Very little constitutional disturbance followed; and the patient left the hospital five weeks after the operation, the upper part of the wound having united, and the lower part having closed by granulation. Microscopical examination showed the tumour to be a characteristic myeloid growth. She had now free use of her hand, which she employed in all her household work; and the movements of pronation and supination were perfect. There was, moreover, no tendency of the hand to drop towards the ulnar side, such as, perhaps, might have been anticipated after removal of the inner bone with which the carpus articulated. In this respect, excision of the ulna contrasted favourably with excision of the radius, inasmuch as abduction of the hand almost certainly followed resection of the latter bone. This abduction was often seen after Colles's fracture, and in its most complete form in cases of congenital absence of the radius, when the hand often assumed a position at right angles to the forearm. Further, the movements of pronation and supination must necessarily be lost when the radius was divided, whereas, after excision of the greater part of the ulna, they might remain complete. Lastly, owing to the intervention of the triangular fibro-cartilage, excision of the lower end of the ulna might be effected without opening the wrist-joint. In thus comparing excision of the lower extremity of the ulna with excision of the lower end of the radius, Mr. Lucas said he did not wish to deter anyone from performing the latter operation; on the contrary, he would be the first to follow the example of Mr. Hancock and Mr. Morris, and remove portions of both bones rather than sacrifice the hand; but he wished to point out that removal of the lower end of the ulna was a most simple operation, involving injury to no structure of importance, and yielding a most satisfactory result. He ended by saying that tumours of the lower end of the ulna were happily of not very frequent occurrence; but, after the experience of this case, he should hold it most culpable in himself, and not altogether blameless in others, to entertain the thought of amputation for a benign tumour without first attempting to remove the growth by excision of the bone.

*Myeloid Sarcoma of the Left Radius.*—Mr. HENRY MORRIS read a paper on this case, in which he had excised the lower ends of the radius and ulna, leaving an useful hand. The patient applied at the Middlesex Hospital on January 3rd, 1876, with a large tumour just above the left wrist, the result of a fall upon her hand. When she first came to the hospital, thirteen months after the fall, and ten months after the commencement of the swelling, the lower end of the left radius was expanded into a large rounded tumour. The inner surface of the ulna was quite free, and could be traced down to the styloid process, but its radial border was overlapped by the expanded radius on both the flexor and extensor aspects. She was advised to come into the hospital for operation; but this she flatly refused to do, and added that nothing would induce her to have her hand amputated. At last, she was admitted; and on March 8th, chloroform having been administered, and Esmarch's bandage applied to the hand and forearm, a long incision was made over the outer side of the radius, extending from the styloid process of the upper third of the bone. The radial nerve was looked for, and used as a guide to the interval between the supinator longus and extensor carpi radialis longior muscles, as Mr. Morris had previously satisfied himself that he could most readily separate the soft structures from the front and back of the radius by going between those muscles, and keeping the supinator to the forepart of the incision. The supinator longus and the pronator radii teres, at their insertions, were detached from the radius, and the bone, when freed both in front and behind of its muscles, was sawn through at the lower edge of the supinator brevis by a chain-saw. The saw was passed through the interosseous membrane upon a piece of silk threaded through a *nævus*-needle. A second longitudinal incision, of less extent than the first, was made along the inner side of the ulna from the wrist-joint upwards, and through it the rest of the soft structures were separated from the tumour and from the lower part of the ulna. The ulna was divided by the chain-saw between three and four inches above the wrist, and the lower ends of both bones of the forearm were disconnected by opening the wrist-joint on the inner side. This done, the entire tumour, together with the ulna and the pronator quadratus muscle, which was thinly and tightly spread out over the tumour, was removed *en masse*. In the operation, the anterior interosseous artery was necessarily divided above the upper border of the pronator quadratus; but, with this exception, none of the trunk-vessels or their larger branches were injured. On removing Esmarch's bandage, several bleeding points had to be



tied or twisted, the most noticeable of which was a small branch from the radial, winding round to the back of the radius, which had been divided close to its origin. A branch of the radial artery was divided, and bled as furiously as could the radial itself. All hæmorrhage was, however, soon stopped; the wound was washed out with carbolic acid lotion, carbolised catgut sutures were inserted, and lint soaked in carbolised oil was placed over the incisions. The hand and forearm were enveloped in antiseptic gauze, and lightly bandaged upon a straight splint. When examined after removal, the tumour proved to be of a typical myeloid character. It was confined within the radius, which formed a thin and imperfect shell, on the dorsal surface of which were seen the grooves and markings of the extensor tendons. The ulna was firmly attached to the tumour, partly by the pronator quadratus, and partly by adhesions between the periosteum of the ulna and the capsule of the tumour. The patient did uninterruptedly well. After leaving the hospital on April 27th, the woman, who was very apathetic and indifferent about her position, rarely attended without being sent for. At the end of August, she came and had a light leathern splint moulded to the forearm and carpal part of the hand. When out of the splint, her hand still hung loosely down like a flail, but she was now able to raise it to a level with the back of the forearm, and to keep it so for a little while. She could make the thumb approach the tip of each finger, but could only make it touch that of the index-finger. The hand was somewhat retracted, so that the carpus had approached the ends of the radius and ulna, the ulna now being only one inch, and the radius about three inches, from the carpus. The hand inclined towards the radial border of the forearm when the arm was resting on a table, as well as when she made an effort to move the hand from its dangling attitude. It could, however, be brought straight, and kept so on a flat surface. Both radial and ulnar arteries pulsated naturally. Sensation of the whole hand, as tested by the point of a pencil, was good. On applying the faradaic current, it was found that, with a battery of two pint Leclanché cells, and Stohrer's coil No. 3 power, excited a slight movement, and provoked a low cry from the patient each time the circuit was completed by applying one pole on the forearm near the elbow and the other at some part of one of the fingers or of the thumb. The most marked effect was produced when the positive sponge was placed upon the ring finger. She was very thankful she did not have her hand removed, as she found it very useful. On January 11th, 1877, she was seen for the last time. She was still wearing the same splint; and, with it on, could move her thumb and each of her fingers fairly well: she was able to pick up a pin, and could hold a fork. She had been using the hand a good deal for washing, holding the wet linen in the left, while she wrung it dry with the right hand. Mr. Morris remarked that the case of Mr. Lucas had been treated at the Middlesex Hospital for a medical ailment by one of the physicians. The tumour was punctured, the microscope used, the tumour pronounced to be myeloid, and excision advised. But the patient left, and fortunately, as it happened, fell into Mr. Lucas's hands.

Mr. GOULD mentioned a similar case under Mr. Hill at University College Hospital. The patient had a large-celled sarcoma of the lower end of the ulna. That portion of the bone was removed; the wound did not at first do very well, but the patient eventually left with an useful hand.—Mr. BRYANT congratulated both Mr. Lucas and Mr. Morris on their operations, which were not generally recognised in the textbooks. The same treatment should be carried out in cases of tumour of bone that was adopted with tumours of soft parts, viz., the removal of the tumour and the immediately adjacent part of the bone from which it sprang; especially should this be done in tumours of the upper extremity, and in cases of myeloid tumour, which rarely recurred. Formerly, in the case of tumours of long bones, the limb was removed at the joint immediately above the tumour. But Sir J. Paget had done well in advising the simple resection of the tumour and diseased bone when the tumour was non-malignant. He (Mr. Bryant) had five years ago removed a myeloid tumour of the upper jaw, probably caused by misplacement of a tooth. The tooth was removed, but the disease in the bone increased. It was then removed; but the section of the jaw showed that some of the disease which had infiltrated the surrounding bone had undoubtedly been left behind. The child, however, convalesced; and, when it was brought back to the hospital three months since in order to have a false palate fitted, the myeloid elements which had been left behind in the bone were found to have quite disappeared. Myeloid disease, in fact, must not be regarded in such a serious light as that in which surgeons were accustomed to view it.—Dr. ALTHAUS asked whether, in Mr. Lucas's case, the ulnar nerve was divided or a portion of it excised? Such bleeding as that which occurred in Mr. Morris's case after the removal of the Esmarch bandage, might be obviated by the application of a faradising current to the upper and lower parts of the wound.—Mr. LUCAS said

he had removed as much as two inches of the ulnar nerve, but sensation had returned.—Mr. MARSH did not think it should go forth that if a myeloid tumour were not all removed it was not likely to return; he believed such tumours were very liable to recur, as was the case with epulis of the jaw.—Mr. BRYANT said he had not laid down any law. His case seemed to suggest that myeloid tumours tended from, rather than towards, malignancy.—The PRESIDENT thought perhaps the operation of removal of the upper jaw was suggested to surgeons by the digging out of myeloid growths from the inferior maxillary bone.—Mr. MORRIS observed that, as regarded the recurrence of myeloid disease, he believed the tendency to recur was unlikely if the disease were entirely removed, although even then in some cases there was recurrence. He believed Sir James Paget had drawn attention to a case very similar to that of Mr. Bryant. In Merkel's book of diseases of the bones, there was a case reported in which a patient had a myeloid tumour in the upper jaw and in three other situations; that in the upper jaw was removed and the other tumours disappeared. As to Dr. Althaus's suggestion, surgeons would be delighted to know that they could stop hæmorrhage by faradisation, but he doubted if bleeding from an artery of the size of the radial could be so arrested.—Dr. ALTHAUS said that complete contraction of the muscular coat of an artery as large as the radial would be produced, so that the hæmorrhage would for a time be entirely stopped.

#### OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 4TH, 1877.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

*Deformities.*—Dr. ASHBURTON THOMPSON introduced two children, the subjects of deformities. In the first were a supernumerary pair of mammae, and a scar-like mark on the top of the head. In the second, in the median line, a little above the upper end of the sternum, there was a small pedunculated growth, immediately below the pedicle of which was situated a small orifice leading into a short canal lined by mucous membrane.

*Operations for Atresia Vagina and Vesico Vaginal Fistula.*—Dr. BOZEMAN exhibited his instruments for the operations for atresia vaginae and vesico-vaginal fistula. He began to treat these conditions in 1855. He first treated the atresia on principles similar to those adopted in the treatment of stricture of the urethra—dilatation and division. He advocated the use of the Hilton suture. He recommended dilatation of the vagina in all cases of difficulty. He employed dilators of hard and soft material; the former were made of vulcanite, the latter of sponge covered with oiled silk. Dr. Bozeman also showed a model of his chair for operating in the knee-elbow position.

The report of the Subcommittee on Dr. Palfrey's specimen of Two-headed Monster was read.

*Fibroid Tumour complicating Delivery.*—A paper on this subject was read by Dr. W. S. PLAYFAIR. The paper consisted of the relation of three cases in which this complication was present. In the first case, the presence of a fibroid tumour was recognised before marriage; it was so large as to fill the pelvis. Dr. Farre had succeeded in pushing it out of the pelvic into the abdominal cavity. Pregnancy was accompanied by much suffering, but delivery took place naturally. No hæmorrhage followed, and the tumour, which immediately after delivery reached a foot above the pubes, had six months after diminished in size, so that it could be discovered only by the bimanual method of examination. A second labour took place naturally. In the second case, there were two large fibroid tumours situated at the fundus and sides of the uterus. The pains became feeble, and the forceps was resorted to. There was no *post partum* hæmorrhage. Six months afterwards, the presence of the tumour could with difficulty be detected. The third case was a multipara. Labour had begun, and a large fibroid was discovered filling the pelvis, jammed down in front of the fetal head. It had a diffuse broad base growing apparently from the posterior wall of the uterus. It was evident that the mass could not be removed by enucleation or by the *écraseur*; and the space between it and the pubes was one inch and three-quarters only. The hand was introduced into the vagina, and pressure made on the tumour with a view to push it up out of the pelvis. Eventually, this object was attained; the forceps was applied to the head, and delivery rapidly effected. No hæmorrhage followed. This was a case unsuited for enucleation on account of the character of the growth. In such cases, action should be taken early, and an effort made at reposition before having recourse to more desperate measures.—Dr. BARNES said that the difficulties and dangers associated with this complication varied with the seat of the tumour. When the growth projected into the cavity of the uterus, the danger was very great; when situated in the lower segment of the uterus, enormous. In



the latter case, the tumour might be crushed, sphacelate, and give rise to pyæmia. There could be no doubt that fibroid tumours might atrophy; they were occasionally expelled. Hæmorrhage depended on the seat of the tumour.—Dr. BRAXTON HICKS said that not only small but also large tumours opposing labour ought to be removed when situated in the lower segment of the uterus. He had removed successfully a mass as large as the foetal head. Some cases which appeared unpromising during early pregnancy improved during the course of gestation, so as not to give any trouble. When these conditions were met with during active labour, they should be treated mechanically.—Dr. GODSON said that, in a case under his care, large masses were discharged and the tumour disappeared.—Dr. MURRAY had seen relief to the bowels brought about by pressing the tumour from the pelvis by means of the hand introduced into the rectum.—Dr. DE GORREQUER GRIFFITH had seen three cases of this complication; two without a bad symptom, the third complicated by *post partum* hæmorrhage. During gestation, the tumour increased; it afterwards diminished in size.—Dr. HAYES referred to a case in which death took place from hæmorrhage before delivery. A fibroid tumour about the size of a Tangerine orange, which was easily enucleated after death, was found in the anterior wall of the cervix. The placenta was not prævia.—Dr. EDIS thought the best position to effect reposition was the genu-pectoral.—After a few remarks from the President, Dr. PLAYFAIR replied, saying that *post partum* hæmorrhage occurred in some of these cases, but it did not appear to be so common as one would expect.

#### SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THURSDAY, MARCH 29TH.

R. S. FRANCIS, Esq., in the Chair.

*Diphtheria*.—Dr. WALTER BEEBY read notes of an epidemic of diphtheria at Bromley. With regard to the origin of diphtheria, he thought it most probable that ordinary putrefactive material in a very active state was a sufficient cause without any specific contagium; though, doubtless, the disease could be conveyed very readily from one person to another, provided those to be infected had previously been exposed to septic influence; otherwise, though they might suffer accidental inoculation and a diphtheritic membrane result, it was a question whether they would develop the characteristic constitutional symptoms; and, even if this were so, it would prove no more than that ordinary putrefactive agents, when they had set up a change in living tissues, became possessed in a high degree of the power of generating similar morbid processes in the tissues of previously healthy persons. He considered that membranous croup and diphtheria were brought about by the same causes, viz., a mild, damp, unwholesome atmosphere, charged with the fungi of decomposition; for, though the laryngeal exudation differed from the so-called false membrane of the pharynx, the characteristic changes in each locality were often found together, and the laryngeal affection alone was of frequent occurrence during an epidemic of diphtheria. Recent outbreaks of diphtheria proved it to be of a decidedly infectious nature, and the attendance of children at schools was a fruitful means of spreading the complaint amongst the lower classes; though, if care were taken that no scholar came from infected houses, and the schools were disinfected, then it was unwise to close the schools, as, if this were done, the healthy were thrown back to play in the streets with the contaminated. Diphtheria might occasionally evince itself by very slight symptoms, whereas others in the same house might afterwards suffer severely; in the worst cases, the greyish patches covering an ulcer were adherent, and the subjacent tissues became gangrenous, and this severe form was at the outset attended by a high temperature, rigors, swollen glands, pallor of skin, and fetid breath. Younger patients were peculiarly liable during the first week to laryngeal complications; and later on there was danger of syncope, often sudden, albumen in the urine, if copious, was a bad sign. Tracheotomy had several times been performed during the late epidemic with variable success; if performed, it should be done early. Instances were given of the various forms of paralysis following diphtheria; and, for general treatment, those means which appeared best adapted to sustaining the vital powers, were chlorate of potash and iron for medicine. As to local applications, solution of perchloride of iron on a camel's-hair brush had been used, together with inhalation of lactic or carbolic acid, and Condry's fluid in the form of a gargle. Small pieces of ice in the mouth were grateful, with a wet compress round the neck. Emetics were used in croup. Out of ninety-three cases at Bromley and fifty-four at Riddenden, the mortality was in each case about one-fourth; and, in seventy-nine at Bromley, whose ages were stated, the largest number attacked were at two, three, six, seven, and eight years old; whereas the greatest mortality was at one, two,

three, and five years; no death occurred over the age of eleven.—Mr. ADAMS (Maidstone) referred to the general opinion that the locality of the fifth nerve was the region usually affected by paralysis in diphtheria; his opinion, however, was that parts supplied by other nerves were often affected. The defective vision often met as a sequela was a state of hypermetropia. He looked upon the matter of contagion as of a ground nature, like miasma.—Dr. GANGE had, in 1857, seen an extensive epidemic, numbering five or six hundred attacked. He agreed with the predisposing causes mentioned by Dr. Beeby; he recommended the application of solid caustic, and the early administration of active aperients, such as calomel, jalap and rhubarb combined.—Dr. BOWLES (Folkestone) considered Dr. Beeby's mortality large, and thought that mild cases were often overlooked when they ought to be properly included as being diphtheritic. He spoke of the difficulty of defining what is diphtheria.—Dr. PRALL (West Malling) had met with two epidemics, both on banks of large rivers, damp being evidently an important factor. He considered the raised membrane diagnostic of diphtheria; he believed that the membrane of diphtheritic croup was generally visible; not so that of real croup.—Mr. J. ATTHILL and others joined in the discussion.

*Supposed Dislocation of the Hip*.—Mr. ARTHUR LONG (Dover) read notes of a case of a supposed dislocation of the hip. A female aged 29, short and rather stout, of an hysterical temperament, slipped up and fell heavily on to her gluteal region. Two days afterwards, she walked a mile to his surgery, complaining of pain and soreness at the bottom of her spine. He advised complete rest. Six weeks afterwards, she again presented herself, complaining of pain in the right knee and down the leg. This was thought to be rheumatic. The case went on for some weeks, when she was visited at her own house, when there was found to be apparent shortening of the leg to the extent of one inch and a quarter. She stood with the knee bent, resting the foot on the ball of the great toe. There appeared to be slight flattening around the hip-joint, with considerable hyperæsthesia and pain on deep pressure. Passive rotation, flexion, and extension could be produced, but with considerable pain. A consultation was then held with two other medical men, who both considered it a case of dislocation into the obturator foramen. Mr. Long, with the early history of the case before him, could not think so. Others saw her, and their opinion was divided. She then obtained admission into King's College Hospital, under the late Sir William Fergusson, who decided that there was not, nor ever had been, any dislocation; and the patient had since gradually improved. There was still a slight limp, with some apparent shortening, due to the tilting of the pelvis. Mr. Long spoke feelingly of the unpleasantness which might have occurred, had it not been for the great courtesy shown by all concerned.—Mr. TYSON (Folkestone) thought it probably a case of hysterical hip-joint; and mentioned a similar case where there was supposed to be a dislocation on to the dorsum.—Dr. BOWLES, Dr. BEEBY, and others made remarks on the case.

*Rotten Teeth*.—Mr. GARRAWAY read a paper on Rotten Teeth, a Rhapsody, with a Remedy.

#### GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, FEBRUARY 13TH, 1877.

JOSEPH COATS, M.D., President, in the Chair.

*Perichondritis of the Larynx*.—Dr. JOSEPH COATS showed the larynx from a patient who had, for some months before death, suffered from perichondritis of the thyroid cartilage. At the right side, an abscess had formed, the wall of which was pigmented, and the cartilage at one point lay bare in the abscess. The prominence occasioned by the thickening and by the abscess was localised to the region of the right ventricle of Morgagni, and, on laryngoscopic examination, simulated a rounded tumour. It caused obstruction, for which tracheotomy was performed by Dr. Knox. The patient succumbed to bronchitis and gangrene of the lung.

*Specimens*.—Dr. FINLAYSON showed, under the microscope, Sarcinae in Urine; and specimens of Potter's Phtisis and Bronchiectasis were put on the side-tables by Drs. GAIRDNER and JOSEPH COATS.

*Lead-Poisoning*.—Dr. ROBERTSON showed a girl, aged 21, suffering from the effects of lead-poisoning. She enjoyed good health until employed in the lead work, in which she worked in the vicinity of the stoves, where the powdery white-lead floated in abundance in the air. The result of her employment was repeated attacks of colic, lasting each a day or two; and she noticed that her fellow-workers suffered in the same way. Latterly, headache and dimness of sight set in; and, two weeks before admission to hospital, she had two convulsive seizures; the intellect became obscured; there was, however, no paralysis.



Under treatment by iodide of potassium, iron, and Epsom salts, she improved; but at this date (six weeks from admission to hospital) there remained an optic neuritis on the right side. The urine was normal. The gums were never distinctly affected.

*Hemianæsthesia, with Periodical Exacerbations.*—Dr. ROBERTSON showed a woman with slight hemianæsthesia sinistra, interrupted by periodical exacerbations. She was a nurse aged 56, and the disease dated twenty years back. Until menstruation ceased (five years ago), the exacerbations took place once every four months; but, since then, every five weeks. They occurred suddenly, with some confusion of mind and tendency to stagger for a few seconds, and, for six or seven hours thereafter, decidedly defective sensation and motor power on the left side, the habitual state of slightly defective sensation being restored gradually; the attacks were, therefore, not clearly defined "fits". In the intervals, the compass-points could be distinguished by the patient on the right arm at one inch and a half, but on the left arm only at four inches apart. The muscular power was equal on both sides. The history showed that, sixteen years ago, the hemianæsthesia in the attacks was complete, and accompanied by a *prinkling* in the left arm; and there had been hysterical "globus". There was at present (as in Charcot's cases) a tenderness over the left ovarian region. Dr. Robertson thought the lesion was probably seated in the optic thalamus, and he further referred to the existence of unilateral phenomena not only of motor, but also of sensory kind, as well as in a few cases mental hallucinations in hearing, etc., confined to one side only.

*Fracture of Skull.*—Dr. MACEWEN showed several patients who had recovered after fracture of the skull; and a patient with a soft compressible pulsating tumour at the seat of a gap in the skull on the left side of the forehead, left after a compound fracture, which was caused by a fall from a fourth storey.—Mr. FLEMING showed tracings obtained by Marey's tambours from this pulsating tumour. The impulse was very feeble; but the tracings were affected by changes in the position of the patient, by holding the breath and by exercise, alcohol, etc.—Dr. HENDERSON (Barnscastle) showed part of a skull from a girl aged 13, who had been struck by a stone thrown at her just above and in front of the right ear. At the time, there was pain at the part struck, which pain persisted and increased; and, twenty-four hours after the blow, the patient vomited. She was then seen for the first time by Dr. Henderson, who found her sensible and collected. The head was hot, but there was no mark on the scalp. Three hours afterwards, stertor set in, followed by coma, and by death thirty-six hours after receipt of the injury. At the necropsy, there was found a small triangular depressed fracture of the squamous portion of the temporal bone, the internal aspect of the fracture being the larger, and measuring about a quarter of an inch diameter; the sharp edges of the bone had cut a branch of the middle meningeal artery, and the blood had separated the dura mater from the bone over an area as large as an oyster-shell. The brain was healthy in appearance.—Dr. FOULIS placed on the table a skull-cap, in which the middle meningeal artery ran in a canal in the bone for part of its course, the remainder of its channel being deeply indented in the skull, to illustrate the previous case.

*Syphilitic Disease of the Pons Varolii.*—Dr. E. DUNCAN showed a syphilitic gumma of the pons Varolii from a patient aged 37. The patient had a chancre in 1870, not followed by secondary symptoms; he was treated by mercury and iodide of potassium, and considered himself cured. In 1875, ulcers on the left shin and progressive emaciation led him to think that he was still under the influence of the syphilitic poison, and to consult Dr. Duncan. Under tonics and iodide of potassium, the ulcers healed; but pain in the lumbar region and along the left sciatic nerve began to trouble him, and the emaciation progressed; later on, the right sciatic nerve was involved. The patient began to wander in his mind, to suffer from headache, and it was noticed that there was hemianæsthesia of the left side of the face and paralysis of the right eyelid. He finally became unconscious; the temperature rose (averaging 100 deg.), and coma and death followed. Dr. Duncan adverted to the absence of the secondary symptoms; and was inclined to relegate the case to that group of syphilitic cases in which Hutchinson found iodide of potassium and mercury of no avail, and in which paralytic symptoms predominated.—Dr. JOSEPH COATS described the appearance of the brain as, on the whole, normal; but, at the exit of the fifth nerve on the right side of the pons Varolii, a gumma as large as a bean was found indenting the pons and merging into it, so as to have no definite outline; it took origin from the pia mater. In the fissures of Sylvius, a few smaller gummata existed on the pia mater. The structure was that of a grey translucent exterior, with yellowish opaque centre—the grey part made of round cells, the centre of debris. The spinal cord was not examined.

*Spindle-celled Sarcoma of Brain.*—Dr. GAIRDNER showed a spindle-celled sarcoma of the brain from a woman aged 39, who was admitted

to hospital with paroxysmal frontal headache. The patient would not utter a word; was restless, as if hysterical; was not paralysed in any part; the temperature and urine were normal. Death took place thirty-one hours after admission, in a convulsive attack. The friends gave a history of similar symptoms during a short period nine years previously. The tumour lay in the white substance of the left hemisphere, just within the third temporo-sphenoidal convolutions. It was vascular, and produced some tension of the surrounding brain-tissue, which was softened close to the tumour.

*Abscess of Brain.*—Dr. GAIRDNER also showed an abscess in the brain, which occurred in a house-painter, in whom symptoms simulating those of lead-poisoning, especially drop-wrist, existed, but confined to one side. In the later stages of the case, however, the symptoms were distinctly cerebral.

## MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS OF IRELAND.

WEDNESDAY, FEBRUARY 7TH, 1877.

THOMAS HAYDEN, F.K.Q.C.P.I., Vice-President, in the Chair.

*A Case Resembling one of Addison's Disease.*—Dr. GEORGE F. DUFFEY brought under notice the case of a car-driver, aged 32, single, who had been admitted into Mercer's Hospital six months ago, with considerable oedema of the lower extremities, the penis, and scrotum. On examination, an almost general discoloration of the face, trunk, and upper extremities was noticed. The labial mucous membrane was pale, and irregularly speckled over with well-marked dark brown spots, and similar patches were visible on the right buccal mucous membrane and upon the soft and hard palate. The sclerotics were "pearly-white". The urine was scanty, of a lemon-yellow colour, specific gravity 1010, and a little frothy on the surface. It contained a large quantity of albumen, as well as numerous large and small epithelial cells, and a few granular tube-casts. Heller's test gave the coloration indicative of the presence of indican very distinctly. The axillary temperature was only 97 deg. Fahr. So far, the case seemed to be one of associated Bright's and Addison's disease. Ophthalmoscopic examination did not reveal any abnormal pigmentation of the choroid or retina. After several months, the absence of pigmentation after the application of a blister, coupled with the partial and mottled, instead of uniform and general, discoloration then observed—the disappearance of the patches first from the lips and subsequently from the mouth; the greatly improved general health, strength, and spirits of the man; his good appetite; the absence of emaciation and gastric symptoms; and the perceptible "clearing up" of the discoloration following the frequent use of warm alkaline baths and soap—led the author to question whether the case was really one of Addison's disease or not. This doubt was not dispelled until after a perusal of Greenhow's case of "Vagabonds' disease simulating the bronzed skin of Addison's disease" (*Clinical Society's Transactions*, vol. ix). Against the view of the case being one of "Vagabonden-Krankheit" (Vogt), were—1. The age of the patient. Vagabonds' discoloration is most frequently seen in elderly persons of very indigent circumstances and uncleanly habits, especially when infested by vermin; while Addison's disease very seldom occurs in persons past middle age (Greenhow, *Croonian Lectures*, p. 43; and *Clinical Society's Transactions*, vol. ix, p. 46). Of the 37 cases of Addison's disease, tabulated by Dr. Hayden (*Dublin Journal of Medical Science*, February 1865), 56.75 per cent. occurred between the ages of twenty and forty years. 2. The presence at first of associated pigmentation of the mucous membrane and cutaneous discoloration. 3. The constitutional symptoms and subnormal temperature. 4. The non-effect at first of hot baths, the pigmentation actually becoming darker during their use. In favour of vagabonds' discoloration were—1. The fact of its being paler on the face, hands, and other exposed parts. 2. The partial discoloration of the skin. 3. The surface left after blistering being pale. 4. The remarkable diminution of the discoloration after the use of warm alkaline baths. 5. The constitutional symptoms present being referable to a disturbance, and one of the most characteristic constitutional symptoms of Addison's disease—viz., obstinate and uncontrollable vomiting—being wanting.

[Before the discussion on Dr. Duffey's paper, the subject of it was introduced, and examined by the members of the Society.]

The CHAIRMAN was much inclined to agree with the view taken by Dr. Duffey, which was now confirmed by their inspection of the patient, viz., that the case was not one of genuine Addison's disease. He had seen the man with Dr. Duffey, some months ago, and he then certainly presented very many of the symptoms of the true disease. Dr. Duffey had admirably summarised the general features of the affection.—Surgeon-Major JACKSON described a case somewhat like that which



formed the subject of Dr. Duffey's communication.—Dr. NIXON detailed a case of Addison's disease recently under his care, and proceeded to refer at length to the pathology of the affection, basing his remarks on the views expressed by Jaccoud in his admirable article on the "Maladie Bronzée" (*Nouveau Dict. de Med. et de Chir. Pratiques*, tome v, p. 704).—Dr. WILLIAM MOORE alluded to the remarkable case of bronzed skin described by him in the *Dublin Journal of Medical Science*, February 1871, and concluded from it and similar cases that extensive cutaneous discoloration could exist in the absence of enlargement of the suprarenal capsules, being then the result of either strumous or malignant disease.—Surgeon-Major GORE referred to the brownish-yellow discolorations of malarial fevers.—Dr. FINNY objected to the name "suprarenal melasma". From the proximity of, and sympathy between, the suprarenal bodies and the semilunar ganglia, it was quite sufficient to consider the disease as due to sympathetic alterations without binding themselves to include an affection of the suprarenal bodies as part of the cause.—Dr. DUFFEY, in the course of his reply, observed that Jaccoud's theory as to the pathology of Addison's disease—namely, that it was due to an irritation which had its point of departure from the suprarenal glands, the centre of radiation being the semilunar ganglia, and the pigmentary hyperæmia being the result of the abnormal development of function—was corroborated by the lowering of temperature which had occurred in several cases.

# BIRMINGHAM AND MIDLAND COUNTIES BRANCH : MICROSCOPICAL SECTION.

MARCH 23RD, 1877.

LAWSON TAIT, F.R.C.S.Ed., in the Chair.

*Medical Spectroscopy.*—Dr. McMUNN read a paper on this subject, showing—1. A new method of mapping absorption spectra by the adaptation of the camera lucida to the chemical spectroscope; 2. An universal scale, by means of which spectra can be printed in formulae; 3. Easy methods of preparing the various spectra of blood, bile, and urine. Dr. McMunn also described some new blood-spectra.

*Disease of Peritoneum.*—Dr. RICKARDS introduced a case where the peritoneum, both that part covering the abdominal wall and that investing the viscera, near the seat of opaque, yellow, smooth, and mottled masses, mostly spherical, varying in size from that of a hemp-seed to that of a kidney-bean. Some lay under the peritoneum, while others were attached to it by pedicles. On section, these growths were found to be cheesy in the middle, enclosed by capsules. The microscope showed that they originated from the peritoneum, and were composed partly of fibro-nuclear tissue, and partly of cells like white blood-corpuscles. Here and there a distinct stroma was seen forming loculi, and transversed by vessels. The boy, aged 10, had been ill four months with constipation, and afterwards with pain in the bowels and diarrhoea. A dozen or more of these morbid growths had softened and caused perforating ulcers in a part of the small intestine, this part being in the pelvis. These ulcers were sealed over by inflammatory adhesions; and, as there was an ulcer in the rectum, feces found their way from the small intestine, first into the pelvis, and thence into the rectum, and so passed off.

*Duplex Embryo.*—Mr. LAWSON TAIT showed sections of the fused eyes of a duplex embryo, in which all the elements were independent, except the adjacent sclerotic coats for about a third of the circumference, throughout which space the coats were united. The fimbriae of the Fallopian tube, injected and stained, and the organ of Rosenmüller, with its duct about one inch and a half in length, injected and stained, were also shown. The last was a normal specimen; but another was shown which Mr. Tait had removed in the course of ovariectomy on account of the enlargement of Rosenmüller's sac. It was five or six times as large as ordinary, and its lining epithelium seemed in active proliferation.

*Ovarian Cysts.*—Mr. TAIT also showed cysts of the ovary in process of growth, injected, and displaying their identity in vascular arrangement with Graafian vesicles. The thickened walls displayed the sclerosis which Mr. Tait has advanced as an explanation of the growth of cystic tumours of the ovary.

*Cauliflower-Growth of the Cervix Uteri.*—A preparation was also exhibited of cauliflower-growth of the cervix uteri, showing its nature to be really a villous cancer; and, in the case referred to, it was merely the first stage of the ordinary excavating epithelioma of the uterus.

**TESTIMONIAL.**—The patients of Dr. William Barr Brown of Ascot have just presented him with the sum of a thousand guineas, as an expression of their esteem and regard for him.

## REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

### MEAT-FARINA.

MILLER AND CO. of 9, Adam Street, Adelphi, have submitted to our notice a preparation of meat, under the name of meat-farina, which appears to have many merits. The meat in this preparation is in the form of a powder, retaining all the nutritive properties of the meat, and thus differing from those meat-extracts which have little nutritive value, although very valuable as digestive stimulants. Twenty-seven per cent. of this farina consists of nitrogenous matter, fourteen per cent. of fatty matter in a form which preserves it from the tendency to become rancid, together with starchy components converted into dextrine and soluble phosphatic salts. As a concentrated form of nourishment, easily digestible and well prepared for absorption by feeble digestive organs, this preparation appears to be well conceived and cleverly manufactured. It has an obvious field of utility, not only in the dietary of the invalid and the convalescent, but also wherever portability is an important element in alimentation; especially, therefore, on board ships, in camps, for yachting purposes, for travellers, and for armies and navies. In respect to its use in the navy, we may observe that the amount of salt beef and salt pork included in the sailor's dietary is often a great disadvantage, and the men are glad frequently to sell the meat given out to them, at a small value, in order to obtain fresh bread and potatoes. The unsuitability of salt meat is due to the fact that salt increases the metamorphosis of tissue, thus having a tendency to render those who eat it more hungry, while at the same time the meat is rendered relatively indigestible, and so *pro tanto* less suitable for food. The meat-farina contains the meat dry and complete, and not overcooked, with just sufficient salt to give it flavour at the same time. This food supplies flour, leguminous matters, and abundance of phosphates, which constitute a valuable element in a nutritious dietary. On the whole, we regard this food as one of the most ingeniously devised which has been brought under our notice.

### NEW DILATING SPECULUM ANI.

MESSRS. SALT AND SON of Birmingham have brought under our notice



a new form of dilating speculum ani, recently constructed by them, the mechanism of which was suggested by the excellent tracheotomy instrument devised by Mr. Wagstaffe of St. Thomas's Hospital.

The instrument, of which the annexed woodcut is an engraving, is expanded by means of levers, acted upon by a large milled head, the extent of dilatation being entirely under the control of the surgeon. The internal surface of the speculum is highly polished, the external orifice large, and the interior capable of being highly illuminated, so

as to afford a very clear view of the passage.

### THE G.P. MIDWIFERY BAG.

THIS bag has been designed for the use of general practitioners by Messrs. Millikin of St. Thomas's Street, Southwark. It is made of strong leather, and is lined with wash leather; it is not divided into compartments, but contains two pockets in which bottles or other small articles may be placed. Its primary purpose, as its name implies, is to contain obstetric instruments; but it will also be found useful for carrying surgical instruments and other articles used in practice. Being of moderate size and easily carried, it is a very convenient article for the medical practitioner.



## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, APRIL 28TH, 1877.

### HOSPITAL RELIEF: ITS ABUSES AND THEIR REMEDY.

AVERSION to change is, proverbially, a characteristic of corporate bodies, and pre-eminently, perhaps, of those which exist for purposes of philanthropy. If it were not so, we might feel some wonder that certain grave abuses in the administration of our medical charities, and particularly in the management of their out-patient departments, should have survived the large amount of popular and professional disapproval to which free utterance has been given in the press, on the platform, and by petitions, and which has also taken practical shape in the formation of powerful committees for purposes of consideration and remonstrance.

The tenacious vitality of a system which has been loudly denounced as obsolete in principle and peculiarly mischievous in practice, by no means, however, demonstrates the futility of continued agitation on the subject. In a few hospitals and dispensaries valuable reforms have taken place; while in a large number there has been awakened a spirit of advance and of inquiry. If such reforms have been but partial, and if, in the largest and wealthiest institutions, but little desire for improvement have been discernible, it is to be remembered that the best outcome of a newer and healthier tone of opinion on the subject of medical relief is to be seen, not so much in the reform of the older charities, as in the multiplication of those invaluable provident institutions which are absolutely essential to a proper national system of medical treatment for the poor. We, therefore, notice with the greatest pleasure and interest that on Tuesday, April 17th, in the rooms of the Society of Arts, an important public Conference was held under the auspices of the Charity Organisation Society, whose Council invited a large number of medical men and others interested in the question, to listen to a statesmanlike and exhaustive paper, by Sir Charles Trevelyan, on Metropolitan Medical Relief; the points chiefly insisted upon being, firstly, the abuse of the present system as regards the treatment of out-patients, and, secondly, the value of well-managed provident dispensaries and the urgent need for their multiplication. The chair was taken by Dr. Acland, and the meeting was influentially and numerously attended, not only by men distinguished in the medical profession, but by members and official representatives of the Charity Organisation Society, and by others taking a wide interest in schemes of intelligent philanthropy.

The paper (printed copies of which, together with some voluminous and most interesting appendices, were, through the kindness of Sir Charles Trevelyan, distributed to every member of the audience) was followed by a prolonged discussion, in which the Chairman, Sir William Gull, Mr. Prescott Hewett, Sir Rutherford Alcock, Mr. Holmes, Mr. R. Brudenell Carter, Dr. West, the Hon. Reginald Capel, the Rev. R. J. Simpson, Mr. Stevens, Mr. Flower, Dr. Watkins, and other gentlemen took part.

Sir Charles Trevelyan's previous writings have already identified him with this question, as also with many other subjects of social and charitable reform. An account of the proceedings of the meeting will be found on another page.

It may seem to some who listened to the animated discussion which

followed the reading of the paper, that even greater emphasis might, with advantage, have been laid upon the pauperising effect of out-patient departments, the evils of hasty prescribing, and the easy circumstances of many of the applicants. If some of the statistics, to which a correspondent has lately called attention in our columns, had been generally known and appreciated, we should scarcely perhaps have been told that hospital advice is sought, not because it is gratuitous, but because of its superlative excellence; that caution should be used in meddling with a system which at present "works so well"; and, lastly, that the working classes of England ought not to be called improvident; a piece of patriotic optimism which we could wish to see better supported by reliable facts and figures. It was satisfactory, however, to notice the almost entire harmony of feeling which prevailed with regard to the main points at issue; and, if at times the discussion travelled from the lines which have been very generally followed in dealing with this interesting question, certain points were, on the other hand, brought into prominence, which have hitherto scarcely received the attention their importance deserves. Sir William Gull, for instance, pointed out that the present system of relief at hospitals (superseding as it does the habit of domiciliary medical visitation so needful for the inculcation of healthy domestic habits among the poor) encourages the patients to adopt a radically wrong theory of disease. They look, he said, upon drugs as a fetish; they bring children to be drugged when they ought to be washed; and, thinking little of good dwellings, good food, good cookery, and healthy habits, they believe that sickness comes by Providence and goes away by drugs. Well worthy, too, of consideration were the suggestions of Mr. Holmes, who, amplifying an idea already put forward by Sir Charles Trevelyan, dwelt upon the necessity for establishing, as a means of discrimination between hospital and ordinary cases, an inquiry into the nature and gravity of the malady, rather than into the pecuniary resources of the applicant. He urged that, from private practitioners, from provident dispensaries, and from the Poor-law, cases of special difficulty or interest should by mutual arrangement be transferred to the hospitals, which should be looked upon more as centres for consultation, and should be less resorted to for mere treatment.

We are hardly able to follow Mr. Brudenell Carter in his idea that, so long as the nation, by its apathy and imperfect legislation, remains indirectly responsible for overcrowding and for general unsanitary conditions, the cost of sickness among the poor should be borne for them by others, and that the illnesses which are traceable to such causes should in justice be treated gratuitously; while in those of other kinds some payment on the part of patients should be required. Not to mention, however, the insuperable practical difficulty of any such classification of patients, the premium it would set upon avoidable neglect in homes, and the dangers attending a great increase of sanitary legislation and interference, this speaker seems too little to have realised the extent to which overcrowding, and a wretched and unhealthy manner of life, are themselves the result of improvidence, and in particular of improvidence in population.

Some interesting remarks on governors' letters were made by Sir Rutherford Alcock; and the measures which have been adopted with regard to out-patients at the Ormond Street Hospital were described by Dr. West and Dr. Lee, a member of the Local Committee of the Charity Organisation Society.

It has been a subject of regret to those who, in this matter, are pledged to a policy of thorough and general reform that, since the date of the memorial which was presented in 1875 to the British Medical Association, there have been so few active reforms and so few strong expressions of general and professional opinion. Lately, there have been many signs that the interest and sympathy of the public have not in reality subsided, and we earnestly hope that the present meeting may be the commencement of a sustained and fruitful agitation.

It is, however, more than probable that, while intelligent philanthropists and experienced members of the profession are already fairly



convinced on the subject, it is among the subscribers to the medical charities that the most important efforts must be made. It is they who hold the key of the position; it is they alone who can bring pressure to bear upon the governing bodies of the hospitals; therefore, it is they who, above all others, need to be made aware of the facts; and no pains should be spared and no means neglected to show them that the system they are at present perpetuating, by their pecuniary support and by their unquestioning acquiescence, is equally prejudicial to the patients, to the institutions themselves, and to the profession.

#### ARE LUNATIC ASYLUMS PRISONS?

HASTY generalisation is the besetting temptation of young public boards, and this temptation the General Board of Lunacy of Scotland did not, in the days of its youth, successfully resist. Unpopular in its origin and unfortunate in its composition (it contained only one member having the slightest practical acquaintance with the great questions with which it was called upon to deal), it was in a hurry to justify its existence by arriving at results of a generally intelligible and gratifying character, instead of patiently waiting until results shaped themselves out of laboriously collected premises. Unaided by the divination of genius or by scientific imagination well trained and disciplined, the Board rashly committed itself to some random guesses that have been as weights round its neck ever since, impeding its progress in public estimation and dragging it down deeper and deeper into clogging depths. For to the Scotch Lunacy Board has not been given the splendid candour of a Kepler, which could sacrifice a hypothesis which seemed to explain the Universe, the moment that facts required it. On the contrary, that Board has clung all the more tenaciously to its conjectures, the more untenable they have become; and we need not expect to find its blue-books in harmony with scientific observation until the *personnel* of the Board has been changed, and its traditions have been entirely disintegrated by the hostile criticism which is now freely directed against them.

One of the early errors committed by the Scotch Board consisted in bestowing unqualified approval on the system of farming out of pauper lunatics. It was really out of the abuses of this system that the Board arose. The dreadful revelations brought to light by the Royal Commission of 1855 and 1856, as to the condition of the insane in private dwellings in Scotland, startled the House of Commons, shocked the humanity of the country, and led to what may be almost called panic legislation in the Scotch Lunacy Act of 1857. It was clearly the intention of that Act that the farming out of lunatics should be brought to a speedy termination. It contained provisions for the erection of asylums in various districts of Scotland, into which the miserable and maltreated victims of mental disease were to be collected. It allowed five years for the erection of these asylums; but it did not leave their inmates without protection in the meantime, for it directed the appointment of Deputy Commissioners, whose sole duty it should be to visit the insane in private dwellings, and to ameliorate their condition as much as might be possible, until proper homes and refuges had been provided for them. The official existence of the Deputy Commissioners was expressly limited to five years. At the end of that time, when, it was presumed, the needful asylums would be completed, the Deputy Commissioners were to vanish from the scene, and the Commissioners to become Inspectors-General of Asylums in Scotland. But the Deputy Commissioners, having tasted the sweets of office, felt reluctant to resign them; while the Commissioners viewed with aversion the unhappy despatch of two able and agreeable colleagues. In the meantime, a reaction had taken place against the philanthropic fervour that glowed so fiercely when a disgraceful national sore was first uncovered. Fresh interests and other social blemishes pressed the lunacy question out of the foreground of public vision. The lairds began to grudge the money that architects and masons absorbed so freely in connection with the new asylums. Was it really essential, it came to be asked to build palaces for de-

mented paupers? Was the old system so very bad after all? Might it not be adapted to modern notions? These questions found an echo in the heart of the Board of Lunacy. Palaces for paupers, that Board discovered, were not wanted. Great improvements had taken place in the state of the insane in private dwellings under the wise supervision of the Deputy Commissioners. The old system might be continued, i only the Deputy Commissioners were made permanent officials, so that they might continue to supervise the insane in private dwellings, and, by visiting them once a year for five minutes, ensure their living happy ever afterwards, and free from tyranny and abuse, until the next annual inspection. The policy of the lairds and of the Board was not altogether unopposed. Even within the Board, murmurs were heard; while without it there were very audible grumbles, and hints that, when six Commissioners inspected the lunatics of all England, four could scarcely be wanted for Scotland, with a population about equal to that of Lancashire. But the lairds and the Board were not to be gainsaid, and fought vigorously for the relief of the local rates and the existence of the doomed officials. They secured an extension of the appointments of the Deputy Commissioners for three years, and they used that time of grace sedulously to promulgate their views; and, of course, as they preached and proselytised, their notions grew upon themselves as well as upon the public; and, before the end of the three years, they were found teaching that the farming out of the insane was the best method of providing for them, that the cottage-system and family life were the hope of the madmen of the future, that Gheel was the New Jerusalem, and that asylums were egregious blunders.

The Deputy Commissioners were made permanent officials, asylums were curtailed of fair proportion, and the farming-out system was firmly established; but the Board of Lunacy did not then return to moderation. It had committed itself deeply to a certain policy and to numerous hypotheses. New difficulties sprang up around it; opposition menaced it in many quarters, and it dare not recede from any position it had taken up, no matter how ill-advised that position might be. One such position was its hostility to asylums, and that position it has persistently maintained up to the present day. By frequent detraction, by holding up to obloquy every unpleasant feature that such institutions present, and by keeping in the background the enormous advantages they confer upon society, by dextrously obliterating their essential characteristics, and by drawing into unwary betrayal of them those who ought to have been their staunchest defenders, the Board has effectually succeeded in weakening the public confidence in lunatic asylums in Scotland.

And now the crusade is to be extended to England. These notions are to be advanced across the border, perchance that criticism may be withdrawn from them at home; and a raid is to be made on the southern citadels of the simple. Our English Commissioners are, we are informed, ignorant and wedded to the asylum system; and so Sir James Cox comes up to London to enlighten the Select Committee on the Lunacy Laws, and tells them that asylums are "prisons after all". It remains to be seen what influence Sir James Cox's testimony, especially as demolished by the able examination of Dr. Lush, may have had upon the Committee; but in the meantime we think it worth while to examine what warrant there was for his statement, more than once repeated, that "asylums are only prisons after all".

A single glance, we think, must suffice to satisfy any one with an unbiassed mind that there was no warrant whatever for that statement, and that its effect is simply to create prejudice. If the word prison is to be taken in its literal sense as simply a place of confinement, it must doubtless be admitted that asylums are prisons; but, if it is to be taken in its more generally received acceptation, as a place of penal discipline and stern correction, then it is a misuse of language to call a modern asylum a prison. It is clearly in the latter sense that Sir James Cox desires the term, as employed by him, to be understood, seeking thereby to connect with asylums all the distasteful associations that cluster around gaols. An asylum is a place of confinement and



restriction of liberty, and to that degree it is a prison; but to the same degree a public school is a prison, for the boys may not break bounds, nor enter certain parts of the building that are not allotted to their use; and a hospital is a prison, because the patients are restricted to their own wards; while to an even greater extent barracks and workshops are prisons. Nay, if any interference with absolute liberty constitute the place in which it occurs a prison, then are our public offices of that description, because the clerks in them are cooped up in certain rooms from ten till four each day, and are compelled to drive the quill, sort papers, and cipher assiduously, with only an occasional glance at the *Times* or *Scotsman*. Then are our factories and our workshops prisons, because operatives are immured in them daily for long and weary hours; then are our cities prisons, because every man may not enter his neighbour's house; then is the world a prison, because its inhabitants cannot visit Mars and Saturn at pleasure. Limitation of liberty in certain directions is the fundamental condition of human aggregation, and the moderate price we pay for a freedom which the solitary savage with unlimited liberty could never have dreamt of; but to call all limitation of liberty imprisonment is surely misleading and ridiculous. The great bulk of patients in asylums determine their own occupations, or are altogether idle if so disposed. They select their own amusements, are supplied with books and newspapers, have their dietary varied according to their own whims, regulate their lives according to their own desires, within certain wide bounds prescribed by sanitary and medical considerations. They are diligently waited on and indulged, have admirable entertainments provided for them, walk out in well-arranged gardens or in the open fields, receive visitors, attend church or stay away from it as they may be inclined, have access to all games from billiards to dominoes, and are enabled to celebrate every feast and festival in an appropriate manner. The majority of them are better housed, clothed, and fed than they have ever been before, and are subjected to no punishment more grievous than the temporary deprivation of tobacco, no matter how insubordinate or violent they may be. If persons thus treated are in prison after all, then we must alter our notions of what a prison is. "Stone walls do not a prison make." Does the enclosure within these walls of every modern comfort and luxury impart to them that unpleasant character?

Much more prison-like, we fear, is the life in private dwellings in Scotland, of which we shall shortly give a correct sketch. English asylums are not at all like prisons, nor are their inmates in any way treated or regarded as felons. These asylums are, as Dr. Bucknill more accurately said, partly boarding-houses and partly hospitals; and the endeavours of all those interested in the welfare of the insane should be directed to make them partake more and more of the latter character.

#### THE ENTOMBED MINERS.

WE are favoured by Mr. E. W. S. Davis of Mountain Ash with the following note of the mental condition of the rescued miners at the Ty Newydd Pit, Cymer.

I had improvised a little cottage hospital in the shanty or shed by the pit's mouth, where the men in general evidently congregated before going to their daily labour. This was naturally darkened, and had a noble fire at the end. Planks, and sweet hay covering these, formed extemporaneous couches. Candles stuck in clay were arranged quickly and skilfully by some men against the walls. Warm coffee, gruel, and soup were in "jacks" warming by the fire. Some women nurses, and all was prepared to receive the rescued men and boy.

The first patient I received was the boy David Hughes. His face was pale, but his expression collected. On being asked how he was? he replied, without any hesitation, that he felt much better.

There was a peculiar calm in the face of all the men I subsequently received; and here I should say that every patient brought in was attended by a medical man or intelligent student, and brought up the pit in his charge.

Accompanied by this calm, there was an intelligent turn of the eye, and a little period before answering a question; but the answer in all

cases came clear and calm, and with an indescribable air of intelligence.

On feeding George Jenkins, I said (after giving him, in spoonfuls, a cup of warm gruel), "George, I must 'stop tap' now"; and he grinned all over. I had to repeat this admonition in the same words when he was "interviewed" by a reporter, and with the same result—a hearty chuckle!

I said, "They tell me, George, that you have calculated the time you were shut up; how was this?" and he answered readily, "Well, sir, we burned the candles until Saturday, and I judged we had been in seven days to-day". Now, this was within half-an-hour's time of his liberation. His mind was "clear as a bell".

So, also, of Powell and the other Jenkins, although the former, I was told, had been a trifle excited below; but here they answered quickly and calmly and sensibly.

Old John Thomas (deaf, and with peculiar pronunciation) was perfectly still, but with the calm, inquiring, intelligent roll of the eye as in all. On shouting to him, "Well, John, how are you?" he answered in a faint, hollow, but perfectly intelligent, manner, "lled dda", "pretty fair" (or well). He motioned to his ear, and seemed to think there was water in it; but it was evidently an internal sensation only. He was the only one whom light seemed to offend, and he motioned with his finger to have the candle above him removed, which was done.

Not one was ravenous or excited, and, when spoonfuls of gruel or hot coffee were given, they took it like well-conducted children. John Thomas was the only one requiring a stimulant (a very little ammonia in the gruel). His abdomen was not only flat, but hollow—awful to feel. He had diarrhoea the last two or three days of his incarceration. They all took their meal on the Wednesday of the accident. In half an hour's time after admission, I would have guaranteed to have had a clear account from all but John Thomas, and even he would always return a hopeful "lled dda" (pretty well) to my questioning. He had a marked foetid smell of the breath.

For men incarcerated without food for ten days, the mental condition of these men was truly extraordinary; and, what was remarkable, the pulse and temperature of all was not far from the normal condition, but that my friend Henry Naunton Davies will advise you of, he having such a splendid staff of young men (two students) as makes it a pleasure to remember. Two of them bravely went to the extremity of the passage to pass the food through the hole (Messrs. Davies of Guy's, and Dukes).

The imprisoned men had drunk water freely during their incarceration, and three of them ate not more than an ounce of candle between them. The pressure of the air was more than of two ordinary atmospheres, and this appears to have acted possibly in preventing waste.

Mr. H. N. Davies has been unable, through pressure of occupation, to complete his notes of the physical condition of the men in time for publication this week, but will forward to us his report next week. Meantime, a metropolitan hospital physician writes to us:

The recent entombment of the five Welsh miners furnishes several matters of medical interest. In the first place, they were ten days without food without being thoroughly exhausted. It is known that man can exist for nine or ten days without food if a little water be supplied, but that is only under favourable circumstances. In the case of the wreck of the *Arracan* in the Indian Ocean, a few years ago, the crew survived a much longer time than this, but then these men were surrounded by an atmosphere of high temperature, so that the demand upon the system to maintain the body-heat was very small, and probably was quite met by the action of the heart and the chemical changes normally going on in the viscera. In the case of the miners, they also were in a comparatively high surrounding temperature. Mines are always warm, and coal is a bad conductor of heat, so that there was very little loss of heat—at least, after their clothes were once dry. Two points are presented for speculation. The one is, what was the effect on the chemical interchanges of the utter darkness in which they were during the last five days? The other is this—Is there any evidence furnished by their physical condition of any evil effect upon the lung-tissues, from the prolonged respiration of an atmosphere of much more than its ordinary density? When the water rushed into the main in which they were imprisoned, its onward progress was checked by the air, which was thus compressed, it is asserted, to twice its ordinary pressure on the square inch. That it was very highly compressed is certain, from the force with which it



escaped when an opening was made. So far, they do not appear to have suffered therefrom. Probably it was a fortunate thing for them that the air was compressed, otherwise they might have exhausted the available air and died of defective oxidation, as imprisoned colliers commonly do. The absence of delirium in any of them might be influenced by the surrounding darkness and the absence of any high temperature.

#### DRUNKENNESS OR EPILEPSY.

WE have hitherto abstained from commenting on the letter addressed to us on the 7th instant by Dr. Joseph Rogers under this heading, anticipating that the Surgeon of the C Division of Police would either forward us some explanation of his action in the case, or put forward a distinct refutation of Dr. Rogers's statement; but, as he has not thought fit so to do, we may perhaps infer that he has none to offer.

It will be remembered that it was only after careful inquiry and personal examination that Dr. Rogers (who, as is well known, has been prominently connected with workhouse management for a quarter of a century, and who, if any one could, ought to be able to distinguish between mere drunkenness and illness) decided to send the woman to the station; it was, therefore, to say the least, a high-handed proceeding, if not a strange error of judgment and discourtesy, for Dr. Waters to express not only a contrary opinion, but to send her back to the workhouse as an epileptic, etc. One would have also thought that, after her admission next morning that she had been drunk, and requesting to go away, and after Dr. Rogers had returned her to the station with a certificate addressed to the magistrate detailing the facts of the case, Dr. Waters would have hesitated in again asserting, which he did next day, that the woman was an epileptic and had heart-disease—thereby evoking from Mr. Newton a public censure of Dr. Rogers for his refusal to admit the woman to the workhouse, the magistrate having evidently been guided in his judgment by the too confident opinion of Dr. Waters.

It seldom happens that the materials for perfectly demolishing an erroneous opinion are so readily forthcoming as in this case, and we have no hesitation in expressing our view that Dr. Rogers was as completely in the right as Dr. Waters has shown himself to be in the wrong. We can well understand that some degree of ill-feeling has existed between the C Division of Police and Dr. Rogers, for the police would appear to have exercised their power of transferring their prisoners from the cells to the workhouse infirmary very frequently, and, as Dr. Phillips states, too often without much effort in discriminating as to whether they were really sick or not. We are aware that the police have often a difficult duty to perform; but, as the inspectors are empowered to call in and to pay their divisional surgeon in every doubtful case, it is only the duty of such medical adviser to exercise a reasonable discretion, lest he should inflict on a brother medical officer unnecessary labours, for which, under present arrangements, such officer receives no additional consideration whatever.

We consider that this latter point is well worthy of being entertained by the Council of the Poor-law Medical Officers' Association. There must be many workhouse medical officers similarly situated to Dr. Rogers, and liable like him to be called on to attend police cases. Now, an united representation to the Home Secretary might lead to his enforcing more careful examination; or, if that be held to be impracticable, then perhaps to something better still—viz., some additional pecuniary payment to workhouse surgeons from the police-rate, seeing that they are subjected, without fee or reward, to be called at a moment's notice, at any hour of the day or night, to attend to police cases, and that too, as most workhouse surgeons are non-resident, perhaps from a considerable distance.

THE Liverpool charities benefit to the extent of £24,500 by the will of the late Mr. Higgins, an old Liverpool merchant.

A SERIOUS outbreak of cholera has occurred at Akyab. Twenty-five per cent. of the small European population died in thirty hours. The cause of the epidemic is uncertain.

THE new volume of *Army Medical Reports* has been published. It is full of interesting matter; and, although sadly failing in some respects, to which we shall direct attention, is a most valuable volume.

THE list of the gentlemen recommended for election by the Council of the Royal Society is out. It includes the names of Sir J. Fyfe and Dr. Thomas R. Fraser.

A YOUNG woman named Benham, belonging to the Shaker community, has, it is stated, died in the tent at their encampment near Lymington, from consumption, and several other hopeless cases are said to exist.

IN continuation of his evidence before the Select Committee on the Lunacy Laws, Dr. Tuke recently spoke of the use of chloral as having been of great service in the cases of some of his patients. The effect of chloral was, if abused or taken in too large quantities, the same as alcohol.

HER MAJESTY has been graciously pleased to command that the Albert medal, hitherto only bestowed for gallantry in saving life at sea, shall be extended to similar actions on land, and that the first medals struck for the purpose shall be conferred on the heroic rescuers of the Welsh miners.

THE Gresham Lectures for the Easter Term, by Dr. E. Symes Thompson, will include the following subjects: Lecture 1, Tuesday, May 1st, 1877, Sound; Lecture 2, May 2nd, The Ear; Lecture 3, May 3rd, Diseases of the Ear; Lecture 4, May 4th, The Education of the Deaf.

IT is announced in this week's telegrams, that Dr. Billroth of Vienna has been called to Kischeneff to be consulted on the Czar's complaint, for which it was recently stated that Sir Henry Thompson was summoned to Moscow. The report has probably originated in the fact that—as stated in this week's *Wiener Medizinische Wochenschrift*—Dr. Billroth has gone to St. Petersburg to perform an operation.

AT the annual meeting of the Devonshire Hospital and Buxton Bath Charity, after the report for 1876 had been taken as read, and votes of thanks had been passed, Dr. Robertson, the chairman, read his address, from which it appeared that in that period the total number of in-patients received was 1,579, and of out-patients 220. There was hope of being able to extend the hospital, the Duke of Devonshire having acted with great generosity in the matter of granting additional land.

A COURSE of lectures has been arranged for the present session by the National Health Society, 44, Berners Street. It will commence with a lecture by Miss Octavia Hill on Open Spaces, on Wednesday, May 9th, at 4.30 P.M., in the rooms of the Society of Arts, John Street, Adelphi. The Chair will be taken by His Grace the Duke of Westminster. The remaining lectures will be by Dr. Corfield, Wednesday, May 16th, on Knowledge the True Enemy of Disease; by Dr. Ransome, F.R.S., of Manchester, How to Prevent the Spread of Epidemics; by the Rev. Harry Jones, June 6th, On Homes of the London Poor; by Mr. Ernest Hart, on June 13th, On Coffee-Taverns for the People; and by Dr. Bridges, Medical Officer of the Local Government Board, On the Influence of Civilisation upon Health.



## THE ANNUAL BALANCE-SHEET.

THE annual balance-sheet of the British Medical Association for the year 1876, printed on another page, shows a steadily continuing and increasingly satisfactory financial result. Thus, it will be seen that, at the end of the year, the total liabilities were only £2,038:11:7, against which there was cash in hand £2,287:8:7, together with £1,500 invested in consols. The profit for the year was £1,063, in addition to the amounts due to the Association for advertisements and subscriptions, so that the total excess of assets over liabilities was £4,241:13:3. Such a financial result, considering that the total subscription of one guinea includes the whole cost of the JOURNAL free by post weekly, together with Scientific Grants to the State Medicine, Parliamentary Bills, and Habitual Drunkards' Committee to the extent of upwards of £500, and all charges in connection with the general organisation of the Association, is, in every respect, creditable to those who are entrusted with the financial management of affairs. It not only insures a firm foundation for the business relations of the Association, but promises in the future the means of increasing efficiency in all the branches of the work which properly falls within the sphere of the British Medical Association.

## THE KING'S COLLEGE HOME AMATEUR THEATRICALS.

THE demand for tickets to witness this performance on the 14th of May has been so great, that a second representation has been arranged to take place on the 15th. Those who have been disappointed in obtaining places for the first representation will therefore, probably, find amends in the superior finish and closeness of acting which may reasonably be anticipated on a second performance of the same play.

## AUTO-INSPECTION OF NUISANCES.

It appears to be thoroughly understood among preservers of game that the worst poachers make the best gamekeepers. It would be interesting to know whether the Local Board of Bromley would urge a similar reason for appointing as inspector of nuisances the owner of several cottages, and the son of the owner of a good deal more property of a similar character. However well the arrangement may answer in this particular case, it is one which we venture to think would, as a rule, be infinitely undesirable, and which would scarcely conduce to sanitary progress. The interest attaching to this, we hope unusual, appointment in Bromley is enhanced by figures published in the recently issued annual summary of the Registrar-General, from which it appears that, during 1876, a higher zymotic death-rate prevailed in Bromley than in any other of the suburban districts comprising the Registrar-General's outer ring. This high zymotic rate, which was most excessive within the Local Board District of Bromley, was mainly due to the epidemic of diphtheria which had prevailed for many months; but the fatal cases of measles, whooping-cough, enteric fever, and infantile diarrhoea were also numerous. The rapid increase of population in Bromley in recent years has led to a great demand for house-accommodation, which has been partially met by the erection of cottages, in which the drainage and water-supply arrangements are anything but conducive to the health of the residents. Many existing rows of cottages have large cesspools in dangerous proximity both to the dwellings and to the shallow wells which supply the only water available for the use of the residents; there appears, moreover, to be no satisfactory system of scavenging, necessary to prevent cesspools in urban districts from becoming an intolerable and dangerous nuisance. The defects of water-supply are the less excusable, because the mains of the Kent Water Company are laid within a short distance of the properties which are allowed to remain dependent for their water upon wells which are open to the gravest suspicion of sewage contamination. That overcrowding increases the evils arising from the sanitary defects of much of the cottage property in New Bromley, few who know the neighbourhood will venture to deny. The Public Health Act of 1875 confers ample powers upon local sanitary authorities to deal with such matters, and to insist upon dwelling-houses being supplied with pure

water when such a supply exists within the district. Bromley, under a more effectual sanitary organisation, ought to take its place among the healthiest, instead of standing at the bottom of the list, of suburban districts. It should not be forgotten that public health government in England is a system of local self-government, and that it is in the power of the ratepayers to decide whether the public health shall be fostered or neglected. A local board which is apathetic in health matters is but the reflection of the apathy of the ratepayers on the subject.

## THE TURKISH ARMY HOSPITALS.

THE following letter from Dr. Crookshank, Surgeon to the Sienitza Military Hospital, Bosnia, dated March 7th, has been forwarded to us.

"As the post for Constantinople leaves to-morrow, I avail myself of the opportunity of reporting the safe arrival and distribution of the blankets placed under my care. That they arrived at a most acceptable time and were most thankfully received, you will readily believe when I tell you that for the last ten days the weather has been extremely cold, and that the whole country, as far as the eye can reach, is covered with snow, from two to three feet deep. In consequence of the weather, my journey hither was slower than usual, and from Dakaplan to Sienitza I was obliged to procure large wooden sledges to transport the bales. Through the kindness of Mr. Cooper (Imperial Commissioner for Railways), the goods were conveyed by the company from Salonica to Mitrovitza free of charge; and I obtained an order from Mehmet Ali Pacha, commandant of the forces of Novi-Bazar, etc., to allow the goods to be conveyed from Mitrovitza to Sienitza at the government expense. With the exception, therefore, of portage and a few incidental expenses incurred *en route*, the cost of conveying the goods from the boat at Salonica to the hospital at Sienitza has been very little. The blankets are of good size, but not large enough to be divided; are thick and warm, and greatly admired, more especially the scarlet-coloured ones, which give a very cheerful appearance to the otherwise dismal-looking wards. After the distribution of the blankets, the patients, being told who were the donors, with one voice desired their thanks to be conveyed to the English people for their kindness to them in their time of sickness and distress. I received four hundred and fifty blankets from Constantinople, and an additional hundred from Mr. Blunt (Salonica); and these have been distributed as follows: Sienitza, 250; Novi-Bazar, 150; Iachliga, 30; Colachine, 25; Berana, 25; Acovar, 25; Novi-Varoch, 25; on hand, 20—total, 550. On my arrival at Mitrovitza, I found the hospital only contained thirty patients, and I did not deem it necessary to leave any blankets for that place; but I would beg to suggest that, as all the patients evacuated from the hospitals in this district will have to pass through Mitrovitza, it would be well to add another thirty or fifty to the hundred (second hundred) for Mr. Blunt at Salonica, and ask him to forward them on to Abdullah Pacha, the commandant of his place. A consignment of warm flannel clothing having lately been received from Lady Elliot for the sick and wounded of these same hospitals, they are now well supplied for the cold weather; but a still greater need exists than before for medical comforts and extras, which can best be purchased on the spot and as necessity requires; so that, if the (Stafford House) Committee care to place any further sum with Mr. Consul Blunt, at my disposal, I shall be very happy to distribute it to the best of my ability when the present £100 is finished, of which I will forward an account."

## A DANGEROUS MIXTURE.

A FIRM of Metropolitan chemists have been fined forty shillings and damages for having left in a gentleman's room a mixture of nitric and hydrochloric acids, said to have been made up from the prescription of a medical man for internal use, but without any further description of it, or caution as to its dangerous character, written outside. It was alleged in defence, that the boy neglected to deliver the prescription and instructions at the same time that he left the bottle in the wrong chambers. Shortly after the entry of the proprietor of the chambers, Captain Smart, the bottle burst with a loud explosion, the room was filled with smoke and a suffocating vapour, and the tablecloth and table appeared to be burning. There seems to have been here a complication of carelessness on the part of all concerned, and it certainly was quite right that Captain Smart should be indemnified from suffering from the incautious proceedings of the prescriber and the dispenser of this dangerous compound.



## ALLEGED NEGLECT IN AN ASYLUM.

THE Lunacy Commissioners have, according to the *Daily Telegraph*, just investigated the circumstances attending the painful death of a young lady at Haydock Lodge Private Lunatic Asylum, near Warrington. She was the daughter of Councillor Kean; and, the night after her admission, was left alone, it was alleged, without any nurse, and next morning was found dead, her body being covered with bruises. An inquest was held without her father's knowledge, and the visiting justices have held an inquiry, and presented their report to the Commissioners. In their letter to Dr. Lister, the proprietor of the establishment, they say they are strongly of opinion that Miss Kean ought not to have been left without an attendant; and that, during the Commissioners' visits, they had expressed surprise at the defective arrangements for night-attendance on the female side, and they regretted this had not been remedied.

## SOIRÉE OF THE ROYAL SOCIETY.

THE annual *soirée* of the Royal Society was held on Monday evening. A great number of interesting objects were shown; among them a fine collection of relics of the great mammalia and ancient man from the Derbyshire Caverns, by Mr. Boyd Dawkins, and a very ingenious and novel modification of Mr. Crooks's radiometer, which he calls the othescope (from *ἠέθεω*, I propel); the fact being that it is now demonstrated by Mr. Stodare and Professor Stokes that the real cause of motion in Mr. Crooks's experiments is the action of heat setting in motion the highly attenuated residual atmosphere in the glass, and not, as Mr. Crooks originally supposed, an hitherto undiscovered action of light. Professor Burdon Sanderson showed a modified arrangement of Lippman's "electrometer", for investigations of the electricity of plants and animals. There was a recently killed batrachian heart in action, its apex being in connection by a moist silk thread with an electrode, the other electrode being connected with the base. Electrical disturbance was observed about one-sixth of a second before each contraction.

## TYPHOID FEVER IN PERA.

CONSTANTINOPLE papers publish alarming accounts of the spread of typhoid fever in Pera and the adjoining quarters. The causes of the scourge are not far to seek. The dead in the Turkish cemetery of Ainali Kavak, says the *Levant Herald*, are interred by the score in shallow furrows which do not deserve the name of graves; and neither quicklime nor any other chemical preparation is made to mitigate the results of so slovenly a system of sepulture. Hence the poisonous exhalations breeding the fever by which certain quarters are ravaged. All the cemeteries, and especially most of the Mahomedan burial-grounds, are left round Constantinople and its suburbs in a horrible state of neglect and dilapidation.

## INFECTIOUS DISEASE AMONGST CATTLE AND AMONGST MEN: A CONTRAST.

ON April 11th, in the House of Commons, Lord Sandon informed Mr. Ridley that "the attention of the Government had already been called to the fact that there was a direct communication between country dairies and infected districts of the metropolis by the daily return of milk cans in an uncleansed state, and communications had been made to the local authorities on the subject. It was a matter of no slight importance, and would be carefully watched by the department". The casual reader of this Parliamentary response might probably imagine that it referred to the prevailing epidemic of small-pox, and to the possibility of the infection being conveyed into unsuspecting rural districts through the agency of the milkman's cans; or he might even read it as an intimation that the attention of the Government had been called to the existence of some nefarious design for propagating enteric fever amongst the healthy inhabitants of dairy-farms by washing empty milk cans in the water of some of the London wells. If, in the simplicity of his mind, either of these ideas had entered his head, it would have been speedily corrected by the perusal of further information which the

courteous Vice-President of the Council vouchsafed to anxious inquirers on this subject, from which it would become evident that the infectious disease, about the propagation of which the Government were so much concerned, was neither the small-pox, which has been so prevalent in London of late, and which is being actually disseminated from it into rural districts so far off as Gloucestershire, nor the scarlet fever, which is raging with equal severity in these same rural districts, and which, with a polite reciprocity, they are probably at the same time importing into the metropolis. It is not the "humans", as our American neighbours designate them, who are being so anxiously looked after by the Privy Council, but the cattle. The former unfortunates fall under the supervision of another "department", that of "my lords" of the Local Government Board; a department which, if we may judge by the Gallio-like indifference with which it treats the continual criticisms with which it is favoured as to the utter inefficiency of the present law on the subject of infectious disease, considers the life of man as not worth much more than that of a few sparrows, and far inferior to that of a single ox. We commend to the attention of the *poco curante* President of the Local Government Board the excellent example of anxiety for the welfare of his *protégés* which is exhibited by his promising young colleague; and we trust that he will soon wake up to a perception of the fact, that milk cans play as important a part in conveying disease into towns from the country, amongst men, as it appears they are credited with doing in the reverse direction amongst cattle. Probably, when Mr. Sclater-Booth has realised this fact sufficiently well to be able to estimate its importance, and has also opened up the fallows of his mind to a few others of a similar kind which are ready to germinate in it, we shall be favoured with a response from him in Parliament to this effect: that "the attention of the Local Government Board is being anxiously directed to the enormous loss of life which is annually incurred by the inhabitants of this country from diseases of a preventable nature; that the Board is very sensible of the almost utter worthlessness, for preventive purposes, of existing legislation on the subject; and that it proposes, with as little delay as possible, to institute a careful inquiry into the whole matter, with the view of ascertaining what can be done to stem the tide of wholesale human slaughter which is now inundating the country".

## ACTIONS AGAINST HERBALISTS.

AN action has been brought by the Apothecaries' Company against a man named Keeys, a herbalist in Birmingham, for practising as an apothecary. On the evidence of a quasi-patient, a policeman, the jury gave a verdict for the Company, with £20 penalty. The argument for the defence was that twenty-one days' notice had not been given; and further, that, under 34th and 35th of Henry VIII, a herbalist might prescribe and receive money for his medicine. With regard to this statute, the judge said it had been decided to apply only to such as administered medicines "of pity and charity". (Lyttelton, 349.) An appeal on the point of law was applied for, but deferred. In similar actions against two other herbalists, one had paid the penalty and the other had accepted judgment against him.

## DEATH IN CHILDBED.

AN inquest was held last week at a village near Sedgley, Staffordshire, on the body of a woman who had died the day after her confinement. From the evidence published in the local journals, we gather that Dr. Ballenden was engaged to attend deceased as a parish patient; that, on visiting her, he found a "cross-birth", and said he should return next day. The husband meanwhile sent for Mr. Walker, another surgeon, who attended with Mr. Fennell, and, under chloroform, delivered by turning. The woman died a few hours afterwards, and the cause of death, as stated by Dr. Pope, after *post mortem* examination, was exhaustion connected with congestion and inflammation of the lungs, a weak heart, and lacerations from "cross-birth". Dr. Ballenden's explanation of his non-return was that he heard another medical man had been called in. Mr. Bunch, in giving evidence, considered that



the laceration arose from the operation (turning). It was not always desirable to turn; opium might be given, and the patient left a few hours. Chloroform would be dangerous to a person with heart and lungs in that condition. Dr. Alexander Simpson of Edinburgh would usually turn in such cases at the earliest possible moment, and would give chloroform, and, unless he heard the patient suffered from heart-disease, would not think it necessary to examine the chest. He considered that something in pregnancy served as an antidote to the ordinary danger of chloroform. In the present instance, the congestion of lung was probably from hypostatic congestion, as the examination was made seven days after death, and there had been no symptoms of cough, etc. He should not feel justified in leaving such a case till delivered. Mr. Walker and Mr. Tait had previously given evidence to the same effect. Mr. Clay explained that, in certain cases, he would turn under chloroform, but not without examining the chest. In others, he would give opium and antimony, and would not object to leave for a few hours. If difficulty occurred, he should decapitate. Chloroform was not less dangerous in labour than in other cases, but was less freely given. In the present instance, the state of the heart and lungs would induce him not to give chloroform. If decapitation had been performed, the woman might have recovered. In brief, the evidence on the one side was to the effect that the woman ought not to have been left, that chloroform and turning were right, and that she died from unavoidable causes; and on the other, that the woman might safely be left for a few hours, use of opium, that turning was dubious, and chloroform improper. The verdict stated the cause of death as given by Dr. Pope, acquitted Mr. Walker of any blame, and censured Dr. Ballenden for having left the patient.

#### A SUGGESTION FOR THE SPHYGMOGRAPH.

A CORRESPONDENT writes to us: Most people who have worked with the sphygmograph will have found the use of ink or of camphor-soot very inconvenient, on account of the blotching and smudging almost unavoidable. The paper which I enclose is prepared for engineers in the use of a machine called the "indicator", for estimating the power of steam-engines. It is marked by a piece of copper-wire travelling upon it, in the same way as the pen is used in the sphygmograph. The marks were made upon it by the merest touch with the brass of an ordinary watch-key. I cannot but think that it would be much preferable to the albuminated paper generally employed. The suggestion is one which seems well worthy of practical application.

#### VERY LIKELY TO SUCCEED.

In the House of Commons, on April 13th, Sir Thomas Chambers presented a petition from "The Order of Daniel", Brompton Square, in favour of sending out a new Arctic Expedition, composed of men who did not use flesh food, alcohol, or tobacco. We should imagine there would be some difficulty in procuring a sufficient number of A.B.s who would sacrifice their "baccy", not to speak of the novelty of a large number of nautical vegetarians. Sir Thomas Chambers certainly showed some moral courage in presenting before the world a petition containing the essence of various follies and crazes.

#### ACCOMMODATION FOR INFECTIOUS DISEASES.

A LETTER from Dr. Dudfield to the Managers of the Metropolitan Asylums Board has lately been printed, in which he urges views which are those of a majority of the metropolitan medical officers of health. He says that he endorses the opinion of the Asylums Board Committee that "adequate provision for the isolation and treatment of epidemic infectious diseases in the metropolis does not exist", and that "such a provision can be best made in a comprehensive and systematic manner by one central authority acting for the whole metropolis"; that the managers have already provided for a large number of non-pauper cases, and that he should be glad to see the accommodation extended "for all comers", provided power be taken to charge those who can afford to pay, none of the persons admitted being considered to have received pauper relief, and the total cost to be borne by a metropolitan

rate; that, if these conditions be deemed inadmissible, he would prefer a severance between the Poor-law administration and the hospital authorities, and that the execution of the Vaccination Act be transferred to the central authority. He considers that this expense should be looked upon in the same spirit as the cost of the fire-brigades; viz., as a premium of insurance against the spread of infectious diseases; also that special provision should be made for those who are willing to pay for their treatment and are accommodated in these hospitals. We have noticed Dr. Dudfield's letter because of the importance of the subject, although our remarks on the same circular letter which were published on March 10th not only contain similar proposals, but go further and state "that the simplest plan for the removal of the sick and their admission into a hospital would be, that a certificate from any registered medical practitioner should entitle those requiring it to the use of a proper ambulance and to admittance into the hospital". We also advocated the erection of a separate wing, or at any rate the provision of separate wards, for paying patients; as well as the reception of all persons affected with small-pox or a similar infectious zymotic disease into hospitals provided by and under the control of a central metropolitan authority.

#### THE DUAL MEDICAL ADMINISTRATION IN INDIA.

WE have reason to believe that an attempt is once more to be made to do away with the double medical administration which obtains in India, under which every general of a division of the army has one medical administrative officer to advise him on the health of black and another to do the same for white troops. A commission charged to collect evidence and prepare a scheme has been at work for some time, although its proceedings have been kept secret, and are not likely to be published until the scheme has been submitted to the highest authorities in India and at home. Lord Halifax, then Sir Charles Wood, who was Secretary of State for India when the direct Government passed from the hands of the Court of Directors to the Crown, made a strenuous effort to effect an amalgamation of the two services, and, to facilitate the work, abolished the medical funds of the three presidencies, which up to that time had been among the chief attractions of the medical services of India. Sir Charles Wood's scheme did not find favour with the authorities at home, chiefly bent on obtaining a large increase to the administrative staff of the medical department of the British army in India. This, after some resistance on financial grounds, was obtained, and the question of amalgamation was allowed for some years to slumber, although it is notorious that Lord Lawrence always declared the dual medical administration to be too costly and cumbrous to stand in days of financial pressure, which may be said to have come, as the enormous expenditure caused by two famines has strained the resources of India to the utmost. The system is becoming more costly every day; the supply of medical officers for the British army is so short that the department is becoming "small by degrees and beautifully less", and, at the present rate of decrease, will ere long be quite incapable of meeting the wants of the army in times of the profoundest peace. This being so, the number of surgeons has fallen so low that medical officers of higher grade, and, of course, higher pay, have taken their place in India, thus largely adding to the cost of the system, and once more forcing the dual system on the notice of the finance authorities in that country. How is the difficulty to be met? How is this much talked of amalgamation to be effected? Some, like a writer in the *Army and Navy Gazette*, propose to deal with it in a very summary way. They propose to hand over the charge of the whole of the British troops in India to the care of the medical service of India, carrying this scheme out in a gradual way. Now, it is easy to see that such a scheme as this must of necessity be very distasteful to the home service; it would have the immediate effect of adding to the disintegrating process already in active operation, as it would cut off the service from the only field in which remunerative appointments for the higher grades are to be found; in fact, such a scheme would be nothing less than the



death-warrant of the medical department of the army. It is justified on the plea that the medical service of India has the command of the market, and can get as many recruits as the service requires, the reverse being the state of the case as regards the medical department of the army. Another scheme is to break faith with the medical service of India, and say to its members: "Make your choice between military and civil service; if you elect to be military surgeons, you shall be employed indifferently with European and native troops, and, ceasing to belong exclusively to the service of India, will be liable to serve in any part of the world where the British army serves. If you elect to be civil surgeons, you shall remain in India doing all civil medical work, and cease to be liable to serve with troops, black or white." Now, this would be one of the most flagrant breaches of faith on record, and the moment it is promulgated in the schools India will cease to command the services of such men as now flock to it for a career. It would also fail in another way; there would still be a dual administration, one civil and the other military. We do not pretend to say that the scheme in preparation may not be so contrived as to deal fairly by both services, although we confess it is not easy to see how this is to be done; and we see, by a late article in our contemporary the *Indian Medical Gazette*, that much uneasiness prevails among the medical officers of the Indian service lest their prospects should be affected by the coming change.

#### PATHOLOGICAL HISTOLOGY.

AT the meeting of the Pathological Society held on Tuesday last, the members expressed not only satisfaction, but delight, at the very beautiful microscopical slides, as well as drawings, exhibited by Dr. Braidwood to illustrate his paper on contagium, based on the grants of the British Medical Association. These sections of vaccinated heifer-skin and of vaccinated and variolous skin from the human subject could not, in our opinion, be excelled, either as regards the transparency and perfectness of the sections or as regards their staining, as the author stated in his remarks that the tissues examined had undergone no intricate process of hardening, but were prepared for section-cutting simply by immersion in spirits. The art of making sections of hardened viscera is to a certain extent attainable by much patient practice; but we have never seen, among the microscopical collections of amateur section-cutters in this country and on the continent, a series of so uniformly complete sections of viscera. The importance of this will be understood by microscopists who desire to examine the elements of viscera in their natural relationship to one another, and not as isolated units. It is evident that Messrs. A. C. Cole and Son, of Liverpool, who prepared the specimens exhibited by Dr. Braidwood last Tuesday evening, have a natural talent for this kind of work; and their willingness to assist thus, as well as the very handsome manner in which they have done their work, deserve the thanks and support of the profession at large, and especially of the Science Grants Committee. Inasmuch as Messrs. Cole and Son devote their entire time to such work, we trust the profession in London will support them when they take up their residence among them, which, we are informed, they purpose doing shortly.

#### CHEMISTS' EARLY CLOSING MOVEMENT.

A LARGE and influential meeting of pharmaceutical chemists and druggists was held last week in the theatre of the Pharmaceutical Society, for the purpose of taking some steps to secure a generally earlier hour for closing. Mr. G. W. Sandford, a former president of the society, occupied the chair, and was supported by prominent members of the trade. The movers do not propose to close so as in any way to prevent medicine from being obtained in cases of emergency, their object being to stop a certain class of customers postponing their shopping until a late and inconvenient hour, thereby considerably extending the labour of all concerned. Resolutions were passed unanimously approving the object of the meeting, fixing the hour of closing at 8 P.M., and the final shutter at half-past eight, and also against Sunday trading

where it could be possibly avoided. Many speakers were of opinion that there would be no great difficulty in applying these resolutions. One speaker, an assistant, told of the very long hours worked by them, which showed that some change appears necessary. Medical men may exert much influence in favour of this very reasonable movement, and it is but right and kind that they should do so, either directly by their times and modes of ordering medicine, and indirectly through their patients.

#### NON-RESIDENT STUDENTS AT CAMBRIDGE.

A GRACE passed the Senate of the University of Cambridge, on April 19th, affirming the report of the Lodging-House Syndicate which recommends the appointment of a responsible officer (by preference a resident member of the Senate) to inspect all houses for which licences are desired, and to report thereon to the Syndicate, taking account chiefly of the accommodation and sanitary state.

#### MR. LIEBREICH.

THE *World*, usually well-informed and clever in its comments, in referring to General Ignatieff's visit to Mr. Liebreich, which has been the subject of much diplomatic mystification, has recently undertaken to enlighten the public with the information that he is "a young surgeon, who took his degree only five years ago". This is perhaps rather hard on the great ophthalmologist who, more than twenty years ago, earned undying fame by labours which may almost be said to have created pathological ophthalmoscopy at one stroke. For Liebreich's ophthalmoscope, with the instrument-makers' modifications, has made the tour of the world, and has for nearly the last quarter of a century been the pocket-companion of almost every surgeon and physician; and, by his *Atlas*, he created to a large extent the pathological iconography of ophthalmoscopic research. It did not exist before, and singularly little has been added to it by years of research of many skilled observers. To have at once the fame and fruits of a quarter of a century of work of a kind which is achieved only by a few men of genius, and yet to retain the blushing honours of youth, is perhaps a fate not altogether to be lamented. Having achieved a foremost place in ophthalmology, and won laurels in music and in sculpture, Mr. Liebreich is now devoting the scanty leisure of his rare genius to painting. It is sometimes charged against medical men that they are narrow and monotonous in their pursuits and in their amusements: Thompson, Seymour Haden, Probert, Evershed, and Liebreich in this do much in our country to redeem our profession from a part of that reproach.

#### SCOTLAND

THE report of the Committee for subscriptions towards the building fund of the Glasgow University states that, when the debt on the works has been cleared, £71,000 will be required to complete the new buildings. The Committee mention that a Glasgow gentleman has contributed £1,000 for the spire.

WE regret to notice the death of Dr. Peter Brotherston of Alloa, who was acting surgeon to the Alloa Hospital and medical officer to the parochial board. The deceased, who was about fifty-five years of age, died very suddenly. He was in large practice, and was very greatly respected throughout that part of Scotland.

DURING the fortnight ending April 5th, three cases of small-pox, all mild, were recorded in Glasgow, and seventy-three cases of fever—thirty-one typhus, and forty enteric. It was stated at a late meeting of the police board, that the recent prosecutions of grocers who sold "butterine" as butter had caused some misapprehension in the minds of the public. The offence did not lie in selling an unwholesome article, but in selling as butter what was not butter, although a perfectly harmless substance. The Committee would be satisfied if a label were attached to each parcel of "butterine" sold.



THE University of Glasgow have conferred the degree of LL.D. upon, among others, Dr. Thomas Andrews, President, and Dr. Allen Thomson, President-elect, of the British Association for the Advancement of Science.

AT a recent meeting of the Edinburgh University Court, an application was received from Sir R. Christison to be allowed to resign the Professorship of *Materia Medica* in the University on a retiring allowance, as provided in the Universities (Scotland) Act of 1858, and the relative ordinances of the Commissioners under that Act. It was resolved to report to Her Majesty in Council that, in the opinion of the Court, this application should be granted. Professor Grainger Stewart, M.D., was appointed one of the Examiners for Graduation in Science in the Department of Public Health, in place of the late Professor Laycock. Monday, January 14th, 1878, was fixed as the last day for receiving applications for the additional examinations in Anatomy, Midwifery, and Clinical Surgery, which fall vacant at the end of 1877.

#### UNIVERSITY OF EDINBURGH.

SATURDAY last was the graduation day at the close of the winter session of the University of Edinburgh, and a number of graduates in arts and divinity received their degrees. Two gentlemen also received the degree of M.D.—namely, W. Allan Jamieson, M.B. and C.M., and J. Halliday Scott, M.B. and C.M. The degree of Doctor of Science was conferred upon W. J. Vereker-Bindon, M.B., B.Sc., S. Drew, M.D., and John W. Taylor, M.D., in the department of Public Health; and upon Aghornáth Chattopádhyaý, B.Sc., and R. M. Morrison, B.Sc., in the department of Chemistry.

#### FATAL DIRK-WOUND.

A MELANCHOLY accident happened at one of the clubs in Edinburgh last week. One of the officers from the Castle called in at the club on his way to a ball, and began to talk to one of the pages in the lobby. The officer, being in full highland dress, wore a dirk, and, while showing it to the boy, made a sportive pass at him. The latter, in drawing back from the weapon, unfortunately thrust his left side upon the point of it, and received a wound which penetrated the abdomen below the ribs. He was removed to the Royal Infirmary, to the care of Mr. Annandale, and appeared for a day or two to be doing well, but a change for the worse took place, and he died on Sunday afternoon.

#### THE CHAIR OF MATERIA MEDICA IN EDINBURGH.

WE hear that Dr. T. R. Fraser, whose name is well known in connection with a series of highly important and extremely well conducted researches on chemical and physiological therapeutics, is likely to be a candidate for the Chair of *Materia Medica* in the University of Edinburgh. Dr. Fraser's researches on the antagonism of certain alkaloids are specially valuable; and his former connection with this Chair as an assistant of Sir Robert Christison will no doubt be considered to enhance his high scientific claims to the appointment. Dr. Fraser's reputation is as high abroad as in this country, and few names are better known to foreign physicians and to pharmacologists. Dr. Fraser was recently appointed by the Government a member of the Committee of Inquiry into the causes of the outbreak of scurvy in the last Arctic Expedition; and he is this week nominated for the Fellowship of the Royal Society.

#### PROFESSOR BALFOUR.

PROFESSOR BALFOUR has resigned the office of Dean of the Medical Faculty in the University of Edinburgh, which he has held for upwards of thirty years. We are glad to know that this step has not been rendered necessary by any failure of health or power, but by the increasing demands made upon his time and energy by his enormous botanical class, which, like his botanical text-book, is the largest in the world, numbering above three hundred students. The time would seem to be a fitting one for some suitable acknowledgment of Professor Balfour's long and valuable services to science and to medical education.

#### UNIVERSITY OF ST. ANDREWS.

THE annual graduation ceremony in divinity, arts, and medicine, at St. Andrew's University took place on Friday, the 20th instant, when ten gentlemen received the degree of M.D. Principal Tulloch concluded the proceedings by a few words of congratulation to the graduates, adverting to the highly satisfactory results obtained in the examination for the degrees, and remarking that it was an encouraging sign in the University that the degrees were more and more sought after by the alumni.

#### IRELAND.

THE President and Fellows of the King and Queen's College of Physicians have, we are informed, forwarded a memorial to the Right Hon. the Secretary of State for War on the subject of the grievances of the Army Medical Service.

IT is intended to erect a tablet over a bed in the Stewart Institution for Imbecile Children with the inscription "*Lady Napier: in memoriam*", in accordance with Lady Napier's wish, who has lately given a donation of £100 to the funds of the charity.

#### ADULTERATION OF FOOD.

DR. CHARLES A. CAMERON, Analyst for the County Dublin, brought his report for the past year before the Grand Jury last week. From this document, it appears that 238 articles of food were analysed during the year, of which 46 were found to have been adulterated. There were 35 convictions for selling adulterated food, and the fines imposed amounted to £135.

#### HOSPITAL SHIP "DUBLIN".

AT a late meeting of the Guardians of the South Dublin Union, a report from the Committee on Establishment Charges was under consideration, which recommended that the hospital ship, for which nearly £300 has been paid during the last three years, "in employing a man to do nothing and his wife to help him, as well as another man to assist in the same work", should be sold, subject to the permission of the Local Government Board, so as to save the cost of maintenance. The guardians have adopted the suggestion, and it is probable that the hulk will soon be disposed of.

#### HEALTH OF DUBLIN: QUARTERLY REPORT.

IN the Dublin Registration District, the number of births registered during the quarter, ending March 31st last, amounted to 2,469, being equal to an annual ratio of 1 in 31.9, or 31.4 in every 1,000 of the population; and the deaths to 2,485, exceeding the births by 16, and affording an annual ratio of 1 in 31.7, or 31.6 in every 1,000. Omitting the deaths (99) of persons admitted into public institutions from localities outside the district, the rate for last quarter was 30.3 per 1,000. The deaths from zymotic diseases registered during the quarter numbered 345; the average number of deaths from these diseases in the corresponding quarter of the previous ten years being 467. There were 17 deaths from small-pox, 2 of these cases being from persons outside the district, who died in hospital; and, although these 17 cases are about double what occurred in the December quarter of last year, yet the disease is not spreading to any great extent. From fever, 91 deaths resulted; scarlet fever, 48; measles, 46; whooping-cough, 17; croup, 16; erysipelas, 9; diphtheria, 8; and diarrhoea, 35. Bronchitis caused 453 deaths, or 18.2 per cent. of the total deaths, 125 deaths from this disease having been registered during the last two weeks of March; pneumonia proved fatal in 81 instances, and lung-disease unspecified in 51. One hundred and fifty-nine children died from convulsions. There were 114 deaths from heart-disease, 63 from paralysis, 33 from apoplexy, 20 from Bright's disease, 29 from kidney-disease unspecified, 47 from brain-disease, 34 from liver-disease unspecified. Phthisis caused 301 deaths, mesenteric disease 44, hydrocephalus 46, scrofula 14, and cancer 43. The mean of the mean weekly temperature for the quarter was 43.2; and the rainfall for the thirteen weeks measured 8.207 inches.



## MEDICAL RELIEF IN THE METROPOLIS.

A LARGE assemblage, presided over by Dr. Acland, met on April 17th in the hall of the Society of Arts, Adelphi, to discuss the subject of medical relief in the metropolis, Sir Charles Trevelyan, K.C.B., having engaged to read a paper upon this subject. Among those present were the Right Hon. Earl Stanhope, Sir James Hogg, Dr. A. P. Stewart, Mr. Prescott Hewett, Lord Dunsany, Sir Rutherford Alcock, Sir William Gull, Dr. Guy, Mr. Ernest Hart, Dr. Fairlie Clarke, Dr. Langdon Down, Mr. Cooper Key, Dr. Ford Anderson, Mr. Andrew Johnson, Mr. G. A. Spottiswoode, Mr. Lennox Browne, Dr. West, Hon. C. W. Fremantle, Mr. Hamilton Hoare, Mr. A. G. Crowder, Hon. R. Capel, and Mr. F. D. Mocatta, etc.

The CHAIRMAN said that the subject which had brought that meeting together was one of the most intricate social questions of the day, and was of increasing importance and interest. The question had obtained its present magnitude in the memory of every one present; for the system of which complaint was made was only of a few years' duration, and it had only lately become of great importance. After some further remarks, he called upon Sir Charles Trevelyan to read his paper.

SIR CHARLES TREVELYAN commenced by laying stress upon the enormous number of the recipients of medical relief in the metropolis, amounting, in fact, within the police area, to fully one-fourth of the population, and, within the inner circle, to a probably still larger proportion. He dwelt on the many evils which such mistaken prodigality must entail, such as the heavy burden thrown upon the medical profession, the necessity of prescribing for patients at a rate which precludes any adequate care either in diagnosis or in treatment, the fatal encouragement offered to various types of mendicancy and fraud, and, last of all, the terrible fact that, to hundreds of thousands, this system of medical relief is the entrance-gate to those habits of dependence for which the London population is unhappily distinguished beyond the rest of their countrymen. Sir Charles then spoke at some length of the important committee and subcommittees of eminent professional men which met in 1870, under the presidency of the late Sir W. Ferguson, to consider the subject of metropolitan medical relief and to make suggestions for its reform; he also reminded his hearers of the conference called in December 1871 by the Council of the Charity Organisation Society (at which Mr. W. H. Smith, M.P., presided, and Mr. Stansfeld, Dr. Acland, and others, assisted); and he read to the meeting the memorial presented in 1875 to the British Medical Association by three hundred and three members of the profession. He then alluded to certain reforms which have been commenced at St. George's and King's College Hospitals, and to the stupendous annual number of out-patients still prescribed for at St. Bartholomew's, the London, the Metropolitan Free, Guy's, and St. Thomas's Hospitals, a gross total which, according to the latest published returns, amounted to 355,631. After speaking also of the system of exacting small payments from the more well-to-do patients which had been adopted at certain of the special hospitals, he stated that the committee of the Children's Hospital, Great Ormond Street, which had for some time past referred patients for investigation to the Charity Organisation Society, had now decided to offer to applicants the choice of submitting to an inquiry into their social position and earnings, or of making some payment for their treatment. He then spoke of the unsuitability of trivial cases for gratuitous hospital treatment and of the manifold advantages of the system of provident dispensaries; and he pointed out that, as the middle and upper classes were able to take care of themselves, and as the lowest classes were provided for by the Poor-law, there remained only a wage-earning class, the members of which could almost invariably afford the subscription required by provident dispensaries, which were, in fact, competent to meet all their needs, except in peculiar and difficult cases, which would in future, as heretofore, be referred for treatment to the hospitals. After characterising as retrogressive certain features in the policy of the Council of the Hospital Sunday Fund, and after demonstrating the failure of the Hospital Saturday movement as a scheme for changing the working classes "from alms-receivers to alms-givers", he recommended—1. That hospital out-patient letters should be abolished, and admission to hospitals restricted to difficult and peculiar cases, while those whose ailments are trivial should be referred to provident or Poor-law dispensaries, or, if in good circumstances, should, as at the Ormond Street Hospital, be offered the alternative of payment or inquiry; 2. That existing free dispensaries should be made provident, and that new provident dispensaries should be established; 3. That the medical officers of provident and Poor-law dispensaries should be authorised to recommend to the neighbouring hospitals their more serious and difficult cases. Sir Charles then adverted to the ad-

vantages which must accrue, both to patients and to medical students, from the plan of domiciliary visitation; and, after dwelling on the success of provident dispensaries in the provinces, and on some favourable features in the cottage hospital system, he concluded his paper by a quotation from the letter of a Melbourne correspondent, who pointed out that, in that colony, the example of the mother country was even so far surpassed, that patients wealthier than the doctor habitually drove to the hospitals in broughams, the lady occupants of which were attired in costly silks and jewellery.

SIR WILLIAM GULL said that they were all agreed that the conditions attendant upon gratuitous medical relief in this country were unsatisfactory. It had not always been unsatisfactory; but each year it was now becoming more and more so, in consequence of the conditions of the advance of society. Forty or fifty years ago, the Poor-law Department took little care of the sick poor; but they were now drafted into the Poor-law infirmaries, where they were treated and looked after with the same skillful attendance as they would receive in the large hospitals. Above the very poor was a class of persons who were not able to pay largely for medical relief, but who considered that they ought to pay something for medical relief, a spirit which betokened independence. There was one fault in the medical profession, and it was the animus of its members to bestow relief at any moment and upon any object. That spirit was not yet sufficiently respected by the public. There was a great idea that the relief cost nothing, and it was, therefore, thought by many that it should be given for nothing. That was a mistaken notion. It was a mistake to the profession and a mistake to society. It put the labour of the medical man in a false position, and it placed the profession at a disadvantage. The medical need of the class above the pauper would be met by the establishment of provident dispensaries. It was not that these were required by the members of the medical profession, who could bear the burden and the loss, as they had hitherto done, but because, as matters now stood, the poor thought little of medical advice, except in the sense of taking drugs and swallowing physic. If provident dispensaries were established and medical men attached thereto were in the habit of visiting patients at their own homes, the best influences would be brought to bear upon the domestic life of the poor. At present, the poor had an idea that disease came from Providence, and that it must be cured by drugs. Now, if there were a mischievous idea which ought to be got rid of, it was that. Children were often brought to a medical man to be drugged when they really wanted and ought to be washed. The poor had an idea, when ill, that, if they could only swallow so much medicine, they must get well again. He believed that one of the effects resulting from that meeting would be to spread the knowledge that disease could be prevented by hygiene, by good food, and that it should be prevented by careful cooking of the food, and by regulating the amount and insuring the quality of that which was taken. The gin-palaces which stood at one corner of the street and the medical dispensaries at the other were evidence of monstrous excrescences abounding in society. The establishment of provident dispensaries would create a feeling of independence among the people who received medical advice. Then, with regard to the use or the abuse of the great hospital charities, it was well known that many people came to them who ought to pay. In one sense, it was a sort of compliment to the hospitals. There was so great a feeling prevalent that the great hospitals were well managed, that in some cases people would put off their best clothes and don poor apparel in order to consult medical men at the hospitals. That was a feeling to be discouraged. Sir Charles Trevelyan had suggested that there should be no out-patient letters issued; but he (Sir William Gull) considered that they were necessary in some cases, as, for instance, in diseases of the skin, eyes, etc. Encouraging the lower classes to help themselves would in reality have the effect of increasing their intelligence, and, at the same time, it would be striking a blow at bad habits. The out-patient departments of most of the large hospitals was a comparatively novel innovation, and was often in many ways, by its operation, detrimental both to the hospital and to the patients, and it might be curtailed to the advantage of both. Many people came to him claiming charity, and, when he did not know them, he referred their cases to the Charity Organisation Society for inquiry. He was personally much indebted to the Society for the pains they took in such cases, and he felt bound to say that their inquiries were conducted so as not to hurt the feelings of anyone. The resolution which he had to propose was worded in general terms, and he had no doubt that it would meet with the unanimous acceptance of the meeting. It was as follows; viz.:

"That the improvement of the people of London in health and habits of thrift and independence demands that, while, on the one hand, out-patient departments should be regulated so as to secure the prompt treatment of cases requiring the special resources of a hospital,



on the other, free dispensaries should be converted into provident dispensaries, and new provident dispensaries should be established in proportion to the wants of the population."

Mr. PRESCOTT HEWETT said that, after the very able and exhaustive speech of Sir William Gull, it would not be necessary for him to offer any remarks. Having been located at St. George's Hospital as one of the house-surgeons for a longer period perhaps than any other gentleman similarly placed, all he would say was, that he most cordially concurred in all that Sir William Gull had said. He seconded the motion.

Sir RUTHERFORD ALCOCK had listened with great pleasure to the exhaustive and excellent paper which had been read by Sir Charles Trevelyan. Whether the numbers relieved formed one million out of the four millions of population of London, was a moot point; it might be asked whether some of the patients did not appear many times on the same lists. Everyone connected with the out-patient departments of hospitals was aware that people earning good wages, and who might contribute something towards the expenses incurred in giving them relief, did not do so. The really poor had the Poor-law infirmaries to go to. The lower middle classes ought not to have gratuitous medical advice; and there was really only a very small margin between those who could not pay at all and those who could pay something; and, therefore, he considered that, if they had a million, or even anything like half a million, of people receiving gratuitous advice, they had far too many. Such a state of things neither blessed those who gave nor those who received it; in fact, it really fostered a great evil among the classes who were the recipients of such charity. He believed that the working poor of our large towns were less provident, less thrifty, and were becoming more intemperate than persons of the same class in any other country with which he was acquainted. Such a result was a great evil; it limited the power of industrial production, led to distress in the homes of the poor, and largely recruited the ranks of pauperism. A great deal of that might be traced to the system now prevalent at hospitals and dispensaries, which led the poor to make no provision when they were in health and work for the relief of their families and themselves in sickness. But this condition of things did not lie with the poor alone. It was necessary that the governors of, and the subscribers to, these charities should be educated. He had personally made efforts, in the case of some hospitals, to ascertain whether those who obtained relief were deserving and proper cases, and he had met with difficulty in prosecuting his researches. Subscribers had said to him: "Oh, there may be some abuse, but it would be a greater evil to subject the poor to inquisitorial inquiries." They said: "Your left hand should not know what your right hand does in such cases." It seemed to him that it was the bounden duty of governors and subscribers to make inquiries, either personally or through the Charity Organisation Society, or any other available channel. Some people liked to delude themselves with the idea that letters were well bestowed, but in many cases they were handed over to the first applicant by the butler, or by anybody else who was deputed to give them away. In very few instances were inquiries made as to whether the applicants were not working people, who might be able to pay something to provident dispensaries. The first evil they had to correct was that of letters, which did not answer the purpose intended, and which encouraged people to beg. The whole tendency of the remarks which he had to offer was, that there was a great education to be effected on the whole subject of hospital and medical relief, beginning with governors and subscribers. Sir Charles Trevelyan had suggested that they should begin by converting free dispensaries into provident dispensaries; but he (Sir Rutherford) thought that there would be great difficulties in the way of carrying out that idea, and, in fact, they had better found provident dispensaries *de novo*. There was one matter which they ought to bear in mind. It was a principle of human nature to value a thing in proportion to what was paid for it. If they could only instil into the minds of the poor that medical advice was the most valuable advice which they could obtain, he felt quite certain that that fact would more than balance all the other benefits which would exist and be fostered collaterally with it.

Mr. HOLMES thought that, in the cases of the persons who applied for medical relief at the hospitals, inquiry should be made as to the cause of the diseases. Inquiry into the domestic circumstances of the people was in most cases objectionable. All cases were not alike; for a man who earned sixty shillings a week might have a disease which rendered more expensive appliances necessary, and the man would be worse off than a man of thirty shillings a week whose case was an ordinary one. He thought that the cases in the out-patient departments of hospitals might be much cut down if there were a connection between the hospitals, the dispensaries, the Poor-law authorities, and the practitioners; and he considered, too, that the hospital out-patient departments should be merely consultative. As it was, the overcrowding

of hospitals deprived them of much of their usefulness; for it was impossible the teaching of medicine and surgery could be carried out where the medical man had to see one hundred patients an hour.

Mr. R. BRUDENELL CARTER thought that, while the governing powers allowed the people to remain in an unsanitary condition as regarded the rivers, the water-supply, the drainage, overcrowding, and the like, it was hardly fair to expect the working classes to bear the burden of paying for restoring the health thus lost. He expressed his dissent from the view that the working classes were improvident and drunken. He supported the motion.

Dr. WEST explained the principles adopted at Great Ormond Street Hospital for Children, and stated that good results had followed from the course adopted.

Mr. REGINALD CAPEL described the steps taken by the Great Northern Hospital to test the statements made by applying patients as to their earnings, and stated that in very few instances only were these statements proved to be false. He said that no married man who had twenty-six shillings a week, with whatever number of children he had, should receive this relief, and no single man with eighteen shillings a week should receive it. He suggested that the provident dispensaries, to be thoroughly successful, should be under the hospital roof, saying that many of the people came to hospitals because they thought they got the best advice.

The Rev. R. J. SIMPSON supported the motion, saying that his experience showed him that the people valued what they paid for; as, when they had free schools, they neglected to send the children, but, when they had to pay, the children were sent regularly.

Mr. STEPHENS explained the working of the Hammersmith and Fulham Provident Dispensaries, both of which, he said, were thoroughly successful.

Mr. FLEWER, one of the secretaries of the Hospital Saturday Fund, accused provident dispensaries of being unremunerative to the medical profession and extravagant in their working expenses.—Sir CHARLES TREVELYAN said that the speakers who had praised these institutions had alluded to such as were well managed.—In answer to questions from Mr. Alsager H. Hill, Mr. FLEWER admitted that the Hospital Saturday Fund had disbursed in various expenses of collection 20 per cent. of the £4,000 to which their receipts for last year had amounted.

The CHAIRMAN earnestly deprecated the idea that anything but the most purely disinterested philanthropy had induced the medical profession to take part in the present meeting, and to advocate in general the principle of hospital reform; and he took occasion to remind the audience of the part taken at the earlier conference by Mr. W. H. Smith and Mr. Stansfeld, and of stating that the latter gentleman, Cardinal Manning, and some other influential laymen, had been only prevented from attending on the present occasion by absolutely unavoidable engagements.

The motion was carried *nem. con.*

Hearty votes of thanks were given to Sir Charles Trevelyan and to the Chairman, and the proceedings terminated.

## MILITIA SURGEONS.

### DEPUTATION TO THE SECRETARY OF STATE FOR WAR.

On Monday afternoon, a deputation of the Parliamentary Committee of the British Medical Association waited on the Right Hon. Gathorne Hardy, Secretary of State for War, at the War Office, Pall Mall. The deputation consisted of Mr. Childers, M.P.; Lord Claude Hamilton, M.P.; Mr. J. Chaine, M.P.; Mr. Ernest Hart, Chairman of the Committee; Mr. Reginald Harrison, Dr. J. H. Paul, Mr. Monson, Dr. H. Cooper Rose, Sir H. Wilmot, M.P.; Dr. W. Orange, Mr. Lush, M.P.; Mr. Repton, M.P.; Mr. Crawford, M.P.; Mr. Arthur Peel, M.P.; Sir Trevor Lawrence, Bart., M.P.; Dr. John T. Griffith; Mr. O'Sullivan, M.P.; Mr. Bass, M.P.; Mr. Polhill Turner, M.P.; Mr. Basil T. Woodd, M.P.; Mr. Ripley, M.P.; Mr. W. Holder, Hull; Mr. Johnston, M.P.; Dr. J. Macpherson, Dr. J. Seaton, Mr. Curgenven, Mr. Wheelhouse, M.P.; Captain Nolan, M.P.; Dr. Henry, Mr. Leith, Q.C., M.P., and Sir Robert Buxton, M.P.

Mr. MITCHELL HENRY, M.P., in introducing the deputation, said: This, sir, is a deputation of the Parliamentary Bills Committee of the British Medical Association, who represent here the militia surgeons, who, being officers and having duties to perform elsewhere, are not able to be in London to-day. I have been requested, as an old member of the medical profession, to introduce this deputation to you in the absence of Dr. Lyon Playfair, who is prepared to do all in his power in favour of our cause, but is prevented from being here to-day through an unfortunate affliction. In his absence, I will ask Mr. Hart,



the Chairman of the Committee, to make a statement to you. All that I can say to you, sir, is that, having from time to time had the pleasure of communicating with you in the House of Commons, you have always expressed yourself as interested in the militia service as in the army. After the Warrant of last year had been issued, you said that you would be prepared to consider individual cases of grievance. I believe that several such cases have been brought under your notice, but none of them have met with anything more than your sympathy. You did not think, sir, that anything could be done for them. I know that militia surgeons belong to a hard-working and poorly remunerated profession, and, as the changes which have been made greatly reduce their incomes, they are felt to be hardships of a very serious character. I believe that, during the last few days, there have been a great many promotions; but, however gratifying these may be, they do nothing towards remedying what is a purely pecuniary grievance. All that we ask for is, that justice may be done.

Mr. ERNEST HART said: The statement that I have to make in the absence of a most accomplished and able member of Parliament, Dr. Lyon Playfair, embodies much of what he would have said had he been able to be present on this occasion. In bringing before you the case of the militia surgeons, I am stating a case on behalf of others, and not on behalf of that particular body before you to-day. The deputation before you, sir, consist of the Parliamentary Committee of the British Medical Association, who are only interested in the militia so far as militia surgeons, who form a part of the public service, and who have a grievance to complain of, are concerned. The particular points to which I have to call your attention are, first, that, by the instruction of 1873 and by the Warrant of July 18th, 1876, and the Secretary of State's instructions thereon, some of the militia surgeons are, and nearly all will be—at this moment, probably are—deprived of the greater part of the income which they had derived up to that period as militia surgeons. This income has been taken from them by removing from them duties which they had hitherto performed, not because they have been wanting in their proper performance, but because it was thought that the exigencies of the service required the change. Their case is that, although they will suffer considerable loss (indeed, in some cases, loss of the most material importance to them, as part of their living) by reason of this alteration, the authorities have refused to make them any compensation for that loss. Their grievance is, that their time and professional services have been monopolised since 1854; that two embodiments for periods of a year have taken place during that time—the embodiment during the Indian Mutiny and the embodiment during the Crimean war; that they have been taken from their respective places of practice to perform the duties required of them; and that they have actually fulfilled these duties. Then, again, they have been called away to service and to manoeuvres, which has greatly interfered with their private practice; and their liability to be called away suddenly from their place of residence has been a bar to their getting public appointments which are open to the other members of the medical profession. Each surgeon is liable to be required to go to the head-quarters of the regiment, and to be called out for a whole year at a time; and a professional man in practice who may be called away from his duties for a whole year at a time suffers, not only material loss, but an actual deterioration of position which lasts for some years, and he has reason to believe that the remedy required is not of a merely temporary kind; the necessities of the case will not be met by temporary remuneration; they must be met by a grant which will afford compensation for past and prospective loss. In other words, no man would consent to be taken away from his practice for a year's payment; for the taking him away may involve serious professional injury to him during the whole of his life. None of the militia surgeons can, therefore, be taken to have consented to be liable to serve for a year at a time, if they had known that the Acts of Parliament under which they got their commissions would have been repealed or abrogated. The 42 George III, up to the present, confirms them in their appointments, fixes their duties and expectations. Under this Act, many were required to reside at the head-quarters of the regiment, and the head-quarters for the time were not always the best adapted for private practice; but then they had an income to depend on, and the militia surgeon coupled the disadvantages of the locality with the advantages of the fixed income, and he accepted the two together. And, having taken up that position with the guarantee of Acts of Parliament that they would retain that income, now that income is taken from them and they receive no compensation; they suffer considerable loss, not from any act of their own, but for the public service; and it is a principle that individuals who suffer for the public good should not go without compensation. In respect to the losses sustained, they vary very considerably, of course, according to the emoluments of the regiment; but, where two of the gentlemen were

earning £300 a year, twelve from £250 to £300 a year, and fifty from £200 to £250 a year, at the present time, and under the regulations complained of, their incomes are reduced to about an average of £27 a year, and that £27 is earned under circumstances so onerous, that it cannot be said to be any compensation. They are now expected to serve twenty-seven days a year at £1 a day. Now, if the surgeon be a man in active private practice, he must leave some one behind him to take his place, and the ordinary rate of payment to an assistant is £1 per day. The militia surgeon has also to pay his own expenses whilst in attendance on his regiment. The £27 which he receives not being more than sufficient to pay his assistant, he is out of pocket. The appointment is now practically untenable, and, whatever the official object, the result is to make appointments which should be worth, on an average, from £250 to £300 a year (and which, when accepted, were accepted as permanent) worthless; for the £27 cannot be considered as salary, since it hardly covers the out-of-pocket expenses. The militia surgeons do not question the right of the Government to make alterations; but, when alterations are made for the good of the service, and which involve hardship and loss on individuals, they should, we say, sir, receive compensation. When Lord Cardwell's scheme came into operation, it was said that there would be no individual hardship; you, sir, have made that statement to members of Parliament; and you have stated in the House of Commons that you would consider cases of individual hardship. Many cases have been put before you, and your most recent statement was, that, until December 30th last, you could not pledge yourself to any decision on the practice. With your permission, sir, I will briefly notice your reply to Dr. Lyon Playfair. In answer to a question by the hon. member, you pointed out, by way of compensation, that "the new Warrant gave medical officers in the militia increase of rank and increase of pay subject to certain conditions". The increase of rank is what they do not ask for and what they do not value; for it is no equivalent for the pay which they have been deprived of. The increase of pay is from £3 to £4 a year, and that would not be equivalent for a loss of £275, and, therefore, we submit that the two points on which you say they have advantages are no advantages. Then you say, sir, that, under the new regulations, they do not perform the duties which they did formerly, but that is what they complain of; for it is in consequence that they suffer considerable loss for which no compensation is offered; and they point to the fact that, when the adjutants suffered loss, they were compensated, and they ask for like consideration. It is generally found, and I am bound to add that it has raised a sore feeling in the profession, that, when questions affecting the regular army and the doctors are raised, the doctors generally come off second best. In this case also, although the loss of the surgeons is considerable and excessive, and totally destructive of their prospects in many cases, there appears to be no chance that the Government will afford them compensation.

Mr. HARDY, in reply, said: I have received a letter from Lord Exeter and a letter from the Lord Advocate, both of whom are prevented from being here, and they have asked me to mention the fact to the deputation. With respect to the general question of the army surgeons, I do not think that this would be a good time to go into that, though Mr. Hart ought to know that what he asked for two years ago, when he came here with a deputation, has been much exceeded by what has been done for the medical officers. With regard to the militia surgeons, that is a different case; they have different duties to perform, and practically it was urged that their duties were unremunerative; that the attendances on the staff and their families were unremunerative; and the only thing, so far as I can make out, on which they made lucrative returns was the passing of recruits. That was a service for which payment was not made by salary, but for work done, and at any moment the non-recruiting for a regiment might cause a cessation of that; and I do not see that there could be any claim made for loss sustained by the non-necessity of recruiting in a certain district of which a medical man has the charge. My attention has been called to Acts of Parliament, but I can find no trace of any Act of Parliament which gives any such rights to militia surgeons. The Act of George III has been cited; but pension for service ceased in 1829 by Act of Parliament, so that they have had no claim on the public purse for pensions since that; so that the whole question is whether, work not being done by them, they should receive compensation for work which they do not do. There is no power in this department so to compensate, and, there being no power by Act of Parliament, it would be necessary to make an appeal *ad misericordiam* to the Treasury; and I am bound to say that I cannot hold out any promising prospect to militia surgeons on that ground. In certain cases which have been submitted to me, it seems to me that militia surgeons have gained by the change. In respect to what Mr. Hart has said, I find that, since 1869, their pay has practically increased from 14s. 4d. to £1 8s. when on duty, and



this is a material increase and gain. The question of recruiting has been changed by operations at head-quarters, and the examination of recruits would naturally be put into the hands of army surgeons; and I do not suppose that it would pay a surgeon to go any distance from the town in which he was settled down to examine recruits. Then, with regard to private practice, though there may be cases where men who have been confined to militia practice have been injured, in fact, in the majority of cases, militia surgeons have been able to gain considerable positions, and they are not now called on to surrender their work in the event of an embodiment. I have very carefully gone through the different cases which have been presented to me. They vary very much in the mode in which the sums have been earned, but I am Act of Parliament to go on; there are no longer any pensions, and absolutely without power to compensate. I have no authority and no they stand on different ground in this respect from the adjutants of militia. The adjutants had the opportunity of retiring within six or nine months, and, if they retired, they got certainly better terms than if they did not retire; if they did not retire, they went back on the old terms, as they had always had these retirement allowances. They did not get them under special circumstances. Since 1829, the militia surgeons have taken the militia work as part and not as the whole of their practice; but, when they formed a part of the permanent staff, they used to be entitled to pensions on retirement. Under these circumstances, I cannot hold out any hope that they will get compensation for loss sustained. It is my desire that, so far as he possibly can, the Director of the Medical Department of the Army shall give them employment—that is, when they can take it; but, in a great many cases, where medical men have settled down, they cannot take employment. The Director of the Medical Department would, I am sure, be glad to give them employment whenever he finds that he can do so.

Mr. HART: In reference to that answer, it seems to me to differ greatly both in spirit and effect from the promise made that individual cases would be considered on their merits. It was known to Lord Cardwell and to you, sir, that the Government payments would be payments for work done; and the difficulty in compensating militia surgeons is a technical difficulty only, and does not affect the hardship suffered, nor the equity of the claim. I do not see any promise of redress.

Mr. HARDY: I am sorry that I cannot help it.

Mr. MITCHELL HENRY, M.P.: Any one who had paid attention to the subject must know that the result of this interview is disappointing and unsatisfactory; but, at the same time, we beg to thank you for your courtesy and consideration.—The deputation then withdrew.

## ASSOCIATION INTELLIGENCE.

### BORDER COUNTIES BRANCH.

THE spring meeting of this Branch will be held at Penrith, on Friday, May 4th. President: Dr. HENRY BARNES. President-elect: Dr. STEWART LOCKIE.

Gentlemen intending to read papers, or be present at the dinner, are requested to give notice to the Secretaries.

RODERICK MACLAREN, M.D. } *Honorary Secretaries.*  
JOHN SMITH, M.D. }

Carlisle, March 6th, 1877.

### METROPOLITAN COUNTIES BRANCH.

A GENERAL meeting of this Branch will be held at the rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, on Friday, May 11th, at 8 P.M., when Mr. S. S. ALFORD will open a discussion on the Necessity for Legislative Measures in the Treatment of Habitual Drunkards.

ALEXANDER HENRY, M.D. } *Honorary Secretaries.*  
ROBERT FARQUHARSON, M.D. }

London, April 21st, 1877.

### BATH AND BRISTOL BRANCH.

THE sixth ordinary meeting of the session will be held at the York House, Bath, on Thursday, May 24th, at 7.15 P.M.: H. F. A. GOODRIDGE, M.D., President.

The evening will be devoted to a discussion on "The restraint of Hæmorrhage during and subsequent to Operations on the Limbs". The subject will be introduced by Mr. Nelson C. Dobson, F.R.C.S.

R. S. FOWLER, Bath. } *Honorary Secretaries.*  
E. C. BOARD, Clifton. }

Bath, April 24th, 1877.

## PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

At a meeting of the Committee of Council, held at the office of the Association, 36, Great Queen Street, London, on Wednesday, the 18th instant—W. D. HUSBAND, Esq., Treasurer, in the Chair—

It was resolved: That the Financial Statement, as audited by Messrs. Price, Waterhouse, and Co., be received and adopted, and in accordance with By-law 33, published in the JOURNAL.

## FINANCIAL STATEMENT FOR THE YEAR ENDING

DECEMBER 31ST, 1876.

*Revenue Account, or Profit and Loss for the Year ending December 31st, 1876.*

	Dr.]	£	s.	d.	£	s.	d.
Editor .. .. .	..	..	500	0	0		
Sub-Editor .. .. .	..	..	150	0	0		
Contributors .. .. .	..	..	1036	17	0		
Journal:—							
Printing .. .. .	..	2793	19	6			
Paper .. .. .	..	1992	0	6			
Postage .. .. .	..	829	10	9			
Address Bands .. .. .	..	163	18	1			
					5779	8	10
Wood Engraving .. .. .	..	..	69	5	6		
Reporting .. .. .	..	..	87	8	0		
Sundry Journal Expenses:							
Editor's Postage .. .. .	..	15	5	5			
Newspapers .. .. .	..	19	2	10			
Parliamentary Papers .. .. .	..	2	19	8			
Telegrams, Expenses of Assistants .. .. .	..	12	0	5			
Wages of Boy .. .. .	..	24	0	0			
Cleaning Rooms, and Sundries .. .. .	..	18	13	6			
					92	1	10
Rent of Editors' Rooms .. .. .	..	..	27	13	0		
Scientific Grants .. .. .	..	..	300	0	0		
Expenses of State Medicine and Parliamentary Bills Committees and Sub-committee for obtaining Restrictive Legislation for Habitual Drunkards .. .. .	..	..	85	18	5		
Special Grant to Joint Committee on State Medicine .. .. .	..	..	100	0	0		
Legal Expenses .. .. .	..	..	51	13	5		
Auditors' Fee .. .. .	..	..	42	0	0		
General Secretary .. .. .	..	..	450	0	0		
Rent .. .. .	..	..	85	0	0		
Furniture .. .. .	..	..	6	10	0		
Stationery, Envelopes, Paper .. .. .	..	30	1	0			
Circulars and Printing in connection with Subscriptions .. .. .	..	14	9	0			
Ditto, in connection with Advertisements .. .. .	..	22	0	3			
Association Printing .. .. .	..	125	19	0			
Ditto, Annual Meetings, Reports of Committees and Daily Journals of 1875 and 1876 .. .. .	..	60	17	6			
Printing in connection with Editor's Room .. .. .	..	16	7	6			
Reprints .. .. .	..	4	2	0			
					273	16	3
Salaries and Wages .. .. .	..	..	417	10	3		
Postage .. .. .	..	..	105	13	5		
Sundry Office Expenses:							
Travelling Expenses of General Secretary .. .. .	..	14	6	6			
Receipt Stamps .. .. .	..	4	11	1			
Carriage on various Parcels .. .. .	..	4	0	8			
Minute Books, Ledgers, Ink, Paper, etc. .. .. .	..	62	8	3			
Telegrams .. .. .	..	6	13	9			
Cleaning Offices .. .. .	..	26	10	1			
Assistance - Copying and List of Members .. .. .	..	66	0	5			
Commission on Advertisements .. .. .	..	5	14	3			
Journals bought (out of print) .. .. .	..	7	12	0			
Sundries, Printers' Dinner, etc. .. .. .	..	19	6	11			
Woodcuts .. .. .	..	2	2	0			
Coals and Gas .. .. .	..	7	11	7			
					226	19	2
Bank Charges and Power of Attorney .. .. .	..	..	4	6	6		
Branch Charges .. .. .	..	..	1	12	1		
					9953	13	8
Subscriptions—Losses from Death, etc. .. .. .	..	..	419	13	4		
Advertisements—Discounts and Allowances .. .. .	..	..	345	9	10		
Sales, Journals returned .. .. .	..	..	23	4	9		
Profit for the year, carried to Balance-Sheet .. .. .	..	..	1063	17	8		
					£11,805	19	3

	Cr.]	£	s.	d.	£	s.	d.
Subscriptions .. .. .	..	..	7349	4	2		
Advertisements .. .. .	..	..	3746	12	9		
Sales .. .. .	..	..	406	17	10		
Sales of Waste .. .. .	..	..	15	11	5		
Interest on Deposit Account .. .. .	..	20	11	6			
Ditto Half-year on £1558 8s. 11d. at 3 per cent. .. .. .	..	23	1	8			
					43	13	2
Balance on Scientific Grants returned, and amount unused .. .. .	..	..	80	17	7		
Discounts and allowances on printing and paper accounts and stamps .. .. .	..	..	163	13	4		
					£11,805	19	3



## Summary of Receipts and Payments for the Year ending Dec. 31st, 1876.

Dr.] RECEIPTS.		£	s.	d.	£	s.	d.
Cash in hand on 1st January, 1876, viz. :—							
At London and Westminster Bank—							
On Deposit Account .. ..	£1504	0	1				
On Current Account .. ..	1242	7	3				
				2726	7	4	
With General Secretary .. ..				35	4	10	
							2761 12 2
Subscriptions .. ..				6922	18	8	
Advertisements .. ..				3408	19	10	
Sundry Sales of Journal .. ..				403	17	2	
Sale of Waste .. ..				15	0	5	
Interest .. ..				20	11	6	
							10,771 7 7
Balance on Scientific Grants returned .. ..							43 17 7
							£13,576 17 4
Cr.] BY PAYMENTS.		£	s.	d.	£	s.	d.
Editor .. ..					500	0	0
Sub-Editor .. ..					175	0	0
Contributors .. ..					1007	6	5
JOURNAL: Printing .. ..				2754	6	2	
Paper .. ..				1933	1	8	
Address Labels .. ..				158	18	7	
Postage .. ..				841	4	0	
							5667 11 2
Wood Engraving .. ..					75	16	0
Reporting .. ..					74	16	0
Sundry Journal Expenses .. ..				92	1	10	
Rent of Editor's Room .. ..				11	6	0	
							103 7 10
Scientific Grants—1875-1876 .. ..					155	0	0
Ditto ditto 1876-1877 .. ..					242	0	0
Committees—Special Grant to Joint Committee on State Medicine .. ..					100	0	0
Joint Committee on State Medicine .. ..					10	0	0
Expenses of Parliamentary Bills Committee and Committee on Legislative Restriction for Habitual Drunkards .. ..					62	0	5
Auditor's Fee .. ..					42	0	0
General Secretary .. ..					450	0	0
Salaries and Wages .. ..					417	10	3
Rent of Offices .. ..					85	0	0
Furniture (Safe) .. ..					6	0	0
Postage .. ..					165	13	5
Sundry Office Expenses .. ..					212	12	5
Miscellaneous Printing .. ..					231	16	3
Bank Charges and Power of Attorney .. ..					4	6	6
Branches' Sundry Charges .. ..					1	12	1
							6789 8 9
Purchase of £1558 8s. 11d. Consols .. ..					1500	0	0
Cash in hand :—							
At London and Westminster Bank .. ..				2162	13	10	
At Office .. ..				124	14	9	
							2287 8 7
							£13,576 17 4

## Balance Sheet, 31st December, 1876.

Dr.] LIABILITIES.		£	s.	d.	£	s.	d.
Editor .. ..					125	0	0
Contributors .. ..					309	5	1
Cheques unrepresented .. ..					8	2	0
JOURNAL: On Printing Account .. ..	683	17	9				
On Paper .. ..	196	11	4				
							889 9 1
Reporting .. ..					12	12	0
Committees .. ..					13	18	0
Legal Charges for year .. ..					51	13	5
General Secretary .. ..					112	10	0
Rent of Offices .. ..					21	5	0
Ditto of Editor's Room .. ..					16	7	0
Furniture .. ..					6	10	0
Miscellaneous Printing .. ..					82	4	7
Subscriptions paid in advance .. ..					240	15	6
Due on Advertisements .. ..					10	9	1
Wood Fund .. ..					25	0	0
Scientific Grants .. ..					59	0	0
Sundries .. ..					44	10	10
							2038 11 7
Balance on 1st January, 1876 .. ..				3177	15	7	
Profit for the Year ending 31st December, 1876 .. ..				1063	17	8	
							4241 13 3
Total of excess of Assets over Liabilities .. ..							£4280 4 10
Cr.] ASSETS.		£	s.	d.	£	s.	d.
Subscriptions .. ..					1013	17	4
Advertisements .. ..					1301	18	0
Sundry Sales .. ..					22	19	3
Interest .. ..					23	1	8
Furniture .. ..					125	0	0
Consols (£1558 8s. 11d.) .. ..					1500	0	0
Cash in hand: At London and Westminster Bank .. ..				2162	13	10	
At Office .. ..				124	14	9	
							2287 8 7
							£4280 4 10

## Statement Grant, 31st December, 1876.

TRUSTEES—W. D. Husband, Esq. (Treasurer), Dr. A. P. Stewart, and T. B. Curling, Esq.

Dr.]		£	s.	d.
To Balance brought forward .. ..		401	2	7
Interest .. ..		5	4	3
		406	6	10
Cr.]		£	s.	d.
By Balance carried forward .. ..		406	6	10
		406	6	10

W. D. HUSBAND, Treasurer.

We have examined the above accounts for the year 1876, with the books and vouchers of the Association, and find the same to be correct.  
PRICE, WATERHOUSE, & Co., 13, Gresham Street, E.C.,  
April 6th, 1876.

The remainder of the minutes of the Committee of Council of the 18th April will appear in a future JOURNAL.

## SHROPSHIRE AND MID-WALES BRANCH: QUARTERLY MEETING.

A QUARTERLY meeting was held at the Salop Infirmary on March 27th; the President, Dr. TAYLEUR GWYNN, in the chair. There was a good attendance.

*Medical Defence Association.*—The following resolution was passed: "That it is desirable to form a Branch of the Medical Defence Association in this district, to be in connection with the parent Society, but to be entirely separate from the Shropshire and Mid-Wales Branch of the British Medical Association."

*New Members.*—Sydney Clement, Esq., of Shrewsbury, and Dr. Pratt of Newtown, were elected members of the Branch.

*Fees.*—Mr. MAUNDER's scale of fees for operations was then discussed; and it was agreed: "That the principle of the proposition of Mr. MAUNDER with regard to fees is approved of by this meeting."

*Papers.*—I. Mr. FENTON read a paper on the propriety of an universal protest against the Abuse of Alcohol from the medical profession.

2. Dr. ANDREW related a case in which he had removed the Lacrymal Gland for the Cure of Obstruction of the Duct with Abscess. He recommended this course to be adopted in similar cases.

*Habitual Drunkards.*—A petition to Parliament for the restriction of habitual drunkards was signed by all the members present.

## BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

THE sixth ordinary meeting of the Session was held at the Queen's College on March 8th, 1877, at 3 P.M. Present: Dr. G. F. BODINGTON, President, in the chair, and thirty-nine members.

*New Members.*—Mr. E. L. FREER and Mr. R. A. NEWTON were elected members of the Branch.

*Communications.*—I. Mr. FURNEAUX JORDAN exhibited the osseous parts removed in a case in which he had Excised the Tarsal Bones.

2. Dr. H. L. BROWNE showed an Enlarged Spleen, which he had removed from the person of a young man.

3. Dr. MALINS showed an Ovarian Cyst which he had removed.

4. Dr. J. THOMPSON brought forward some specimens of Chylous Urine.

5. Mr. OLIVER PEMBERTON read a paper, entitled "On Two Cases in which the External Iliac Artery was successfully tied for the cure of Aneurism". The patients, a man who had been an in-patient at the General Hospital and a gentleman from Montgomeryshire, attended for examination.

## SOUTH-EASTERN BRANCH: EAST KENT DISTRICT.

THE sixty-third meeting was held at the Ship Hotel, Faversham, on Thursday, March 29th, at three o'clock; R. S. FRANCIS, Esq., in the chair.

*New Member.*—Dr. Garrett of Faversham was duly proposed as a member of the Association and Branch.

*Habitual Drunkards.*—A petition in favour of legislation for habitual drunkards was generally signed by the members present; and the Honorary Secretary was instructed to have it presented to the House of Commons.



*Papers.*—1. Dr. WALTER BEEBY read notes of an Epidemic of Diphtheria at Bromley.

2. Mr. ARTHUR LONG narrated a case of Supposed Dislocation of the Hip.

3. Mr. GARRAWAY read a paper on Rotten Teeth, a Rhapsody : with a Remedy.

*Dinner.*—Sixteen members and their friends afterwards dined together.

*The Next Meeting* will be held at Canterbury on May 24th.

## CORRESPONDENCE.

### ANTI-VIVISECTION IN EDINBURGH.

SIR,—In your issue of last week, reference is made to a public meeting, held under the auspices of the anti-vivisectionists, at which the students played a very uproarious part. Although the conduct of the students is to be entirely condemned, it is not very difficult to understand how it came about. Mr. A. P. Childs, the anti-vivisectionist orator, held two meetings, one on April 10th, the second on the 11th. At the former, although the students engaged in the amusements that characterise them on most public occasions, even when they are not addressed by an anti-vivisectionist, Mr. Childs was allowed to give his lecture. I extract from the *Scotsman* an account of what followed :

"At the close, Dr. Baker, one of the house-physicians at the Royal Infirmary, ascended the platform amid loud cheering. His object was to refute the arguments of Dr. Childs, and after he had spoken for some time, the Chairman insisted upon his resuming his seat. Dr. Baker submitted to the Chairman's ruling, remarking that he did not think it was right that he, a member of a class, should be vilified, slandered, and calumniated as he had been that evening. Dr. Childs replied briefly, amid howling and other interruptions."

Next evening, Mr. Childs attempted to deliver another lecture, but the students refused to hear him, although Dr. Baker, their chosen orator, was present and begged them to give Mr. Childs an audience. This conduct on their part was unjustifiable; but it is explained by the fact that Mr. Childs had refused to allow Dr. Baker to reply to him on this second occasion. The following letter to the *Scotsman* from Dr. Baker—whose untimely death has thrown us all into the deepest grief—gives his account of his interview with Mr. Childs.

"Royal Infirmary, April 11th, 1877.

"Sir,—In consequence of the part which I have taken in reference to recent meetings held under the auspices of the Society for the Total Suppression of Vivisection, I think it advisable to offer one or two words of explanation. In the first place, I may say that I was very unexpectedly requested yesterday afternoon by some medical students to attend Dr. Childs's lecture last evening in the Waverley Hall, and, if necessary, to reply to any arguments he might adduce in favour of total suppression. Having acceded to this request, I was most courteously allowed by the chairman, Mr. Wellstood, to make a short reply. As it was announced that Dr. Childs would to-night deliver another lecture in the Hall of the Literary Institute, I waited upon that gentleman, and asked if I might be allowed to reply again. I was, however, refused, but was told that I should be allowed at the close of the lecture to put any questions I chose. This I felt would be insufficient properly to elicit what I feel to be the truth on this important subject. Dr. Childs and his friends argued that, as they paid the expenses of the meeting, they felt justified in not permitting me to make any reply. I then offered to bear half the cost of the meeting if I, and the gentlemen with whom I was associated, were allowed a fair share in the proceedings. This also was refused. During to-night's meeting, in the course of an unfortunate disturbance, I went up to the chairman and offered, if he would allow me, to use what influence I might possess in restoring order, and again I was refused. Whilst I entirely disclaim, both for myself and for the great bulk of medical students, any part in the riotous proceedings with which the meeting terminated, I must confess that, in my opinion, if the gentlemen on the platform had adopted a different policy, a different result would have been produced. With the chairman of the meeting, I regret—deeply regret—what took place this evening. The chairman stated that it was a bad cause that would not allow the opposite side to be heard. With equal reason I answer: It is a bad cause that *dare* not listen to a straightforward reply. In conclusion, if I have inadvertently misrepresented anything that Dr. Childs has said, I am heartily sorry for it.—I am, etc.,

"JAMES BAKER."

I venture to think that, as the students had obtained the information contained in the above before the second meeting, the excitement they exhibited was comprehensible.

A few days afterwards, Dr. Baker was seized with a severe illness, to which he succumbed. He was a President of the Royal Medical Society, and Resident Surgeon in Mr. Lister's wards of the Royal Infirmary. He was a gentleman of the most brilliant talents, and possessed a gift of oratory that startled all who heard him; and it is a noteworthy fact that Mr. Wellstood, and others who appeared on the platform in support of Mr. Childs, spontaneously attended his funeral.—I am, etc.,

Edinburgh, April 24th, 1877.

X.

### CHANCERY LUNACY.

SIR,—Will you allow me, as an independent observer and as one who has seen much of the working of the lunacy laws, both in private and public asylums, to make a few comments on a leading article, entitled "Chancery Lunacy", which appeared in the *BRITISH MEDICAL JOURNAL* for April 13th.

The writer of this article thinks it desirable that the reports of the Lord Chancellor's visitors should be acted upon, without reference to the Masters in Lunacy. These masters are higher officials, and, in fact, *bonâ fide* judges, appointed to decide on the validity of any accusation which may be brought by a Chancery visitor against any person who has charge of a patient. If it were otherwise, it would be in the power of a single visitor, were he so inclined, to exercise a capricious tyranny, and systematically ruin the proprietor of any asylum against whom he had a prejudice. Your readers may not all be aware that only one visit is made by a Chancery visitor to an asylum in the course of the year, whereas the Commissioners in Lunacy visit six times a year. Is it, therefore, likely that he can, on one visit, invariably form a correct opinion of the patients' condition and surroundings?

Dr. Lockhart Robertson, in his recent evidence before the Lunacy Committee, made certain statements, from which it must be inferred that he is decidedly opposed to private lunatic asylums, and that he would be inclined to have all Chancery patients removed to private care. With regard to the comparative advantages of lunatic asylums and private care, I will quote an observation from a letter which I published in the *BRITISH MEDICAL JOURNAL* for October 1869. "Admitting the utility of private care in some chronic cases of insanity, we must not lose sight of the greatly superior advantages which an asylum offers as a curative measure—the main object to be kept in view—in the majority of cases, whether chronic or acute. The Commissioners in Lunacy have invariably advocated this view. Griesinger, one of the highest authorities, observes that a patient in an asylum finds it a place 'where his eccentric behaviour is concealed' from over-officious eyes, where the necessary surveillance is unobtrusively accorded him, and where he has usually a far greater amount of freedom than he could possibly have under any other circumstances."

I am, sir, your obedient servant,

J. M. WINN, M.D.

31, Harley Street, April 16th, 1877.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

THE Aston Local Board and Urban Sanitary Authority have increased the salary of Mr. Henry May, medical officer of health, from £100 to £150 *per annum*.

THE Witham Guardians and Rural Sanitary Authority have passed a resolution to apply to the Local Government Board to form the parishes of Great and Little Coggeshall into an united district for all the purposes of the Public Health Act, 1875, under Sec. 279.

### THE GRAVESEND BOARD OF GUARDIANS AND MEDICAL RELIEF.

IN the issue of the *Gravesend and Dartford Reporter* of the 14th instant will be found a report of the proceedings at a meeting of the Gravesend Board of Guardians, held on the preceding Thursday, from which we learn that the Board was much disconcerted on finding that there was only one applicant for the vacant post of medical officer of one of the two districts into which this union is divided, and that this gentleman withdrew his name on finding that the Guardians would not increase the stipend from £85, the advertised sum, to £100 a year, and also on discovering that not one of the fifteen medical gentlemen practising in this town would consent to act as his substitute if he took office on the terms offered. During the last few years, no fewer than six gentlemen have resigned one or the other of the appointments;



and, although the Guardians are fully aware that the reason assigned for these repeated resignations has been the insufficiency of the stipends, no steps have been taken by the Board to modify their arrangements.

As might be expected, there was the customary vulgar abuse of the profession for refusing to retain or take office on the terms offered, the Chairman going so far as to threaten repeatedly to resign his office, "because I don't want the medical men to ride over me"; he also called on his colleagues to do the same. It is much to be regretted that the Board did not accede to his request, for it is hardly possible to imagine that any similarly stupid body could be again elected, and any change must be for the better. It should be borne in mind that, in these provincial urban districts, no aid, or at the most to a very insignificant amount, is afforded by free dispensaries or out-patient departments of hospitals; consequently, the sole attendant on the sick poor is the ill-paid parish officer, who, in too many instances, has to supply all medicines and appliances from his stipend. The amount of such obligations in Gravesend will be understood when we state that the population exceeds 20,000, and the stipend, without any extras, only reaches £85 for each of the two district officers. Ultimately, the Board was compelled to appoint the other medical officer to temporarily attend the vacant district at an increased rate of payment.

We are pleased to record these facts, as it will be noted that, whereas formerly there was much competition for these pecuniarily worthless offices, arising out of the mistaken belief that they either led to the retention of, or the introduction to, private practice, such notion is gradually but surely being dissipated, and Boards of Guardians will be compelled to modify their arrangements, though, possibly, not until they have spent much money in needless advertising.

We consider that the conduct of the medical profession in Gravesend, in unitedly refusing to take or to lend any assistance to any outsider beguiled into taking this worthless vacancy, merits, at the hands of the general body, the highest consideration. They have, by their action, entered their protest against the continuance of a system which degrades the medical officer, and leads, we fear too frequently, to a perfunctory attendance on the sick poor, and ultimately to increased burdens on the ratepayers.

#### PUBLIC HEALTH MEDICAL APPOINTMENTS.

\*ASHBURNER, Henry J., M.R.C.S. Eng., appointed Medical Officer of Health for the Horsham Urban Sanitary District.

### MILITARY AND NAVAL MEDICAL SERVICES.

IN the *Gazette* of the 20th instant, the whole of the Militia Medical Officers are transferred from their regiments and appointed to a Militia Medical Department, in accordance with the terms of the recent Warrant.

THERE are seventeen candidates for commissions in the Army Medical Service, twenty-seven for the Indian, and thirteen for the Naval Medical Service attending the Army Medical School at Netley this session, and one Surgeon-Major of the Bengal Medical Service.

#### RETIREMENT IN THE ARMY MEDICAL DEPARTMENT.

A CORRESPONDENT writes to us:—Last week's *Army and Navy Gazette* contained an able and closely reasoned article, dealing mainly with the question of retirement in the Army Medical Department, which cannot fail to command attention. Having disposed effectually of the ideas that, in the event of war, reliance can be placed on temporarily engaged civil medical aid, and that, under any circumstances either of war or peace, the present ten years' service system will work satisfactorily, the writer proceeds to advocate the introduction of a system of twenty years' service, with retirement at the end of that period on a pension of £300 a year; such retirement to be voluntary in the case of existing members of the Department, and compulsory—with a few reservations, to be made by selection, for promotion to the higher grades—for all future comers. The gist of the scheme is set forth in the following sentence.

"Assuming that £300 a year, with a bonus of £1,000 at the end of ten years' service, must be offered, if the short service experiment be continued, it is plain that in twenty years £6,000 will have been disbursed to two medical officers in yearly pay, and two bonuses of £1,000 each, making in all £8,000; but £1,000 had to be paid on the completion of the tenth year of service, and consequently interest and compound interest thereon is lost for ten years, amounting to £637:10;

whereas, a medical officer who serves twenty years on the existing rates of long-service pay, even allowing him the boon of promotion at twelve years' service, will draw in twenty years only a total of £5,385:15, leaving thereby a balance in the exchequer of £3,253:15 towards purchasing the annuity which is to form his pension of £300 a year, at forty-five years of age and upwards, few of the applicants being first-class lives."

Regarded from a financial or State point of view, this scheme appears to be entirely unobjectionable; and it possesses an additional praiseworthy feature, in that it will furnish a medical reserve upon which, in time of warlike pressure, the country can with confidence rely. We, therefore, strongly commend it to Mr. Hardy's attention; and we think we can undertake to say that, if he adopt it, and, at the same time, removes the unmeaning and hurtful restrictions invidiously imposed on the carrying out of exchanges amongst the medical officers, he will have done much towards saving the Department from the utter annihilation which now threatens it and himself from his pathetically bemoaned, albeit self-created, "trouble with the medical men".

#### PROMOTION TO ADMINISTRATIVE RANK IN THE ARMY MEDICAL DEPARTMENT.

A CORRESPONDENT has taken exception to the manner in which we stated the case of the surgeon-major whose interests have been affected by the rule of three years' service in India being made absolute and general, i.e., applicable to promotion to the administrative rank for home as well as *Indian* service. Our object was to make Mr. Hardy's meaning clear in the reply given to Dr. Lyon Playfair, not to justify the hard measure dealt out to the officer in question by the authorities. We quite agree with our correspondent that, when an "agreement" was come to between the Secretary for War and the Commander-in-Chief, to make the rule of three years' service in India absolute and general for all promotions to administrative rank, the terms of that "agreement" ought to have been published and its application made prospective. This not having been done, we agree with our correspondent that the surgeon-major whose prospects have been blighted by this measure has cause for just complaint.

#### ROYAL HOSPITAL STAFF.

SIR,—The old name for the Army Medical Department was the very distinctive and appropriate one of Hospital Staff. On the button was the Royal cipher surrounded by a scroll, on which these words were embossed. The name of department is in much disfavour among civil as well as military surgeons. The other day, a hospital surgeon of eminence said to the writer, "You will never get our men to enter a department; they want to be officers of the army, and they do not consider you to belong to that category at present". I think you will not dispute that we deserve the title of Royal. Let, us then, be embodied as a "Royal Hospital Staff", commanding our own men. The title would be euphonious and short, and not clash with the surgical prefixes of the different ranks. We are already members of "Royal Colleges"; why should we sink our designation on entering the army?

April, 1877.

I am, etc.,

X.

### OBITUARY.

#### WILLIAM NORRIS, M.D.

It is with regret that we have to announce the death of the above-named veteran member of the medical profession, which occurred at his residence at Stourbridge on March 23rd, 1877, from hemiplegia and apoplexy. One of the very few medical men now in existence of two or three generations ago, Dr. Norris had survived for a period of eighty-five years, and within a few days of his death he was active and buoyant. Born in 1792, he was the eldest of the four sons of William Norris, Esq., of Thorpe, Enville, Stourbridge. He received his early education at the Grammar School at this town, was apprenticed, at the early part of the present century, to the late Mr. Canter. In 1810, Norris entered as a pupil at St. Bartholomew's to the usual courses under Abernethy, Clutterbuck, Clement Hill, Sir Ludford Harvey, and John P. Vincent, whose certificates, dated 1811 to 1816, are still in excellent preservation. He then attended courses of instruction at the London Infirmary, then a celebrated school of ophthalmic surgery, under Mr. Lawrence. Thence he went to the University of Edinburgh, where he spent considerable time in undergoing an additional course of training. On September 12th, 1816, he was admitted L.S.A. of London, and shortly afterwards elected honorary member of the London Vaccine Institu-



tion. He then went to Stourbridge, where he continued up to the time of his death, an unbroken period of over sixty years. During the early and middle part of his career, he had a large and extensive practice. Dr. Norris was always a thinker and a writer, taking a deep interest to the last in his profession; he leaves a mass of unpublished writings which bespeak a mind of no common order. Amongst the published writings, we may mention a pamphlet on *Melanosis*, and papers on Diaphragmatic and other internal Herniæ, on Cholera, and Fever.

In 1823, Dr. Norris received the diploma of M.D. of the University of St. Andrew's. In 1828, he married Anne Lascelles, youngest daughter of Captain George Hoar Blake, R.N., niece of a somewhat celebrated author, Sir Nathaniel Wraxall, Bart., by whom he had issue three sons and two daughters. The eldest son, Mr. John L. Norris, surgeon, of Brierly Hill, died in 1872; both other sons are dead, and the two daughters alone survive.

## MEDICO-PARLIAMENTARY.

### HOUSE OF COMMONS.—Thursday, April 19th, 1877.

*Sanitary Condition of the Public Offices.*—Lord ENFIELD asked whether any Commission would be appointed to inquire into who was responsible for the defects in the public offices, and whether any steps were to be taken to remedy it.—The Earl of BEACONSFIELD said the Government had directed the Board of Works to prepare a report of the sanitary condition of all the public buildings under their control; and, as soon as they had done so, the Government would consider what steps it was necessary to take.—Lord HAMMOND strongly condemned the condition of the new Foreign Office, and recommended that the Board of Works should establish a strict superintendence by the Clerk of the Works of the contractors employed in the erection of the public buildings.

*Public Health Act.*—Mr. CHILDERS said that last year he presented a large number of petitions in favour of the amendment of the Public Health Act, and he now placed before the House forty-one petitions from forty-five places, signed in each case by the Medical Officer of Health, with the same object.

Monday, April 23rd.

*The late Polar Expedition.*—In reply to Captain Pim, Mr. A. EGERTON said that the First Lord of the Admiralty was waiting for the report of the medical authorities on the outbreak of scurvy on board the ships of the late Polar Expedition. As soon as it was completed, the papers would be laid upon the table.

## MEDICAL NEWS.

**ROYAL COLLEGE OF SURGEONS OF ENGLAND.**—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on April 19th; and, when eligible, will be admitted to the pass-examination.

Messrs. T. E. Leadbeater, Alfred Higgs, A. E. Jones, and S. E. Watkins, students of the London Hospital; George Gulliver, B.A. Oxon., R. C. Coward, H. P. Butler, and A. V. Bernays, of St. Thomas's Hospital; C. F. Cuthbert, D. A. King, and Francis Bowe, of St. Bartholomew's Hospital; W. H. R. Forsbrook, G. F. Gubbin, and Sydney Smyth, of the Westminster Hospital; W. H. T. King and H. B. Runnalls, of St. Mary's Hospital; E. E. Griffiths, of the Middlesex Hospital; and H. G. Jacob, of the Charing Cross Hospital.

The following gentlemen passed on April 24th.

Messrs. A. B. Calder, Leith; S. T. Plumble, Maidenhead; J. H. Pugh, L.S.A., Birmingham; O. C. Shard, Chesterfield; A. L. Douglas, Liverpool; William Bourke, M.B. Edin., Jamaica; J. T. Jones, Ruthin; J. M. Chapman, Edinburgh; H. D. Crook, Bristol; William Gillsbrand, L.S.A., Wigan; E. P. May, Russell Square; H. E. Giffard, Horsham; Henry Sawyer, Rugby; Joseph Ransohoff, Cincinnati; E. O. Jones, M.D. Edin., Surbiton; A. S. Morton, L.S.A., Kennington; Frank Marsh, Stafford; T. V. Nicolls, Charterhouse Square; F. G. Baker, Cambridge Gardens; W. R. Williams, Felixstowe; R. L. MacDonnell, M.D. McGill, Montreal, Canada; John Brock, Northwich; F. A. de Verteuil, Trinidad; E. S. Robson, L.R.C.P. Ed., Durham; Henry Payne, L.R.C.P. Ed., Salisbury; F. C. Smith, L.S.A., Brentford; R. O. Cusack, L.R.C.P. Lond., Bedford; W. B. Smith, L.R.C.P. Ed., Manchester; Clement Rhodes, L.R.C.P. Ed., Halifax; and D. P. Warliker, L.S.A., Bamberg.

**APOTHECARIES' HALL.**—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, April 19th, 1877.

Cant, William John, Nechells Park Road, Birmingham  
Gardiner, Bruce Herbert John, Rectory Grove, Clapham

The following gentlemen also on the same day passed their primary professional examination.

Boughton, William Blockly, Glasgow Royal Infirmary  
Coates, William Henry, Guy's Hospital  
Tritton, William Parsons, King's College, London

**KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.**—At the usual monthly examination meetings of the College, held on Tuesday, Wednesday, and Thursday, April 10th, 11th, and 12th, the following candidates were successful.—For the First Professional Examination.

Corr, Richard James Philip, Alexander

For the Licences to Practise Medicine and Midwifery.

Freund, John Alfred O'Neill, Laurence Joseph

For the Licence to Practise Medicine.

Huey, William

### MEDICAL VACANCIES.

THE following vacancies are announced:—

**ARDNAMURCHAN**, Parish of—Medical Officer. Salary, £120 per annum, with house, etc. Applications to be made on or before May 7th.  
**BECKETT HOSPITAL AND DISPENSARY**, Barnsley—House-Surgeon. Salary, £140 per annum, with furnished rooms, attendance, and gas. Applications to be made not later than May 1st.  
**BIRMINGHAM**, Parish of—Assistant Medical Officer to the Workhouse. Salary, £150 per annum, with furnished apartments, coals, gas, and attendance. Applications to be sent in on or before May 3rd.  
**BRITISH LYING-IN HOSPITAL**, Endell Street—Physician to the out patients. Applications to be made on or before May 7th.  
**CENTRAL LONDON SICK ASYLUM DISTRICT**—Principal Medical Officer to the Highgate Asylum. Salary, £400 per annum, with unfurnished house, coals, and gas. Applications to be sent in on or before May 1st.  
**COUNTY AND COUNTY OF THE BOROUGH OF CARMARTHEN INFIRMARY**—House-Surgeon. Salary, £125 per annum, with lodging, fire, and lights. Applications to be sent in on or before May 2nd.  
**COUNTY ASYLUM**, Prestwich, Manchester—Resident Clinical Assistant.  
**DAVENTRY UNION**—Medical Officer for the Workhouse and First and Second Districts.  
**DONCASIER GENERAL INFIRMARY AND DISPENSARY**—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be made on or before May 5th.  
**NOTTINGHAM GENERAL HOSPITAL**—Resident Surgeon-Apothecary. Salary, £150 per annum, with furnished apartments and board.  
**ROTHERHAM HOSPITAL AND DISPENSARY**—Assistant to House-Surgeon. Salary, £25 per annum, with board, lodging, and washing.  
**ROYAL ALBERT HOSPITAL**, Devonport—Resident Medical Officer. Salary, £200 per annum, with board and lodging. Applications to be sent in on or before May 12th.  
**ST. GEORGE, HANOVER SQUARE, PROVIDENT DISPENSARY**—Physician-Accoucheur. Applications to be sent in on or before May 5th.  
**SOUTH MOLTON UNION**—Medical Officer for the Fourth District.  
**UNIVERSITY COLLEGE**, London—Professorship of Anatomy. Applications to be made on or before the 12th inst.  
**VICTORIA HOSPITAL FOR SICK CHILDREN**, Chelsea—House-Surgeon. Applications to be sent in on or before May 1st.  
**WESTERN GENERAL DISPENSARY**—Honorary Physician. Applications to be sent in on or before May 14th.  
**WOODBIDGE UNION**—Medical Officer for the First and Second Districts.

### MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

**BARRON**, John, M.A., M.B., appointed Assistant Medical Officer to the Berks County Asylum, Moulsoford, Wallingford, *vice* Charles William Harvey, M.B., resigned.  
**\*CHURTON**, T., M.B., appointed Lecturer on Materia Medica and Therapeutics in the Leeds School of Medicine.  
**DRUMMOND**, David, M.D., appointed Physician to the Hospital for Children, Newcastle-upon-Tyne, *vice* A. MacLachlan, M.B., resigned.  
**\*VAWDREY**, T. G., L.R.C.P., appointed Medical Officer for the Handsworth and Smeethwick District of the Cannon Street Male Adult Provident Institution, Birmingham.  
**\*WICK**, Wm. Cairns, M.B., C.M., appointed Assistant-Physician to the Hospital for Children, Newcastle-upon-Tyne, *vice* David Drummond, M.D., appointed Physician.

### BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

#### MARRIAGES.

**STEPHENSON—GRANGE.**—On April 18th, at St. James's Church, Great Grimsby, by the Rev. Canon Ainslie, Vicar of the Parish, \*George Skelton Stephenson, M.B., to Isabella A. Leigh, second daughter of William Grange, Town Clerk, Grimsby.  
**COLLINS—DEVENISH.**—On April 19th, at St. Mary, Bathwick, by the Rev. A. Cassan, Curate, Charles Howell Collins, M.R.C.S.E., the Beeches, Chew-Magna, to Martha, youngest daughter of the late William Devenish, Esq., Weymouth, Dorset.

#### DEATH.

**WELCHMAN**, Charles Edward Eliot, M.R.C.S.E., aged 54, on April 14th, at Bore Street, Lichfield, after a few hours' illness.



## OPERATION DAYS AT THE HOSPITALS.

**MONDAY.....** Metropolitan Free, 2 P.M.—St. Mark's, 3 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

**TUESDAY.....** Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

**WEDNESDAY..** St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.

**THURSDAY....** St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—Charing Cross, 2 P.M.

**FRIDAY.....** Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

**SATURDAY....** St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

**MONDAY.**—Medical Society of London, 8.30 P.M. Dr. Boyd, "On Medical Relief, and a Comparison of the Results, in Patients treated at their own Homes, and in the Parish Infirmary." Dr. Percy Boulton, "On Inflammation and Ulceration of the Os and Cervix Uteri."

**TUESDAY.**—Pathological Society of London, 8.30 P.M. Dr. Creighton: Physiological and Pathological Processes of the Breast. Dr. Vandyke Carter: Memorandum on Leprous Nerve-Disease. Mr. Barker: Some unusually large Vesical Calculi. Dr. F. Semon: Aneurism of the Thoracic Aorta. Mr. Woodhead: Coil of Intestine passed *per vaginam*. Dr. Barlow: Gumata on Cranial Nerves and Changes in Vessels, from a Case of Congenital Syphilis. Mr. Nunn (for Professor Charcot): Sections of Spinal Cord connected with Muscular Atrophy; also, Sections of Phrenic Nerve. Dr. Mabomed: Syphilitic Nerve. Mr. W. Haward: Epiphyseal Disease from a Case of Inherited Syphilis. Mr. Spencer Watson: Melanotic Sarcoma of the Choroid. Dr. Greenhow: Lymphoma of the Mediastinum. Mr. Butlin: Chondroma of the Submaxillary Gland. Mr. Leene Brown: Primary Cancer of the Larynx. Dr. Greenfield: Atrophy of Kidney, Hypertrophy of Heart, and Diseased Vessels, from a boy aged 14 years; and other specimens. Dr. Creighton's specimens on view at 8 o'clock.

**WEDNESDAY.**—Obstetrical Society of London, 8 P.M. Dr. Jas. Braithwaite, "On a New Mode of Treating Certain Cases of Retroflexion of the Unimpregnated Uterus"; Dr. George Roper, "On a Difficult Case of Labour"; and other communications.

**THURSDAY.**—Harveian Society of London, 8 P.M. Mr. George Field, "On the graver aspects of Otorrhoea."

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

**CORRESPONDENTS** not answered, are requested to look to the Notices to Correspondents of the following week.

**AUTHORS** desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

**PUBLIC HEALTH DEPARTMENT.**—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

**CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

**WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.**

**COMMUNICATIONS** respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## MEDICAL ETIQUETTE.

"ASSOCIATE" is anxious to have the Editor's opinion upon the following case. X. and Y. are medical practitioners residing in the same town. One afternoon, X. calls into consultation Y. to see a patient, also residing in the same town, with malignant scarlatina. X. and Y. are agreed as to the proper treatment of the case and the probability of a fatal result. The friends are informed of this opinion, and are quite satisfied. On the evening of the same day, X. calls in Z. from London to decide upon the advisability of trying a particular plan of treatment which had occurred to X. since his consultation with Y. X. and Z. consult together that night. Y. is not communicated with, and knows nothing of the consultation until after the death of the patient, which took place next day. Was X's conduct towards Y. courteous, and was it strictly in accordance with the rules of medical etiquette?

\* \* We shall be glad to have any explanation which Y. may have to offer.

**CORRESPONDENTS** are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## THE SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

SIR,—I have just received notice of the Annual Meeting of the Society for Relief of Widows and Orphans of Medical Men, and I am reminded what a matter of regret it was to me, when practising in a remote country district, that I was unable to join this excellent and well-to-do Society, because of the law which limits the election to those practitioners of medicine who reside within the London postal district or in the county of Middlesex. It had never occurred to me that I might secure my election while I was house-surgeon to a London hospital, and retain it wherever I might settle afterwards; this may, however, be done, and I am sure I shall be doing good service to any of my young friends who may now be filling hospital or dispensary appointments in London or the neighbourhood, if you will allow me through your columns to call their attention to the opportunity they now have of becoming members of a Society which, for a small annual payment, will ensure their families a comfortable subsistence should they unfortunately be left in needy circumstances. As a proof that the Society is well able to do this, I may add that it has over £74,000 invested stock, and that during the past year it distributed nearly £3,000 to the widows and orphans of deceased members.

Let me advise all who may be interested in the matter to send at once for further information to the Secretary at 53, Berners Street, W., who, I am sure, will gladly and promptly respond. —I am, sir, your obedient servant,  
April 18th, 1877. STAMFORD FELCE.

**ERRATA.**—In Mr. Cartwright's letter published at page 497 of last week's *JOURNAL*, Mr. Tomes's amendment should not have been inarked as a quotation. What Mr. Cartwright sent was the tenor of the motion, not the exact words.

In the note headed "Cui bono?" (*JOURNAL*, April 14th, page 472, line 3, for Raestner, *vide* Kestner. In lines 4 and 5, "Quid meditas, Raestner", should be "Quid meditas, Kestner".

In Dr. Johnson's letter on nitrous oxide gas, page 496, fifth line from bottom, for "Mr. Hamilton Cartwright said he found", read "Mr. Hamilton Cartwright and I found".

## EXCORIATIONS.

MR. BRADDENT (Chesham) writes:—A woman with diabetes, and formerly very stout, but now thin, suffers from excoriations in the folds of the abdomen. I have tried many applications for the purpose of healing them, but without success. Can any of your readers suggest a remedy?

## CONSULTATION FEES.

MR. C. ROTHWELL of Bolton, who twenty years ago held a junior partnership for a long period, writes:—I know of no precedent for such proceeding; and not only was such an arrangement never thought of, but I never knew of its being done by any other firm. Had such an idea presented itself to the mind of my senior, I feel sure it would have been scouted. As to the justice of it to the profession, I think it contravenes the *raison d'être* of a firm; as to its justice to a client, I think it to be *nil*. The only approach to its practice in these latter days, I have found to be the medical attendant charging the same fee as the consultant. Carry this out to its legitimate conclusion, and we find a medical man, living in the north and next door to his patient, charging the same fee as his metropolitan consultant and *confère*. Nor is this fair to any consultant, whatever it may be to a patient. Is there a precedent for this?

DR. E. HOLLAND writes:—The senior partner of a medical firm should demand a consultation fee, when called in by his junior, only under very exceptional circumstances. It is well understood that the senior habitually hands over cases to his junior on the assurance, stated or implied, that in a case of difficulty, danger, or protraction, his attendance and advice will be forthcoming.—Every junior gains his introduction to serious cases—to the relief of the senior—much earlier than he otherwise would, from the mere fact of his senior being at hand and available if required; and thus there is a mutual advantage, neither forgotten nor undervalued by their clients.—The junior and the senior are undoubtedly one and the same institution as a business matter; and patients habitually consult one or the other indifferently, one being regarded as the substitute of the other.—The public practically arrogate to themselves a right to consult each member of a firm, and are but ill-disposed to find additional fees to a senior when the junior whom he has introduced has failed to maintain confidence or to relieve his patient.—It is decidedly against the interest of a firm, and against the best judgment of the profession, for a senior to take additional fees, unless in a few exceptional cases; e.g., surgical operations, instrumental midwifery, etc., when strictly professional services are obviously needed and equally obviously rendered.

## DISEASES OF THE KIDNEY.

SIR,—Will you kindly say what works contain the most recent and most trustworthy information on disease of the kidney?—Years, etc. P. C. R. L.

\* \* The treatises of Dr. George Johnson, Dr. Dickinson, and Dr. Leesech (Paris).

M.R.C.S.E. should wait until the appointments, or any of them, to which he refers are declared vacant, and then make application for them.

## CHILDREN'S HOSPITALS.

SIR,—Will you kindly let me have your opinion on the following questions?

1. How should the walls be covered, and what colour should be used, in the wards of a children's hospital?
2. What are the best means of heating and ventilating?
3. How many cubic feet should there be in a ward containing twenty-two beds?
4. Where will I get the latest information on hospital construction?—Yours, etc., April 1877. A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.

\* \* We would advise our correspondent to go, or to send some competent person on his behalf, to visit the new Hospital for Sick Children in Great Ormond Street, where he will find an answer to all these questions, as well as to any other which may occur to him on the subject.



**NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.**

#### MATERNAL IMPRESSIONS.

SIR,—In the JOURNAL of March 24th, Dr. T. Dudley Saunders asks for the opinion and experience of the profession regarding maternal impressions. The most striking instance that has occurred in my practice was in the case of a young married woman whom I attended in her second confinement in July last. She describes herself as having been always a person of a nervous disposition; and when three months pregnant, her next-door neighbour, an old man, died, and upon her visiting the widow a day or two afterwards, she was pressed to go into the bedroom to see deceased in his coffin, which, in obedience to the vulgar ideas upon the subject, she felt constrained to do, though the mere thought caused her to tremble and perspire from head to foot. Upon going into the room, only the face, from the eyebrows to the chin, of deceased was visible. Here her courage failed her, and she had to be led out, nor could she forget what she there saw night nor day afterwards, the whole affair having given her, as she termed it, a complete "turn". In due time she gave birth to a child, which, though it moved when first born, showed no other signs of life, the peculiarity about it being the remarkable prominence of the features and the complete absence of cranium, in place of which was a spongy vascular substance about as large as an ordinary orange, and which was continued down the spinal canal, the upper portion of the same being open posteriorly. The child (a male, I believe) was otherwise well and fully developed. Her first child, who is living, is also well developed, both mentally and physically, and she is now pregnant again.

I do not feel competent to offer any explanation of these cases, but have no doubt that in the above the "disposition" described as nervous was in reality hysterical. I am, yours obediently,  
Epping, March 28th, 1877.

TREVOR FOWLER, L.R.C.P.I.

**CURIOSITY.**—1. The last edition of *Quain's Anatomy* is much to be preferred. If you have not time for this, read the Histology and Development in this, in addition to Gray's *Anatomy*. 2. Michael Foster's *Text Book of Physiology* and *Kirke's Manual of Physiology*. 3. A question bearing on Comparative Anatomy is nearly always set in the paper, and you are liable to some in your *visu voce* examination. Read *Messenger Bradley's Manual*, and the Sections on Comparative Physiology and Anatomy in *Marshall's Physiology*.

#### MANAGEMENT OF THE UMBILICAL CORD: PUTRID SORE-THROAT.

SIR,—May I ask your readers through your columns whether it is usual to cut the umbilical cord of a child, say on the third or fourth day after birth, and before it falls off of its own accord. Also, whether such a course would be likely to give rise to phlegmonous erysipelas in the tissues of the abdominal walls.

I would also ask what is usually the nature of ulcerated or putrid sore-throat, which has recently broken out in my practice in an epidemic form, and which has in some cases proved fatal. *Erichsen* says that erysipelas of the fauces, which is often epidemic, not unfrequently goes on to sloughing, constituting one of the forms of putrid sore-throat.—I am, etc.,  
A COUNTRY PRACTITIONER.

April 17th, 1877.

#### DULCE EST DESIPERE IN LOCO.

**GOETHE**, while a student at Strassburg, suffered from an affection of the throat, caused by drinking the red wine of the country, to which he appears to have been partial. He says (*Aus meinem Leben*, Book 11): The malady became more distressing, as I was attacked by it even at the dinner-table; I lived close to the hospital surgeon. The great cheerfulness and ease with which this revered teacher [probably *Lobstein*] led us from bed to bed; the plain manner in which he pointed out the important symptoms, and especially his judgment on the course of the disease; his beautiful Hippocratic manner of treatment, whereby, without theorising, out of his own experience, he gave forth a body of knowledge; and the propositions with which he used to close his lectures—all these drew me to him, and placed me in a strange position, from which I could only see, as it were, through a chink; but the view was so much the more pleasing and lovely. My aversion towards the sick increased in proportion as my knowledge extended of the means by which disease was to be cured and the body restored to health. He very likely regarded me as an oddity, and excused the curious anomaly that drew me to his lectures. But this time he did not conclude his lecture, as usual, with a *dictum*, which he had learned by the observation of some disease, but said with vivacity: Gentlemen,—We have some holidays before us. Use them to cheer yourselves up: for science requires of her votaries not only earnestness and diligence in study, but also liveliness and freedom of mind. Give your bodies some exercise; travel about on foot and horseback through this beautiful land; the residents will enjoy themselves in their accustomed manner, and strangers will receive new impressions that will leave behind them pleasing remembrances.

#### TREATMENT OF SYPHILITIC WARTS.

SIR,—It is due to your correspondents who so kindly responded to my appeal ("Medicus") respecting the treatment of syphilitic warts, that I should give you the result.

The history of the case is as follows. A. W., about thirty-eight years old, consulted me on October 25th, 1876, suffering from a soft chancre on the under part of the glans. My experience of forty years has not shaken my faith in mercury; I rely upon its efficacy both in hard as well as soft chancres. I therefore prescribed five grains of pilula hydrargyri night and morning for three weeks; afterwards, at bedtime only. Black wash with lint was applied towards the end of November. The chancre disappeared, but was followed by a crop of warts which covered the whole of the glans as well as the prepuce. Nitric acid, tincture of perchloride of iron, mercurial ointment, calomel, carbolic acid, glycerine, were applied; and at least a dozen of the large warts were ligatured, and the small ones chipped off; but all my efforts failed to prevent the continual cropping up. I then made up my mind to ask the assistance through the JOURNAL of some of my more experienced brethren. After my letter was despatched, I determined to employ the following lotion: R. Liqueur hydrargyri penitratiss 3j; glycerini 3ss; aquæ destill. 3ss. M. This lotion was applied with a glass rod; the parts immediately covered with cotton-wool and olive-oil. The result in the course of a few hours was severe inflammation with swelling, which lasted about thirty-six hours. On the fifth day, the lotion was applied again, after which the parts were well washed with soap and water. The second application was much less severe in its results. I applied it again two days afterwards, and gave the patient the lotion to apply himself. He called on Saturday, I am happy to say, perfectly cured. I cannot help thinking the case worth recording.—Yours, etc.,  
CHARLES HOGG, L.R.C.P.E., F.R.C.S., etc.

**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

MR. TALBOT KING.—1. *Odling's Course of Practical Chemistry*; 2. *Meadows's Manual of Midwifery*; 3. *Green's Introduction to Pathology and Morbid Anatomy*; and the Histology in *Quain's Anatomy*; 4. *Garrod's Essentials of Materia Medica and Therapeutics*.

N.—Yes; at an early date.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Scarborough Daily Post; The Dudley Herald; The Shrewsbury Chronicle; The West Surrey Gazette; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Warrington Express; The Croydon Chronicle; The Northampton Herald; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; The Hull Criterion; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The High Peak News; The Metropolitan; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Middlesex Advertiser; The Rock; The St. Andrew's Gazette; The West Cork Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Richmond and Twickenham Times; The Western Morning News; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; The Manchester Free Lance; The Belfast News Letter; The Malvern News; etc.

\*.\* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

#### COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. George Johnson, London; Dr. Wm. Rutherford, Edinburgh; Mr. Richard Barwell, London; Mr. R. S. Fowler, Bath; Mr. B. Annington, Cambridge; Dr. J. Cross, London; W.; Mr. H. C. Burdett, Greenwich; Mr. E. C. Board, Bristol; Our Indian Correspondent; Dr. E. Berthard, Algiers; A. M. D.; Dr. Stephenson, Great Grimsby; Mr. H. Sewill, London; Dr. J. W. Moore, Dublin; Dr. J. Milner Fothergill, London; Dr. Clark, Minehead; Mr. Collison Morley, Belper; Mr. C. D. Batt, Witney; Dr. Parsons, Dover; Dr. Sutherland, London; Mr. Edwin Saunders, London; Mr. E. Nettleship, London; Dr. Goodchild, Leamington; Y.; Mr. Reginald Harrison, Liverpool; Mr. Miller, Southsea; Dr. Greenhow, Chapel Allerton; Mr. Jacob Ashley, Wick; M.D.; Mr. H. W. Sharpin, Bedford; Mr. Crisp, Keynsham; Dr. Cavafy, London; The Secretary of the Harveian Society; Mr. Hamilton Cartwright, London; Mr. G. M. Edmond, Stonehaven; The Registrar-General of England; Mr. T. Watson, London; Mr. Cooper Todd, Folkestone; Dr. George Hoggan, London; The Registrar-General of Ireland; Mr. A. Haviland, Northampton; M. M.; Dr. J. Crichton Browne, London; Lord Grey, London; Dr. Gillespie, London; Mr. Joshua James, Bristol; Our Paris Correspondent; Mr. Gordon, Lower Clapton; Mr. Thurston, Ashford; G. S. H.; Dr. Holman, Reigate; Dr. J. C. Murray, Newcastle-upon-Tyne; Dr. Rabagliati, Bradford; Our Edinburgh Correspondent; Mr. John Broadbent, Newark; C. A. B.; Dr. Carter, Liverpool; Mr. C. H. Rogers-Harrison, Stockwell; The Secretary of the Medical Society of London; Dr. Duffield, Kensington; Mr. Vincent Jackson, Wolverhampton; Dr. E. W. Orton, Bedworth; Dr. Hogg, London; Mr. Walker, Gornal; Dr. Churton, Leeds; Mr. E. M. Crookshank, London; The Secretary of the Obstetrical Society; A Member; Mr. Edward Barber, Sheffield; The Secretary of the Pathological Society; Dr. Gowers, London; Mrs. Marshman, Dover; Dr. Holland, London; Mr. H. J. Ashburner, Horsham; Mr. T. M. Stone, London; Mr. Wickham Barnes, London; Mr. T. Holmes, London; The Secretary of the Royal Medical and Chirurgical Society; Mr. N. A. Humphreys, London; Dr. Bond, Gloucester; Mr. J. N. Greensill, Great Witley; Messrs. Ellis and Co., London; Mr. J. B. Emmerson, Jarrold; Dr. Mackey, Birmingham; Mr. T. G. Vawdrey, Handsworth; Mr. C. H. Collins, Chew Magna; Mr. Davies, Pontypridd; Mr. H. P. Welchman, Lichfield; Dr. Wicks, Newcastle-upon-Tyne; Dr. Edis, London; Dr. W. M. Campbell, Liverpool; Mr. T. S. Ellis, Gloucester; C. A. F.; Mr. C. Downes, London; Dr. Rogers, London; Dr. Grimshaw, Dublin; Mr. E. W. S. Davies, Mountain Ash; P. C. R. L.; Mr. H. Handford, Atherstone; Mr. Houghton, Dudley; Dr. Richard Davy, Burstone; Dr. Creighton, Cambridge; Mr. Jacobson, Loddon; The Secretary of the Hospital Sunday Fund; Dr. William Bayes; etc.

#### BOOKS, etc., RECEIVED.

St. Bartholomew's Hospital Reports. Edited by James Andrews, M.D., and Alfred Willert, F.R.C.S. Vol. xii. London: Smith, Elder, and Co.  
Brain and Intellect. By John Coutts. London: F. Pitman. 1877.  
Illustrations of Clinical Surgery. By Jonathan Hutchinson, F.R.C.S. Part VII. London: J. and A. Churchill. 1877.  
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# THE LUMLEIAN LECTURES ON THE MUSCULAR ARTERIOLES:

THEIR STRUCTURE AND FUNCTION IN HEALTH  
AND IN CERTAIN MORBID STATES.

Delivered at the Royal College of Physicians of London.

By GEORGE JOHNSON, M.D., F.R.S.,

Fellow of the Royal College of Physicians; Professor of Clinical Medicine and  
Senior Physician to King's College Hospital; etc.

## LECTURE III.

*Renal Asthma: Symptoms and Proximate Cause.—The Dry and Inactive Skin of Bright's Disease: its Proximate Cause.—Is Diuresis a Result of High Arterial Tension?—Is High Arterial Tension a Cause of Albuminuria?—Uremic Convulsions and other Noxious Symptoms: their Relation to Epilepsy: their Proximate Cause: Principles of Treatment.—Two Forms of Impaired Vision in Bright's Disease: the Proximate Cause of each.—Cholera Collapse and Pulmonary Embolism compared.—Cholera Collapse and Spasmodic Asthma compared.—Conclusion.*

THERE yet remain for consideration certain symptoms and results of renal disease which are more or less intimately associated with and dependent upon those impediments and derangements of the circulation to which I directed special attention in my last lecture; and amongst these symptoms there is a peculiar form of dyspnoea, or, as it is sometimes called, *renal asthma*. During the progress of the various forms of renal degeneration which are commonly included under the generic term Bright's disease, a more or less persistent dyspnoea may result from a variety of causes, such as anæmia with a deficiency of the oxygen-carrying hæmatine; bronchitis or oedema of the lungs; fluid in the pleura, or in the pericardium, or in the abdomen; an enfeebled condition of the heart, either with or without valvular disease. But the dyspnoea to which I now refer is of a different character. It is not persistent, but occasional and intermittent, coming on in paroxysms, in some cases soon after food has been taken, and especially after an evening meal; while in other instances it occurs mainly during the night, when it entirely prevents or greatly disturbs the patient's sleep. In some cases, the attack resembles one of spasmodic asthma, and there are loud sibilant *râles* over the lungs, apparently the result of bronchial spasm; but in the more typical cases the phenomena are quite different. The breathing is hurried and laborious, the heart's action is rapid and feeble, and there is more or less lividity of the lips and of the general surface; yet, on auscultation, loud puerile respiration, unmixed with *râles* or crepitation, may be heard over the whole of both lungs; while in other cases, especially after a long continuance of the dyspnoea, fine crepitation may be heard over the bases of the lungs, but there is obviously no deficiency of respired air, nor any change in the physical condition of the air-passages to explain the distressing symptoms. It can scarcely be doubted that the symptoms in question are the result of a form of uræmia; and they occur with especial frequency in the advanced stages of the contracted granular kidney, with which other forms of uræmic poisoning are so commonly associated.

The question then arises, What is the proximate cause of this uræmic dyspnoea? We know that dyspnoea—a distressing sense of suffocation—arises when, from any cause, the free intermingling of the blood with the respired air is prevented. The respiratory process may be interfered with alike either by an obstruction in the air-tubes hindering the access of air to the pulmonary cells, or by some impediment to the onward flow of blood through the pulmonary capillaries. A plug in the pulmonary artery causes a sense of suffocation as urgent and distressing as an obstruction in the larynx, trachea, or bronchial tubes. I have on several occasions had the opportunity of observing the symptoms which result from an embolus or a thrombus in the pulmonary artery. When the obstruction of the artery is sudden and complete, there is usually a combination of pallor with lividity of the surface, the result of systemic venous fulness, epileptiform convulsions consequent on sudden extreme arterial anæmia of the brain, and death within a few seconds or minutes from arrest of the circulation. When the obstruction of the pulmonary artery is less complete, but permanent, and sufficient to destroy life, the respiration is hurried and laborious, and attended with a distressing feeling of want of breath. One poor girl, who was dying from this cause, panted out the statement, "I feel as if

I could not get breath enough"; yet over the whole of both lungs, except over two limited patches where some blood had become impacted in the terminal bronchi, there were unimpaired resonance and loud puerile respiration. The surface of the body in these cases becomes cold and pallid, with more or less lividity of the lips; and the pulse is small and feeble, or even quite imperceptible.

It is obvious that the blood-current through the lungs is the channel by which oxygen reaches the tissues; and, when that current is obstructed, the sense of breathlessness is the result of a call from the tissues for the indispensable vitalising oxygen.

Now, it has occurred to me that the paroxysmal dyspnoea of Bright's disease may be, in part at least, explained by an interrupted circulation through the pulmonary capillaries occasioned by spasm of the pulmonary arterioles, which are stimulated to this excessive contraction by the influence of the impure blood upon the vaso-motor nerves and centre. There are some facts and arguments which support this theory of the pathology of renal asthma.

The panting laborious mode of breathing and the sense of breathlessness are very like the symptoms which result from a plug narrowing but not completely obstructing the pulmonary artery. A consideration of the *juvantia* and *lædencia* lends support to the theory of arterial spasm of the lungs. In some cases, the dyspnoea is speedily and greatly relieved for the time by inhaling the vapour of nitrite of amyl; and this relief is probably due to the well-known influence of this agent in relaxing the muscular arterioles. In many instances, relief is afforded by moderate doses of chloral-hydrate, either alone or in combination with bromide of potassium. Ten grains of each of these compounds may be given twice or thrice in the twenty-four hours. This combination probably acts by lessening the reflex excitability of the vaso-motor centre. If, however, the secretion of urine be very scanty, and the blood consequently much contaminated by retained excreta, the chloral may fail to relieve, and it may even add to the distress. In this condition, the breathing is often most effectually relieved by means directed towards the purification of the blood by promoting the free action of the skin and bowels, while the diet is carefully regulated both as regards quantity and quality, an exclusive milk-diet being often the most suitable. The dyspnoea is almost invariably made worse by opium in any form; and the probable explanation of this is, that opiates, by checking the secretions of the bowels and kidneys, increase the blood-contamination, and thus intensify the exciting cause of the dyspnoea.

My late distinguished friend and colleague Sir William Fergusson often discussed with Sir George Burrows and me the etiology and treatment of this distressing symptom, from which he himself suffered severely during the last few weeks of his life. He asked me if I could explain the dyspnoea, and I suggested to him the explanation which I have just now given. He said that my explanation appeared to be in accordance with his own sensation, which was that of an obstruction somewhere within the chest; and, as the obstruction was evidently not in the air-passages or in any of the heart's orifices, it seemed probable that it might be in the pulmonary arteries. He several times described to me an interesting observation which he had repeatedly made upon himself. He found that, by voluntarily increasing to the utmost the respiratory movements—that is, making forcible inspirations and expirations fifteen or twenty times in succession—he could for a time free himself almost entirely from the distressing sensation of breathlessness. Then gradually, in the course of a minute or two after the cessation of the forced respirations, the former feeling of want of air returned; and he explained the temporary relief by suggesting that the deep inspirations had the effect of sending on a larger volume of blood highly charged with air.

The theory of uræmic dyspnoea which I have here set forth receives some confirmation from one fact which I have frequently observed. I allude to the fact that, when the dyspnoea has been long continued or has frequently recurred, although the respiratory sounds may have been quite pure and free from crepitating *râles* at the commencement, yet sooner or later moist wheezing sounds may be heard over the bases of the lungs at the back. The explanation which I would suggest is the following. In consequence of the impeded passage of blood through the minute pulmonary arteries, there is an unusual distension of the right cavities of the heart and of the systemic venous trunks. The bronchial veins, which open through the vena azygos and the superior intercostal vein into the superior cava, participate in this distension; and, in consequence of the engorgement of the bronchial veins and capillaries, there occurs a passive serous exudation into the bronchial tubes, which, gravitating towards the bases of the lungs, gives rise to the moist crepitating sounds which are heard there. A similar engorgement of the bronchial veins and capillaries occurs as a result of the impeded pulmonary circulation consequent on the various



forms of apnoea, whether the cause of the apnoea be the bronchial spasm of spasmodic asthma, obstruction of the larynx by diphtheritic false membrane, compression of one lung by a rapid and copious effusion, or extensive pneumonic consolidation of one lung. In a case of rapidly fatal laryngeal diphtheria, the contrast between the extreme anæmia of the pulmonary capillaries and the excessive capillary and venous engorgement of the bronchial mucous membrane is very striking. The explanation is obvious. In proportion to the exclusion of air from the lungs, the pulmonary arterioles contract and the capillaries are anæmic, and in the same proportion the blood accumulates in the trunks of the pulmonary artery, in the right cavities of the heart, and in the systemic veins, including the bronchial veins and capillaries; and so the bronchial mucous membrane is congested. The dark colour of the lungs noted in some cases of sudden apnoea—as, for instance, in Dr. Massey's case of hanging quoted in my first lecture—is explained by the engorgement of the bronchial veins and capillaries consequent on the arrested circulation through the pulmonary arterioles.

The hæmoptysis which sometimes follows a severe and prolonged attack of spasmodic asthma is probably explained by rupture of the overgorged bronchial capillaries consequent on the obstruction in the pulmonary arterioles which results from the bronchial spasm. The order of events is, first, bronchial spasm, with resulting partial apnoea; second, contraction of the pulmonary arterioles, with a backward engorgement extending to the bronchial veins and capillaries, which may relieve themselves by a sero-mucous exudation or by actual rupture and hæmorrhage.

Another phenomenon closely allied to this is the cedema of the sound lung, which occurs not unfrequently when one lung has been suddenly consolidated by pneumonia or compressed by a rapid and copious pleuritic effusion. In such a case, moist crepitating sounds may often be heard in the bronchi of the healthy lung: a condition of things which must always be looked upon with anxiety, because an increase of this cedematous effusion into the bronchi may cause a fatal apnoea. There can, I think, be no doubt that the bronchial, and not the pulmonary, vessels are the source of this serous exudation. In consequence of the impervious condition of the inflamed lung, there is a state of partial apnoea; more blood is sent to the sound lung than can be fully aerated; its progress is checked and regulated by the stop-cock action of the pulmonary arterioles; the right cavities of the heart and the systemic veins are engorged; and with this there is bronchial venous and capillary congestion, and a consequent passive serous exudation into the bronchi. In the condition here described, a timely venesection may sometimes rescue the patient from impending suffocation. The abstraction of blood relieves the distension of the veins and the right cavities of the heart, and at the same time it lessens the work of the lung in proportion as the volume of blood to be aerated is diminished.

A case of tricuspid regurgitation, which came under my care some years ago at the hospital, affords an instructive illustration of the effect of an impediment originating at the right side of the heart acting backwards, first upon the bronchial, and secondly upon the pulmonary, circulation. A woman, aged 52, was admitted with general dropsy, albuminuria, a systolic bellows-sound at the bottom of the sternum (*i.e.*, over the tricuspid valve), distended and pulsating jugulars, and the physical signs of bronchitis. A single dose of elaterium, acting very freely upon the bowels, removed at once the dropsy, the albuminuria, and the bronchial *râles*. After a few days, however, all the symptoms returned, and the patient soon died. We found, as we had expected, dilatation of the tricuspid orifice so great, that the valve was incompetent to close it; while all the other valves and orifices were normal. The lungs were much engorged. In this case, it is evident that the primary cause of all the symptoms was incompetence of the tricuspid valve. There was consequently reflux of blood into the systemic veins, renal congestion and albuminuria, anasarca, bronchial venous and capillary congestion with a muco-serous exudation into the bronchi, and then a secondary obstruction in the pulmonary capillaries consequent on the pressure of the gravitating bronchial secretion.

It is interesting to note that, on one occasion before her admission, she had spat some blood, the source of which was, in all probability, the overgorged bronchial capillaries. We are familiar enough with hæmoptysis as a result of mitral constriction or incompetence, the source of such hæmoptysis being, in most instances, the pulmonary vessels; but disease on the right side of the heart obviously throws back the strain and pressure primarily and chiefly upon the bronchial vessels.

One of the most constant symptoms and results of chronic Bright's disease is a remarkably dry, harsh, and inactive state of the skin; a

state of skin which, in many instances, resists even the diaphoretic influence of the hot-air or the Turkish bath. I formerly supposed, and publicly expressed my belief, that this condition of skin might be due to the fact that the excessive contraction of the hypertrophied subcutaneous arterioles resists the relaxing effect of external warmth which has so powerful a diaphoretic influence upon the healthy skin. My belief was that the deficient cutaneous secretion was a result of a defective blood-supply to the sweat-glands. I take this opportunity of saying that, for some time past, I have abandoned this theory as unsatisfactory and erroneous. It must be borne in mind that the excessive power of resistance possessed by the hypertrophied arterioles is to a great extent, if not entirely, compensated by the increased injecting force of the hypertrophied left ventricle. The inactivity of the skin, therefore, is not to be explained by a defective blood-supply. I now believe that the dry and inactive state of the skin, which is commonly associated with chronic renal disease, is to be sought for in a structurally diseased condition of the sweat-glands themselves. With the able assistance of my colleague Professor Gerald Yeo, I hope ere long to be able to demonstrate as a fact what is now only a plausible hypothesis, but one which is rendered probable by some well ascertained facts. We know that disease of one excretory organ frequently induces disease in one or more allied organs. For example, when, in consequence of obstruction of the gall-duct, or some structural disease of the liver, bile accumulates in the blood, the products of that secretion are vicariously eliminated by the kidneys, and the result is that the secretory tissues of the kidney undergo structural changes. The urine is not only deeply tinged with bile, but it is often found to contain desquamated renal epithelium, tube-casts, and sometimes albumen. The excretion of biliary materials excites a mild form of desquamative nephritis.

It is notorious that suppressed action of the skin by exposure to cold and wet is a very common cause of acute renal disease with albuminuria. The most probable explanation is that the products of the cutaneous secretion, being retained in the blood, are partially excreted by the kidney, and excite structural changes there, as bile-products have been shown to do. There is a very close relationship and interdependence between the cutaneous and the renal secretion. Many of the symptoms of uræmic poisoning may be removed or mitigated if by any means we can promote and maintain a free action of the skin, the prolonged application of the wet pack being one of the most efficacious of these means. Now, there is reason to believe that when, in consequence of degeneration of the kidney, urinary materials accumulate in the blood and are partly excreted by the skin, as they have been proved to be, this vicarious excretion will induce structural changes in the sweat-glands, and thus explain the abnormal dryness of the skin. This, which is at present a theory, I expect soon to see as a demonstrated fact; and if any one or more workers will take up this subject and complete the demonstration before Dr. Yeo and myself have had the opportunity of doing it, we shall be very happy to be thus anticipated.

Another symptom, which some writers on renal pathology have, as I think erroneously, attributed to increased vascular tension, is the copious secretion of urine which is often associated with the small granular kidney. It is possible, though by no means certain, that increased pressure on the capillaries of the kidney might cause a more copious secretion of urine; but, in the granular kidney, the firm contraction of the hypertrophied renal arterioles counteracts the injecting force of the strong left ventricle, and thus prevents an increased afflux of blood into the capillaries of the kidney. There is no reason to suppose that high arterial tension has any direct tendency to cause an increased secretion of urine. In cases of contracted granular kidney, the two conditions are associated, but in the early stages of the lardaceous kidney the copious secretion of urine occurs without arterial tension. It is probable that in both classes of cases the copious flow of urine is caused by the diuretic influence upon the kidney of some abnormal products in the circulation; an influence analogous to that of sugar in cases of diabetes.

Again, it has been supposed by some that vascular tension may be a direct physical cause of albuminuria. But if, as we have good reason for believing, the increased vascular tension is a result of resistance caused by contraction of the arterioles, it is evident that, just in proportion as the renal arterioles contract and resist the blood-stream, the pressure in the capillaries in front of them will be lessened. And it is a matter of daily experience that in those cases of chronic renal disease which are commonly associated with the highest degree of arterial tension—cases of small granular kidney—the amount of albumen in the urine is least, and not infrequently there is none even, in the advanced stages of the disease.



Relaxation of the renal arterioles is more likely to cause albuminuria than their excessive contraction; and the late Dr. Warburton Begbie published some cases in which he believed that the urine became albuminous in consequence of vaso-motor paralysis, resulting in an increased afflux of blood to the Malpighian capillaries.

This view, too, is confirmed by the results of experiments. Vulpius (vol. i, p. 534) describes the effect of dividing the left splanchnic nerve of a dog just above the kidney. The renal arterioles being paralysed, the kidney at once becomes congested, red, and swollen, the quantity of urine excreted by that kidney is increased, and it becomes highly albuminous. The galvanisation of the distal end of the divided nerve stimulates the renal arterioles to contract, and the red and congested kidney gradually becomes pale.

Contraction of the systemic arterioles in general, with relaxation of the renal arterioles, might cause capillary renal congestion and albuminuria; but this is not the condition which exists in cases of chronic albuminuria with high arterial tension. On the contrary, there is evidence that the renal arterioles in these cases are more firmly contracted and more decidedly hypertrophied than those of any other organ or tissue.

An impediment to the circulation causing albuminuria must act *in front* of the Malpighian capillaries, so as to cause a backward engorgement and a transudation of serum through their walls into the uriniferous tubes. Thus, Dr. George Robinson (*Med.-Chir. Trans.*, vol. xxvi, p. 51) proved many years ago that a ligature on the renal vein of a living rabbit renders the urine albuminous, and even bloody. This experiment has been repeated by Frerichs and others with the same result. Bowman's demonstration of the structure of the Malpighian bodies and their connection with the uriniferous tubes rendered these results quite intelligible. In like manner, distension of the convoluted tubes by morbid exudation within them may, by compressing the intertubular capillaries, cause engorgement of the Malpighian capillaries and escape of serum through their walls.

[To be concluded.]

## CLINICAL LECTURES

ON

### ANTISEPTICISM IN SECTIONS AND RESECTIONS.

By RICHARD BARWELL, F.R.C.S.,  
Surgeon to Charing Cross Hospital.

#### LECTURE II.

GENTLEMEN,—In the last lecture we saw that division of the femur above the knee, combined sometimes with section of the tibia and fibula just below that joint, forms a valuable substitute for resection of the ankylosed portion itself. The advantages of the one operation over the other are the greater readiness with which the parts heal, the more complete preservation of muscular power, and probably, in young subjects, non-interference with epiphysal growths. In my experience (and I have performed osteotomy in more instances than those now reported), the reunion of bone is very rapid. In Case I, I believe that rare form, immediate union, took place, and that the girl might have gone about in ten days. Generally, the lower end of the femur is firmly knit within six weeks, the tibia within a month. The antiseptic method obviates—I had almost said precludes—suppuration, hence the operation is as safe as any human action can possibly be; it is also nearly painless: none of my patients have suffered pain or loss of health.

The modelling process which took place in C. G. (Case I\*) is very remarkable; no abnormal bend whatever of the femur is apparent, nor is that the only instance. Of John B. (Case II), I said in my last lecture that the appearance of angular incurvation at the femur and tibia was diminishing. Since those words were written, the modification has gone on even more rapidly. It would seem that, as in rachitis the inside of the morbid curve is filled up and strengthened by new bone, so in the retreating angle of these artificial fractures new osseous deposit takes place, while the salient angle is absorbed; thus the divided and bent bone becomes, without losing its direction, very much straightened, and that projection of the knee—a marked peculiarity of fig. 5

(see this JOURNAL, April 28th, p. 507)—gradually diminishes, and may very probably almost disappear.

The experience of Case II is valuable in this wise. Owing to the unsound, though not diseased, condition of the femur and soft parts close to the knee, I felt constrained to divide that bone higher up than in Case I. Now, to place the lower leg in a certain line, the lower end of the femoral fragment, whatever its length, must be flexed at a given inevitable angle with the upper one: therefore, it is evidently desirable to make the lower fragment as short as possible, since its projection will be in direct ratio with its length. The synovial membrane need not, of course, be taken into account; but the epiphysal line, at the age when it still exists, should not be interfered with, since most of the femoral growth depends on this structure.

We will now pass on to another subject—namely, to excisions of the knee, and to the effect which antisepticism exercises on the duration and prospect of cure—an effect which cannot, I think, be too highly prized.

CASE I.—Chas. B., aged 8, admitted into the Charing Cross Hospital under my care in August 1876, with disease of the knee-joint, evidently arising from osteitis in the femoral epiphysis. Under a treatment which I will not now detail, he made a marked improvement; but in October he became so suddenly worse that the relapse could only be ascribed to some imprudence (the boy is very full of freaks), which he could not be brought to confess. The symptoms became so aggravated, that very soon excision evidently offered the best chance of preserving the limb.

November 10th. I performed the operation, under all antiseptic precautions, in my usual way, making a free straight cut across the front of the joint almost from one hamstring tendon to the other. A good deal of pus escaped. When the bones were sawn through, a large spot of softened bone-tissue had to be cleared with the gouge, both from the inner condyle and from the inner tuberosity of the tibia. A branch of the external articular artery was tied, and three smaller vessels were subjected to torsion. A drainage-tube was placed at the back of the bones, and the limb placed in a splint of thin zinc and plaster of Paris, to be described immediately.

This splint and general arrangements required no change from the time of application until the 30th January, when the wound was healed, except the openings of two little sinuses, and the limb, therefore, was entirely placed in a plaster of Paris bandage, with the necessary windows. There was not during the whole of this time any swelling of soft parts—so frequent an accompaniment of this operation; neither was there any purulent discharge nor rise of temperature. The wound, save where the drainage-tube was kept for some time, and one other spot, healed by the first intention. It was dressed for the first month every other day, then for three weeks every third day, then every fourth day.

The splint—which after several trials I have come to regard as the most efficacious—is a modification of P. H. Watson's. It is constructed of two pieces of thin zinc, cut on paper patterns, carefully fitted to the back of the thigh and leg. The upper one, longer on its outer than on its inner side, extends from about two inches above the place of



FIG. 1.

wound to the great trochanter on the one and to near the fold of the nates on the other side; it must only be broad enough to go one-third round the thigh. The lower splint, commencing about one inch and a half below the wound, supports the calf, then forms a long and narrow part, which terminates in a foot-piece. In application, this

\* I must apologise for a mistake in dates, which crept in. I hardly know how, from much copying. Catherine G. was admitted in November, and operated on December 2nd.







Removal of cartilaginous growth from patella .. .. .	1
Removal of fibro-vascular (erectile) growth from leg .. .. .	1
Removal of fibroma from nasal fossa* .. .. .	1
Herniotomy .. .. .	2
Ligature of brachial artery .. .. .	1
Total .. .. .	45

The total is, as already stated, small, but the result is interesting. One death only has occurred, and this in a case of excision of the hip in a very bad subject, which I was obliged to perform on account of the severity of the pain arising from the inflamed head of the thigh-bone. I can hardly accept this as one in my death-rate, since the operation was performed to relieve pain, but with no expectation of saving life. Besides mere death-rate, however, I believe that the length of time necessary for recovery is immensely reduced by this method, as witness the two excisions of the knee above detailed. Space forbids me to enter upon that subject now, and my material hardly allows me to do it full justice at present; but I hope shortly to bring forward some accurate data concerning that part of the question.

## REMARKS ON THE CASE OF MISS MARTINEAU.\*

By T. SPENCER WELLS, F.R.C.S.

By the desire of a brother-in-law of Miss Martineau, Mr. Higginson of Liverpool, who is present this evening, and to whom we are all much indebted for the invention of the very useful syringe which bears his name, I now exhibit to the Society the cyst which was removed from Miss Martineau's body after her death by Mr. King of Ambleside, as described by this gentleman in the communication which has just been read to the Society.

The cyst is not of much interest to the morbid anatomist. It is seen to be a pear-shaped almost single cyst; and the Fallopian tube with its fimbriae, and part of the broad ligament with the remains of the Wolffian tubules, have their ordinary attachments or connections with the outer surface of the cyst. There is nothing whatever to support the hypothesis advanced in the *BRITISH MEDICAL JOURNAL* by Dr. Greenhow of the "passage of the displaced ovarium through the Fallopian tube". The cyst contained only about half a pint of liquid, but about ten pounds of the hard fat-like substance to be seen in the bottle on the table. Though looking like fatty or stearoid substance, it does not melt on being heated, but scorches like horn or hair. It is mainly a mass of epithelial scales, with some cholesterine and fine hair. The cyst, therefore, was dermoid. Here its interest to the pathologist or the morbid anatomist ceases; but the clinical history of the case is very much greater. In Miss Martineau's lifetime, her illness, supposed cure by mesmerism, and renewed illness, were publicly discussed. The supposed failure of orthodox medicine and the complete triumph of mesmerism in her case were published by herself in her *Life in the Sick-Room*, and in her *Letters on Mesmerism*, and have been vaunted by many of the supporters of mesmerism from that time to this. Indeed, much of this has been lately revived by the publication of her very interesting *Autobiography*, a book which is very widely circulated. Taking the facts of the illness as gleaned from this *Autobiography*, comparing them with the medical report of Dr. Greenhow published in 1845, and then glancing at the cyst now before the Society, the whole case becomes so clear that its lesson cannot be mistaken.

It is not quite certain when the ovary first began to enlarge; but we do know that dermoid cysts, as a rule, are of very slow growth, and a history of thirty or forty years would not surprise us. Writing herself in 1839, when thirty-seven years old, and about thirty-six years before her death last year, Miss Martineau says at page 151 of the second volume of her *Autobiography*: "An internal disease was gaining ground for months or years before I was aware of it. A tumour was forming, of a kind which usually originates in mental suffering." Two years later, in 1841, Sir Charles Clarke saw her with Dr. Greenhow, and the result is stated very clearly in the published report of the latter gentleman. There was supposed to be a fibroid enlargement and retroversion of the fundus uteri; and Sir Charles Clarke states very distinctly that this disease of the body of the uterus is much less serious than some forms of disease of the neck of the uterus. He

does not speak of the case at all as hopeless, though Miss Martineau repeatedly in her journals speaks of her illness as incurable.

Neither Dr. Greenhow nor Sir Charles Clarke is to be blamed because they mistook an enlarged ovary low down in the pelvis behind the uterus for an enlarged and retroverted uterus. The uterine sound had not then been brought into use; and even now, with all the aid that men accustomed to its daily employment can gain from it, and with the certainty with which in most cases it enables us to complete a diagnosis, doubt must in some exceptional cases be felt whether a pelvic tumour is uterine or ovarian. Taking Mr. King's report of the uterus after death as "small and unaffected", there can now be no reasonable doubt that the tumour was ovarian from the first; that, so long as it was in the pelvis, it led to great suffering; and that its rise from the pelvis into the abdomen, which happened to coincide with mesmeric treatment, was followed by great temporary relief—the supposed cure of the tumour by mesmerism, which was so triumphantly proclaimed.

The growth of the tumour after its rise from the pelvis seems to have been slow, and the next phase of the illness was not until 1855, when symptoms of supposed disease of the heart led to the consultation of Dr. Latham and Dr. Watson. I have here a copy of the note made at the time by Sir Thomas Watson, and I am sure you will all admire the hand of the great master in this life like sketch, made in a very few minutes when in the full flood of busy practice with his waiting-room crowded. I am very glad to be permitted by Sir Thomas to read to you an exact copy of his notes.

"January 31st, 1855. Miss Harriet Martineau, aged 53. Catamenia ceased three years ago. For a year or more, has been short-breathed on exertion, especially when ascending. Has grown much stouter, and began to do so before the catamenia ceased. Speaks of intermissions and subsequent boundings of the heart, felt by her very disagreeably. Has occasional twinges at the back of her neck, as if the scalp were pulled up. A marked vertical arcus senilis. Has dyspnoea occasionally, even in bed, with flutter and bump of the heart. No morbid lung-sounds, but the respiratory murmur is rather louder in the left lung. The heart is heard extensively over the chest—noisy—the first sound approaching a thrum. No actual *bruit*. Urine made profusely and often during the night. This new to her. It is pale, acid; specific gravity 1011 or 1012; shows no albumen to heat or to nitric acid. A large pear-shaped indolent tumour reaching as high as the lower part of the epigastrium."

Here you see this large pear-shaped tumour very much as Sir T. Watson described it in 1855—a little, but probably not very much, larger; and, as we gather from Dr. Greenhow's recent report, not encroaching very much on the chest until some eighteen months before death. And Sir T. Watson's note is the only definite account I have been able to find of an abdominal tumour during life. Dr. Greenhow and Sir Charles Clarke described the tumour before it rose out of the pelvis; but in 1845 Dr. Greenhow said the abdominal enlargement was principally due to flatulent distension of the intestines. Sir T. Watson says Miss Martineau began to grow stout before the catamenia ceased in 1852. It is, therefore, almost certain that, after rising from the pelvis, the cyst was ten years before it reached the epigastrium and interfered with the action of the heart; and that it remained without very great increase during the subsequent twenty-one years. During most of this time, Miss Martineau's life was that of an invalid; sometimes suffering a great deal; always apprehending the result of the incurable disease of the heart under which she believed she was dying, notwithstanding the assurances of the two most distinguished physicians of the day; and, although she did a great deal of literary work, she was a source of constant anxiety to her relatives and those about her. When we see how much real good work she did under such disadvantages, and acknowledge how great were the doings of an invalid woman in comparison with what most of us who are strong and well are able to do, we must regret the more that the last twenty years of the life of this remarkable woman were not made as happy as they might have been by the removal of the cyst which was removed so easily after her death. There were no adhesions; the pedicle was long and distinct, and the case in all respects one most favourable for ovariectomy—the chances at least ten to one in favour of recovery.

I will only say, in conclusion, that I fully agree with Dr. Greenhow in his opinion that the disease from which this eminent woman suffered serves "in some degree to explain some of the peculiarities of character which were apparent during her remarkable career".

THE Army Medical Department has prepared a report specifying all that would be requisite for an army corps of 50,000 men if ordered to take the field, and we understand that the report is now at the War Office.

\* This tumour grew between the mucous membrane and the osseous walls, intruding into the mouth in front of the canine tooth, lateral incisor, and first bicuspid, blocking the nostril and protruding the cheek. It did not involve, nor did I in removing it involve, the mucous membrane; hence the antiseptic method was available.

\* Made at the Clinical Society of London, Friday, April 27th, 1877.



## RARE DISLOCATIONS.

By S. M. BRADLEY, F.R.C.S.,  
Senior Assistant-Surgeon to the Royal Infirmary, Manchester.

ABOUT a year ago, a healthy man aged 35 fell from a scaffolding, dislocating his right shoulder, and was admitted into the Manchester Royal Infirmary the same day. On examination, the head of the humerus was discovered beneath the coracoid process; but so much crepitus was felt, that it was thought that the dislocation was complicated with fracture of the glenoid cavity. Unsuccessful attempts at reduction having been made with the knee and foot in the axilla, he was placed under chloroform to permit a more thorough examination, and also for the purpose, if deemed requisite, of employing the pulleys. Almost immediately after becoming unconscious he ceased to breathe, and all attempts at resuscitation failed: the death was, I believe, reported at the time in the *BRITISH MEDICAL JOURNAL*. On *post mortem* examination, it was found that a piece, of the size of an almond, had been chipped off the head of the humerus, and that this fragment lay on the lower edge of the glenoid cavity, while the rest of the head was displaced inwards beneath the coracoid process. Between the two lay the long strap-like tendon of the biceps; hence it is manifest that the more extension was practised the tighter this strap would be drawn, and with this the greater would become the obstacle to reduction. It proved easy, on the other hand, to replace the head of the bone in its socket by carrying the shaft of the humerus upwards, and then rotating inwards, thus unwinding the head from beneath the restraining tendon. The preparation is in the Owens College Museum.

Within the past fortnight, two cases have been admitted into the Infirmary with dislocation of the tibia forwards at the knee-joint. In the first case, the condyles of the femur lay just below and behind the popliteal space, while the head of the tibia formed a prominent ridge anteriorly over the intercondyloid notch. In the second case, the displacement was even more considerable; the limb was shortened to the extent of three inches, and the condyles so sharply defined at the back of the leg as to appear on the point of bursting through the skin; the leg was blue and cold, owing to pressure on the popliteal artery. In both cases, reduction was readily effected by means of simple manual extension under chloroform, and in both pulsation almost immediately returned in the posterior tibial artery. Nearly all pain ceased on the reduction of the displacement, and up to the present time both cases have gone on uninterruptedly well. When we consider, amongst other lesions, that the crucial ligaments must necessarily be completely ruptured in this accident, it is interesting to note, in cases of the kind which have been recorded, that the movements of the limb in the sequel are little affected; flexion, extension, and the characteristic lateral movements all being performed with the same ease and precision as they were prior to the injury.

The dislocations of the shoulder and knee here briefly reported are not unique, but they are rare; and I think the former, at least, is valuable as showing how, in certain cases, manipulation may possibly succeed when extension must certainly fail.

### A CASE OF SUDDEN ONSET OF VIOLENT CHOREA DURING AN ATTACK OF ACUTE RHEUMATISM, WITH ARREST OF THE MOVEMENTS UNDER TREATMENT: RECOVERY.

By J. HYDE HOUGHTON, Surgeon to the Guest Hospital, Dudley.

I AM induced to publish this case on account of its great rarity, and of the interest it possesses touching the question of the connection between rheumatism and chorea. This general connection is admitted and referred to by authors; the first to observe it being, I believe, Dr. Copland, who also refers to cases by Prichard, Rosier, etc. Trousseau speaks of rheumatism as one of the pathological causes of chorea, quoting, in support of the proposition, Stoll, Bright, Begbie, and others. Again, Dr. Todd, in his lectures, gives two cases, with comments, to prove the connection; and further insists on the resemblance between the two diseases, adducing, as arguments in support of his theory, the condition of the urine, the liability to repeated attacks, and the frequent occurrence of endocardial murmurs in each. Dr. Churchill says very little on the subject; and Dr. Kirkes is of opinion that the connection is not with rheumatism, but with the endocardial disease. Dr. Tanner again, says: "There seems to be some obscure connection between chorea and rheumatism, the latter disease preceding the former." The connection is thus established by abundant authority, which is con-

firmed, no doubt, by the experience of all who have had opportunities of extended observation.

These remarks all refer to the general connection between chorea and rheumatism, in which the former is a consequence of the latter, more or less remote; but when we come to speak of chorea as part of an attack of acute rheumatism, if I may so speak, at all events coming on during the acute stage, very little seems to be known, and very few cases are on record, so far as I have been able to learn.

CASE.—On August 29th, 1875, I saw Clara B., aged 12, the daughter of a clergyman. She was not supposed to be very ill; but as her father and mother were leaving home, they asked me to see her before they started. The tongue was moist. There was no thirst. The countenance was bright. There was slight pain in both ankles, and under the left malleolus a red spot of the size of a shilling, which was tender. There was well marked murmur, loudest over the left side of the heart. There was no cough; slight dyspnoea; no pain over the chest. Temperature 102 deg.; pulse 120; respirations 24; urine acid. She had not been well the last day or two, and a few days previously, whilst hot and fatigued, had sat on the grass. She had not had rheumatism before. Alkaline treatment was used freely.

August 30th. Temperature 103 deg.; pulse 120; respirations 20. The urine was very acid; the sweat was distinctly acid. The pain in the joints was better. The murmur was pronounced.

August 31st. The left knee and shoulder were affected.

September 2nd. The urine was neutral, and she had had a good night. There was some dyspnoea at 7 P.M., which was relieved by a sinapism.

September 4th. She had some giddiness, and pain in the side. The physical signs were improved.

September 5th. The temperature, pulse, and respiration had continued much the same till to-day, when the temperature fell to 99 deg., the pulse to 104, and there was remission of symptoms.

September 6th. Temperature 102 deg.; pulse 120; respirations 48. She awoke much frightened, and had some dyspnoea in the night.

September 8th. She had a bad night, with dyspnoea, *delirium*, and restlessness. There was a return of pain in one foot, and in the precordial region on inspiration were precordial dulness and extended impulse. A blister was applied.

September 12th. There was very little change till to-day. Temperature 102 deg.; pulse 140; respirations 20.

September 13th. Temperature 100 deg.; pulse 126. She seemed improving, except that I noticed a little peculiar twitching about the face and sudden movements of the head, which I did not regard much, as she had naturally a very sharp quick manner, and so had one of her sisters; and her mother, to whom I mentioned it, did not see anything very unusual in it.

September 14th. At four this morning I was called, hearing that the child was furiously delirious. This was not so. She was perfectly conscious, but in a paroxysm of violent chorea; the motions of the fore limbs and whole body being violent. The pains had entirely left the joints. The heat had subsided, but the jactitation was so violent that it was quite impossible to take the temperature, count the pulse, or auscult the chest. She had had no sleep during the night. Dr. Heslop saw her with me. We gave her all the nourishment possible, and liquor morphizæ with quinine and bromide of potassium.

September 15th. The medicine had made the child very sick, and was discontinued, but the sickness continued; and, in spite of large doses of liquor opii, very little rest was obtained, and she was much the same.

On the 16th, I gave five grains of chloral and ten of bromide every four hours; and in the afternoon Dr. Heslop again saw her, and concurred in the treatment, suggesting that she should have nutrient enemata with quinine and brandy. Her worst symptom was hurried catching breathing.

September 17th. This morning, I found that she took chloral at 4 P.M., and afterwards got some tranquil sleep; again at 11 P.M., which she vomited; and again at 5 this morning. She had a good night; chorea was almost gone; the countenance was tranquil. The tongue was furred; she had not much thirst, and took food moderately. She had complained of slight pain in the wrist the first time since the chorea set in. Temperature 100 deg.; pulse 120; respirations 64; urine neutral.—10 P.M. She was free from chorea. The countenance was placid. She was sensible and took nourishment freely. She complained of aphthæ. She had slept nearly all day, and had not taken any medicine since 5 A.M.; and from this time nothing worthy of record occurred till September 21st, when convalescence was completely established. Temperature 98 deg.; pulse 100; respirations 30. She took food freely, and had not taken any medicine since 5 A.M. on the 17th. A loud diffused cardiac murmur continued. From this time



she made a progressive recovery to such a state of health as her damaged heart would admit of.

The points of interest in the case are the following :

1. Though this hardly refers to the question, the well marked evidence of cardiac mischief before the articular symptoms were developed, though none had existed before, so far as could be ascertained, and though she had not had rheumatic fever previously.

2. The suddenness of the attack of chorea on the sixteenth day, simultaneously with the cessation of the articular signs, and with such violence as to make us fear lest she should sink from exhaustion arising from excessive muscular exertion, before the movements could be arrested.

3. The sudden and permanent arrest of the chorea after taking only four doses of the medicine (chloral five grains, bromide of potassium ten grains), and her subsequent uninterrupted restoration to such health as her permanently and extensively damaged heart admitted. It may almost be said she was well when she awoke from her chloral sleep, for after that time she did not take a single dose of medicine, and rapidly recovered by simple attention to diet and good nursing.

There are other minor points of interest to which the limits of this paper do not permit me to allude.

In the twenty-second volume of the *Medico-Chirurgical Transactions*, Dr. Bright gives some cases.

1. A lad, aged 17, April 5th, 1836.—Twelve days previously, general rheumatic symptoms, but not strictly those of acute inflammatory rheumatism, set in. When all these were subsiding, six days before he was seen, consequently on the sixth day of the disease, peculiar spasmodic symptoms arose, which increased till Dr. Bright saw him, when they were fully marked symptoms of severe chorea, except that the convulsion was more severe than is almost ever seen in chorea. The pulse varied from 100 to 120, and there was occasional sharpness, followed by feebleness of the beat, which induced us to pay attention to the action of the heart, which led to suspicion rather than conviction of that organ being more than functionally diseased. Remedies gave some relief for a day or two, when the disease increased and assumed the character of the most violent convulsion. There was slight wandering of the mind. He then required personal restraint to prevent him from injuring himself. He died fifteen days after the spasmodic symptoms set in. After death, the heart exhibited abundant signs of extensive acute inflammation. "The brain and abdominal viscera were most carefully and minutely examined and all found perfectly healthy."

2. Dr. Bright also alludes to the case of a young lady he saw in consultation, who suffered from rheumatic affection of the joints, though not in the genuine form of acute rheumatitis. "Several of the joints were puffy, slightly inflamed, and tender, and she had now begun to show symptoms of involuntary motion, the movements in fact of complete chorea." "The heart was agitated, and to it the chief uneasiness was referred. The pulse was hurried and irregular, and on listening to the heart a *frottement* was distinctly heard. I had no doubt of the inflamed state of the pericardium." The lady recovered completely.

3. He relates very shortly three other cases, in which chorea existed during the course of acute rheumatism: two in the hospital, and one in the son of a medical man, aged 11. The history of this poor lad was shortly as follows: "Within the last two years, two very severe attacks of rheumatism, in both of which most direful inflammation of the heart took place, and with each attack chorea so severe that he threw himself from one end of the bed to the other, and required the constant care of more than one attendant to prevent his injuring himself. He has greatly improved in all his symptoms." (Page 15.)

Dr. Tanner writes: "We sometimes meet with cases, more especially where the heart has become implicated, in which irregular choreal movements come on during the progress of rheumatic fever"; but he gives no case.

Trousseau gives two cases only, in which chorea occurred during the course of acute rheumatism, in both of which the attack commenced about the fourteenth or fifteenth day. In one case, there was endocarditis, and this was fatal; but neither the presence of endocarditis nor the result is mentioned in the other. He also gives the case of a boy, aged 5½, seized January 1st with articular rheumatism, which lasted a month; on February 1st, he was attacked with chorea, which was still present on the 7th. In this case, there was endocarditis. The result is not given. (*Clinical Lectures*, vol. i, page 394.)

Rilliet and Barthez give two cases, one reported by Boutillé, in a child eight years old, suffering from violent rheumatic pain in the left arm and shoulder, accompanied by fever so intense as to require frequent bleedings, in which chorea disappeared at the moment when the pain and fever disappeared. They also refer to a case of their own, in which the movements supervened *à cette moment*; and also to Stoll's

cases, in which the rheumatic pains and the movements commenced simultaneously. (*Maladies des Enfants*, tom. iv, 313.)

So far as the limits of my own small library extend (which includes a complete copy of Braithwaite, which I have searched without finding a case), these are all the instances in which chorea set in during the course of rheumatic fever. Including the third case by Trousseau—in which, however, the chorea, strictly speaking, did not set in till the fever had subsided—and my own, I can only find eleven cases recorded; and Trousseau, Bright, and Barthez and Rilliet are the only authors who have recorded cases. The coincidence is, therefore, I conclude, one of extreme rarity, and the case in all its bearings one of rare interest.

NOTE.—Since the above was written, the following case came under my care in the Guest Hospital.

W. C., aged 9. October 21st, 1876.—A healthy child; had slight chorea two years since, lasting three weeks. The mother had chorea when a child. The attack commenced on September 30th, and two days afterwards a competent person told his mother he had rheumatic fever, with heart-complication. This continued in a severe form till October 18th, when chorea appeared. On the following day, chorea increased and rheumatism subsided, but did not quite disappear. On admission, the chorea was not severe. He had slight pain in the knees and ankles, and a soft systolic *bruit* at the apex. Temperature 98 deg.; pulse 80; urine acid. He was ordered bicarbonate of potash and iodide of potassium. He continued much the same till the 23rd, when chorea suddenly increased, and ten grains of chloral were given, after which he had a good night. On the following night (24th), the movements became so severe and distressing that the house-surgeon gave him chloroform, after which he slept four hours and awoke much quieter. The paroxysm was marked by a sudden rise of temperature, from 98.2 deg. to 102 deg.; falling on the following day to 99 deg.; on the next day rising to 101.3 deg.; and finally falling the next day to normal. After the chloroform sleep, he took ten-grain doses of chloral every two hours, and on the 27th the rheumatism and chorea had disappeared, and he made a progressive recovery.

## GANGLION: ITS TREATMENT BY PNEUMATIC ASPIRATION.

By JOHN BROOM, M.D., Clifton.

THIS disease, whether in its simple or compound form, is one frequently met with by practitioners and almost as often neglected by patients. So far as my own observations have gone, I have been consulted most frequently by women and children, in whom I have invariably found the disease to exist in its simple form. These patients have mostly been of rather delicate constitution, and the subjects of some sudden and violent flexion of the wrist. They have sought advice rather for deformity than pain; especially has this been the case when I have met with it in women.

As the etiology and pathology of the disease are generally understood and accepted by the profession, and I have nothing essential to add, I shall confine my observations to the treatment.

The custom and experience of the surgeon, as well as the age, sex, occupation, and position of the patient, usually determine one of the following methods of treatment: applications, *e. g.*, iodine liniment, or tincture, or blistering solution; pad and strapping; bursting, either by digital pressure, or by striking with the back of a book; incisions, either direct or subcutaneous; drainage, with internal irritation, by passing a seton of thread or silk directly through it. These, separately or conjointly, have usually produced a temporary, if not always a permanent, cure.

The following case—which is one of many taken from my former practice in Sheffield—illustrates the simple form of the disease; its treatment by the pneumatic aspirator; and the result, so far as circumstances permitted me, to prove it.

In 1875, a youth, aged about ten years, was brought to me, having a simple ganglion upon the sheath of the extensor indicis tendon, of a few weeks' existence. I was requested to do all I could for him at this one interview, as he was going into the country for some time, and, therefore, he would not be able to consult me again without some inconvenience. With this view, I at once introduced the needle of the pneumatic aspirator, and drew off about a drachm of semitransparent fluid, which completely emptied the sac; and then, for the purpose of preventing the refilling of the sac, and also of giving support to the weakened and dilated wall of the sheath, I applied a small pad of lint, and kept it *in situ* by encircling the wrist with a single strip of



soap plaster. This dressing I directed the patient to wear for a few days, using the hand in the interim as before the operation.

A few months after the operation, the youth's father informed me that it had been perfectly successful, that nothing further had been done, that there had been no return of the disease, and that his son had neither weakness, pain, nor other inconvenience from it.

As a deduction from the above, the treatment by pneumatic aspiration appears to offer some advantage over the other methods, inasmuch as it is simple, efficacious, and but slightly and momentarily painful—desiderata readily recognised and yielded to by most patients.

## THERAPEUTIC MEMORANDA.

### CHRYSOPHANIC ACID IN THE TREATMENT OF SKIN-DISEASE.

I AM glad to find in the columns of the JOURNAL still further testimony to the efficacy of chrysophanic acid in skin-disease since I first brought it under notice. My testimony to its efficacy in *non-parasitic* diseases of the skin has throughout been more positive than what I have advanced as to its action in the cure of ringworm. I have reason now, after trying it in a large number of cases of both kinds, to believe that it is of unquestionable efficacy both in the vegetable-parasite diseases as well as in the non-parasitic diseases of the skin; but its action is very much more striking in the latter. Dr. Bushe's cases of Burmese ringworm or Malabar itch are, judging from cases of that disease which I have seen in this country in persons who have been resident in India, of a non-parasitic nature, and come properly under the head of figurate lichen. I quite agree with Dr. Bushe that they are not contagious, and that these diseases have no effect on the hairs of the affected locality. Dr. Bushe is in doubt whether these diseases be due to an animal or a vegetable parasite. Now, if they were due to either the one or the other, they would probably be what, as I think, he has quite accurately advanced them not to be; and that is to say they would be contagious. He states the disease to be commoner in males than females; but an analysis of ten thousand consecutive cases of skin-disease which have come under my observation has shown me that males are more liable to skin-disease in general than females, and that notably so. I find also that skin-disease, in general terms, is more prevalent in cold weather in our country, which would correspond to the rainy season, which, according to Dr. Bushe, specially favours in India the occurrence of Burmese ringworm.

I can quite realise Dr. Keith's observation that less than four ounces of Goa-powder ointment (which, as I have before observed, is little else than dirty chrysophanic-acid ointment) sufficed to cure a case of psoriasis with a rapidity that appeared to him quite marvellous. The swelling and dyeing of the face have been already described by myself and by others also; but I must warn him that chrysophanic acid, in its pure state, has the same effect on the linen in dyeing it that it has in its impure condition (Goa powder). I cannot tell him what will remove these stains; but they are not a very serious drawback. The skin is the only article of clothing we possess that we cannot replace; and if, in repairing it, we obtain a sound skin at the expense of a spoiled shirt, the bargain is not, after all, such a bad one. I have had many letters, testifying to the efficacy of chrysophanic-acid ointment in psoriasis, from various practitioners, and I am sorry that they have not published their experience; and I have had some members of the profession under my treatment for the same disease by the same means, with very satisfactory results. But it is fair to say that the remedy does not invariably succeed. In some cases, it fails altogether, even after a fair trial. Why this is so I cannot say, unless it be that the same may truly be said of every other remedy—namely, that success is never to be absolutely prognosticated under any kind of treatment.

BALMANNO SQUIRE,

Surgeon to the British Hospital for Diseases of the Skin.

SEEING Dr. A. D. Keith's observations on the use and effects of Goa powder ointment in the JOURNAL of April 28th, I wish to add mine on chrysophanic acid. Where I have used it in the form of ointment described by Mr. Balmanno Squire, I have found that it dyed the nails a dark claret colour; the hair also, when applied to the head; as well as the linen, from which no amount of washing or exposure to the weather would obliterate the stains. One patient complained of considerable impairment of vision when it was rubbed over any great extent of surface. There is no doubt about its having very valuable therapeutical powers in certain forms of psoriasis; and, could it be supplied at a sufficiently low price, it would be invaluable—as a fast dye.

CHARLES W. THORP, L.K.Q.C.P.I., Todmorden.

SEEING in the JOURNAL of April 28th that Dr. Keith intends trying chrysophanic-acid ointment instead of Goa powder, the stains of which are very objectionable, allow me to state that the chrysophanic acid ointment is open to the same objection. I have recently tried it in two cases; one of pruritus scroti, which it failed to relieve; the other a case of lepra, which rapidly improved, but was not thoroughly cured, as the ointment soon fell into disuse by the patient on account of the severe erythematous rash, exactly resembling scarlatinal rash, and the stains. The patches of lepra were on both legs, but the red rash only over the femoral region of the right thigh, and was followed by desquamation. I noticed the appearance of the skin and the peculiar dyeing of the nails described by Dr. Keith.

THOMAS J. OLLERHEAD, Minehead.

## REPORTS

OF

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### HOSPITAL NOTES.

GUY'S HOSPITAL (DR. WILKS).

*Disease of Suprarenal Capsules.*—A man aged 58 was admitted as the subject of moderate continued pyrexia. Having previously enjoyed good health, he had been three weeks under the care of Mr. Chapman of Shepherd's Bush, and exhibited slight signs of pulmonary disease, but none of the usual signs indicating degeneration of the suprarenal capsules. He died within two months of the commencement of illness, and *post mortem* examination showed destruction and cretification of both suprarenal capsules, a condition similar to that seen in mesenteric glands. Such a condition must have been of long duration, and presented a ready-made experiment, proving that these organs are not essential to life or to health, as was maintained by Dr. Addison; the symptoms commonly resulting, but absent in this case, being probably due to an altered condition of the nerves freely connected with these organs. The cause of death was acute tuberculosis.

*Continued Pyrexia.*—A lad aged 17 was admitted, complaining of being "bodily ill". He was found to have a continuous temperature of about 102 deg., but no signs of local or specific disease, only such symptoms as usually accompany "the feverish state". Dr. Wilks remarked that a condition of continued fever without signs of local or specific disease is laid down in the lecture theatre as indicating probable acute tuberculosis. The case under consideration had continued too long for enteric fever, and, therefore, "ought to have been" acute tuberculosis. After four weeks' duration, there were signs of slight consolidation of the apex of the right lung. There was a family history of consumption, and he had had occasional slight hæmoptysis. Such cases have led to the inference that phthisis frequently follows enteric fever. This is not correct; but signs of phthisis often develop after an attack of continued fever, which is mistaken for typhoid, such period of feverishness coinciding with, and depending upon, the early changes of lung-mischief, which cannot be detected by physical examination. Phthisis never follows as part of the natural history of enteric fever.

*Thermometry* is a most useful means of clinical investigation, and has thrown much light on the pathology of the "feverish state"; it has revolutionised medical opinion as to this condition. Formerly, this condition was supposed to indicate a measure of the amount of morbid poison in the system; now we know that the symptoms are due to the pyrexia, and directly proportional to its intensity. Feverishness is due to the amount of tissue-waste, as is proved by the increased excretion of urea and phosphates. The cold bath reduces the pyrexia and coincidentally lessens the feverish symptoms. In variola, the most virulent cases, in which there is evidently the greatest amount of morbid material in the system, are almost apyretic and devoid of feverish symptoms: clearly, then, the poisonous material does not produce these symptoms. So in enteric fever the symptoms are moderate if the temperature be not high; the feverish symptoms are due to the temperature.

*General Pathological Conditions.*—After visiting cases of gout, emphysema, and chronic renal disease with degenerative tissue-changes (arterio-capillary fibrosis), Dr. Wilks remarked: What we want in the present day is the systematic study of general pathological conditions conducted in the manner in which Bichat studied general anatomy.



Before the time of Bichat, the anatomy of each organ had been studied separately and independently; he compared and studied together the various tissues of the body, the bones, the fasciæ, and fibrous structures, the muscular tissue in various parts, etc. We want now a more complete knowledge of the coincident pathological tissue-changes. In two patients, evidently the subjects of tissue-changes of a degenerative type, in one the circulation fails, in the other the urine becomes albuminous; but neither is the heart-disease in the one nor the renal change in the other the whole of the disease. Such cases are like an old and worn out watch; it stops; we take it to the watchmaker; he is aware we know nothing about the works, and says "it is the chain that has gone"; this is mended, and presently it stops again. This time, the watch-doctor says "it is the hair-spring that has gone", when really every wheel and pivot has worn itself out. Young practitioners often complain of a want of "interesting cases", i.e., cases of acute disease, neglecting to observe the clinical aspect of chronic changes in the tissues and organs. Disease is mostly a chronic process ending in acute changes. Acute changes do not often occur in really healthy people. Sir William Gull and Dr. Sutton have demonstrated a widely spread "fibroid change" as frequently occurring. Probably there are fatty and other changes as widely spread in other cases.

A form of *retinitis* (albuminurica) is commonly met with in chronic renal disease, the patients visiting the oculist and having no suspicion of other mischief. It appears that the same form of retinitis may occur before the development of renal disease and albuminuria; this would seem to point to a general *vascular change* preceding the development of local organic degeneration.

A case of *advanced gout*, with large chalky concretions in the fingers, had been treated by immersion of the hands in solution of citrate of lithia (one ounce to the gallon), a continuous current of electricity being passed from the limb to the solution, thus attempting to dissolve the concretions. Such treatment, if successful in producing solution, might benefit the patient, but would not cure the disease. The disease is due to a general condition and morbid change as yet not fully understood, despite the useful investigation of Dr. Garrod and others.

*Emphysema* frequently accompanies other degenerative changes. The dyspnoea is due not only to lung-changes and want of movement of the ribs; as the base of the chest enlarges the diaphragm becomes stretched across it flat, instead of being arched upwards, so that it cannot by its contraction increase the capacity of the chest, but rather draws the ribs inwards and diminishes its capacity. Again, in some cases, the enlarged lungs actually bulge the diaphragm downwards, so that its contraction directly compresses the lungs. In these cases, antimony is a remedy of great value in lessening the accompanying bronchial catarrh; it is a remedy too much neglected in these days of the "alcoholic heresy".

*Acute Paraplegia*.—A young man was under treatment for secondary syphilitic symptoms, as an out-patient, when, unexpectedly, paraplegia suddenly developed and was almost complete within twenty-four hours. He now complains of numbness at the back of the right ear, indicating probably further extension of mischief in the cord. The position of the numbness at the back of the ear indicates lesion of the great auricular nerve (from the third cervical); whereas, were the numbness at the front of the ear, it must be the auricular branch of the inferior maxillary nerve involved (cranial nerve), a more serious symptom, as indicating extension of the disease high up. An extensive and deep slough has formed over the sacrum, which is being treated with charcoal poultices. The pathological condition in syphilitic disease of the cord is but little known, except where a gumma occurs; it seems probable, however, that a condition of the vessels exists similar to that found in the brain in cases of insanity dependent upon syphilis.

*Aortic Aneurism opening into Pulmonary Artery*.—The patient, having exhibited signs of aneurism, became suddenly livid two days before death. He had a history of rheumatism, but none of syphilis. At the *post mortem* examination by Dr. Goodhart, the heart was found to be hypertrophied, but not dilated, and there was recent pericarditis. An aneurism of the size of a man's fist extended from the first part of the aorta; it was thin-walled and pressed upon the root of the pulmonary artery, the semilunar valves of which had become adherent on that side to the sinuses of Valsalva. A clean cut opening caused communication between the aneurism and the pulmonary artery. Other arteries of the body were healthy. Pathological indications of syphilis were searched for, but none were found. There were no cutaneous scars; the testes were healthy. The vessels of the brain were normal.

*Cancer of the Glands of the Neck*.—A man aged 48 was admitted into Dr. Moxon's wards with the face much swollen and congested, and the breathing greatly impeded by laryngeal obstruction. He had primary syphilis eight years ago, and, eight months ago, an ulcer formed on the tongue and healed; this reopened, however, ten weeks ago, and,

during the last month, the glands about the neck enlarged rapidly. On account of urgent dyspnoea, Mr. Jacobson performed tracheotomy, which gave temporary relief; in performing the operation, a mass of enlarged cancerous glands had to be cut through, giving rise to troublesome hæmorrhage, which was arrested by perchloride of iron. The *autopsy* showed an old ulcer of the tongue with hardened tissue around, extensive glandular infiltration, mediastinal suppuration with double pleurisy. All the preoesophageal tissues were involved, but there had been no dysphagia during life, and it seemed probable that mediastinal pressure might have caused irritation of the laryngeal nerves. The microscopical appearance of the glands was that of epithelial cancer.

## REPORTS OF SOCIETIES.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 24TH, 1877.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

NOTE ON THE DELHI BOIL (FURUNCULUS DELHINUS).

BY H. VANDYKE CARTER, M.D.

[Communicated by JOHN HARLEY, M.D.]

THE author regarded this affection as different from any form of syphilis, and from other admitted local manifestations of impaired constitution. A brief summary of characters pointing to its specific nature prefaced the particular observations, made last spring and summer (1876) upon specimens of the boil kindly furnished by Dr. Fairweather, Civil Surgeon at Delhi. Changes in the epidermis and appendages of the skin involved were alluded to, particular mention being made of the *globes épidermiques*, which had been already noticed by other observers, and which equally abounded in the "bouton de Crête"; and the hypertrophied state of papillæ, with dense cell-infiltration of the whole cutis and sub-jacent tissue, was mentioned; but the main point recorded was the detection of a mycelium-like growth within certain dilated channels or cavities contained in the midst of these new formations. Alluding to recent disclosures affecting the validity of inference from such mycelioid forms (which might, it seemed, be artificially produced), the author yet held to the significance of the appearances, which he described and delineated in a series of figures, some of which, at least, he could not but regard as indicative of the presence of a true parasitic growth. The appearances were too regular and uniform and too characteristic to be mistaken for the effects of reagents; and, without further speculation, it was concluded that there did exist an affection of man which might be termed *mycosis cutis chronica*. Such affection would include the "bouton de Biskra" and the "Delhi boil"; and its signs might doubtless be confidently looked for in other local endemic skin-complaints, which had long been regarded by men locally experienced as altogether *sui generis*.

Dr. THIN said that, when Dr. Carter's paper on the Biskra bouton was read before the Society last year, he had remarked that one of the drawings exhibited was a good representation of a tertiary syphilitic sore. He did not, however, mean to say that all the cases were syphilitic. Dr. Geber of Vienna had described in detail a number of cases of the so-called Delhi boil, and left the reader to form his own diagnosis; but this course had not been followed by others, who sought rather to give definitions of the disease. But even the best of these definitions did not enable one to localise the disease. A definition of a disease should not only indicate its class, but should contain something that would enable one to say that the disease described was that special one and no other. With regard to the presence of mycelium, Drs. Lewis and Cunningham had not found any mycelium or fungoid growths in Delhi boil; and they said that, after excluding syphilis, etc., the Delhi boil was only a form of lupus. Dr. Thin thought that such terms as "Delhi boil" were used merely to meet the difficulty in the diagnosis of the cutaneous ulcers which were common in the East, just as rickets was described in Vienna as the "English disease". He had resided for some time in Shanghai, and had been struck by the circumstance that a sore resembling Delhi boil had been described as being prevalent there; whereas he had not seen a case of cutaneous affection in that locality which was not capable of being classed among ordinary skin-diseases.—Sir JOSEPH FAYRER said that the disease was not peculiar to Delhi, but was met with in other parts of India. It was very prevalent in Delhi after 1857 among the troops stationed there who drank the water of certain wells in the city; and it disappeared from them when they were moved out and drank water from the canal and the Jumna. The wells in Delhi contained a large proportion of carbonate of lime, which was much less abundant in the waters of the canal and river. Drs. Cunningham and Lewis considered the disease to



be lupus; but it differed from this in many points. He did not think it due to a vegetable organism, but to perverted nutrition. Patients recovered when removed from the influences which produced it. He did not know whether it was contagious. It was, no doubt, very amenable to early treatment. In reply to a question from the President, he said that he was not aware that observations had been made on the water in other parts of India.—Mr. GASKOIN had had under his care a gentleman who was a native of a district where Aleppo boil prevailed; and he believed that the water was not the cause. M. Bertherand had observed many cases of bouton de Biskra or Sahara in Algeria, and regarded it as depending on climatic influences. M. Bertherand also referred to the difficulty of healing all ulcers in Biskra.—Mr. HULKE asked whether the Aleppo bouton or Delhi boil was predominant at any one period of life; lupus was not so. The mycelium appeared to have been observed in only one specimen, and to have been taken from a corpse; it might have been an accidental production.—Sir JOSEPH FAYRER said that, in the cases described by Drs. Lewis and Cuninghame, the patients were from twenty-five to thirty years of age; but it must be remembered that their observations were mostly made on soldiers. Since the improvement of the sanitary condition of Delhi under the direction of Lord Mark Kerr, the disease had disappeared from among the troops; but it prevailed still among the inhabitants of the city who used the water from the wells.—Dr. THIN said that Drs. Lewis and Cuninghame had also mentioned the occurrence of the disease at ages varying from two to fifty-five.

A CASE OF ALL BUT UNIVERSAL PARALYSIS IN A CHILD, FOLLOWING EXPOSURE TO HEAT.

BY JAMES ANDREW, M.D., AND DYCE DUCKWORTH, M.D.

The case described was that of a fairly nourished slightly rickety girl aged  $2\frac{1}{2}$  years. She was brought to St. Bartholomew's Hospital at the end of July 1876. It was found that there was complete loss of motor power in all the limbs, and that the sphincters were involved. It was not clear whether there was total loss of sensation, but there seemed to be anæsthesia of all parts affected with motor paralysis. The muscles of the limbs were wasted and flabby, and did not respond to Faradic stimulation. There were no cerebral symptoms; nor were any important physical signs found in the chest or abdomen, save a slight enlargement of the liver, which was probably due to rickets. The history was that the child had always been healthy till its present illness began. At the end of June, it had been exposed to great heat while travelling by railway in the United States of America. On the 1st of July, while waiting on a quay at New York before embarking for this country, and being directly exposed to strong sunshine, the child suddenly lost power in its legs and fell, still retaining its consciousness. On the voyage, it was at times delirious and very irritable. (The daily notes of the case, together with a chart of the pulse, respiration, and temperature, were appended to the communication.) On admission to the hospital, the child was treated with good nourishment, cod-liver oil, and steel. After a few days, belladonna was given in full doses, and a Faradic current was applied to the paralysed muscles daily. A gradual improvement took place in all the symptoms, and power first began to return in the arms. An intercurrent attack of bronchopneumonia ensued, which soon cleared off. The child also passed a lumbricus. A rash resembling scarlatina was also observed; but the authors did not consider that it was indicative of this disease, as there was no sore-throat nor desquamation. In three weeks after admission, power was regained in the sphincters, and the child began to feed herself. Faradisation now elicited response from the affected muscles. Strychnine and steel were given, and the belladonna withheld. Voltaism was not employed at any period of the case. At the expiration of two months, there were observed albuminuria and slight anasarca; the former lasting rather less than a month, and disappearing completely. Ophthalmoscopic examination revealed nothing abnormal. Progressive improvement both in recovery of motor and sensory power was noted; and, in three months from the date of admission and four from the first seizure, the child was quite well. The case was supposed in the first instance to be one of infantile paralysis, inasmuch as the age, previous health, absence of cerebral symptoms, and the electrical condition of the muscles seemed to warrant this view, but the facts of there being sensory paralysis and implication of the sphincters could not be reconciled with this explanation of the features of the case. The fact of subsequent perfect recovery seemed further to militate against this view. The various forms of infantile paralysis were described; and it was shown that this case fell into none of the classes thus categorically defined. After full consideration of all the facts brought out in the history and subsequent progress of the affection, the authors came to the conclusion that the symptoms were due to a form of heat or sunstroke, affecting more particularly the

spinal system, and falling with especial severity upon a somewhat frail and ill-nurtured child. They further suggested the possibility of a concurrent muscular affection along with the more manifest spinal lesion due also to similar thermic influences. The treatment of such a case at the outset, it was believed, should consist in cold affusion and such measures as are of proved avail in the more common forms of heat-stroke.

The PRESIDENT said that the case was of much interest. The symptoms appeared to be due to sunstroke, of which there had been two attacks. Sunstroke in children did not always depend on direct insolation, but might be produced by exposure to heated air, even when there was shelter from the direct rays of the sun. He had sometimes, under these circumstances, seen very general paralysis in children as a temporary condition. The continued high temperature in the case described was opposed to what was observed in infantile paralysis. He thought that the rash might have been scarlatina, notwithstanding the absence of sore-throat or desquamation. This supposition was confirmed by the presence of albumen in the urine. He could not say what influence the belladonna had; but recovery appeared to commence as soon as the child was placed under favourable conditions. He did not know any means of deciding at the beginning of a case of paralysis in childhood, whether it was likely to be permanent, or to end in more or less complete recovery. If, however, much hyperæsthesia were present, the chance of recovery was generally less, although there were exceptions. The cases which absolutely recovered were those in which the improvement commenced very early.—Dr. GREENFIELD thought that the case resembled one of paralysis following febrile diseases.

*Calculating Scale.*—Dr. LAIDLAW PURVES showed an international calculating scale for ophthalmological purposes, and gave a description of it.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 1ST, 1877.

CHARLES MURCHISON, M.D., F.R.S., President, in the Chair.

*Large Vesical Calculi.*—Mr. BARKER showed some unusually large calculi from a man aged 60, removed by lithotomy. He had before had lithotripsy performed, and was discharged as well in October 1872. Symptoms of stone in the bladder returned, and he was cur. In the centre of one calculus was an angular fragment of a stone crushed by the lithotrite. The man made an excellent recovery.

*Aortic Aneurism.*—Dr. FELIX SEMON showed an aneurism of the thoracic aorta from a man aged 40. He had dyspnoea and pain over the costal cartilages, and he felt as if his food stuck at a point betwixt the fourth and sixth cartilages. His general health was good. He then had palpitation and fainting. His extremities were cool. There was stridor on movement. He generally sat with his elbows on the table. The voice was altered. His thorax was well formed. There was no tumour or pulsation. The respiratory sounds were good. On auscultation, both heart-sounds were heard. The radial pulse was equal. Laryngoscopic investigation gave merely negative results; but the diagnosis of aortic aneurism was made from the rational symptoms. It was impossible to say whether the dilatation was local or general. There was no bulging of the trachea, and no pressure on the recurrent laryngeal nerve. The diagnosis was made of aneurism of the arch of the aorta. Death was caused by rupture into the œsophagus. The ascending arch was found dilated. There was also an old perforation plugged by a thrombus from the wall of the aneurism. In answer to a question from the President, it was stated there was no hæmorrhage until the final rupture.

*Syphilitic Changes.*—Dr. BARLOW gave an account of the changes wrought by syphilis in a child fifteen months old. It was a boy born at full time. It had nasal catarrh, thrush, and diarrhoea. There was slight nystagmus. The pupils were equal. There was facial paralysis, not equal on both sides. The left cheek was flat on smiling. There were slight laryngeal spasms, with cyanotic attacks and vomiting. It was thought there was a tubercular growth at the base of the brain, not a syphilitic one; otherwise there might have been no specimen to exhibit. There was no puckering of the liver; and there was cellular but not fibrous growth. The spleen was not enlarged, but cicatricial scars were to be seen. As to the brain, the membrane was nearly healthy; the cortex was normal. The brain was somewhat atrophied. The nerves at the base were affected, especially the third pair. The changes were symmetrical. On microscopic examination, there was found atrophy of the nerve-cylinders, with islands of new cells scattered through the patches of atrophy. The changes were not unlike what Dr. Vandyke Carter had described in the anæsthetic form of leprosy.



The vessels of the circle of Willis were diseased. There were no gummata in them, but their lumen was diminished. The cellular growth was mostly in the outer coat, but slightly also in the intima. The growth consisted of spindle-shaped nuclear cells. The smaller arteries were less affected. These gummata in nerves themselves had not hitherto been described.—Mr. SPENCER WATSON had observed nystagmus in a child, both of whose parents were syphilitic. It recovered under the use of mercury.

*Internal Syphilis.*—Dr. MAHOMED read notes of two specimens of syphilitic changes. The first was from a female aged 48, who died from necrosis of the lower jaw. There were gummata in various viscera, including the lungs. The pleurae were not adherent. The lungs were mottled on section. The right weighed one pound and three ounces, and in it was a nodule of the size of a nut. The pleura was an eighth of an inch in thickness. The left lung weighed one pound one ounce, and was puckered. There was no cretaceous deposit. The cicatrices consisted of fibrous connective tissue. There were small nodular gummata in the lungs. The coats of the vessels were thickened, especially the intima; and this thickening was general. The kidneys were well marked instances of tubular nephritis. The heart weighed twelve ounces. The vessels in the lungs were not uniformly thickened. In the second case, which was one of syphilitic ulcer of the rectum, there was stenosis of both mitral and tricuspid orifices. The lungs were rather small and fibrous, with small cell-growths in them. There was a history of syphilis.

*Sections of Spinal Cord and Nerves.*—Mr. NUNN showed, for Professor CHARCOT, some drawings and microscopic sections; first, of the anterior columns of the cord in progressive muscular atrophy; second, of the lateral columns where there was paralysis; also, of tubules of the phrenic nerve in atrophy of the diaphragm. They illustrated changes in the nervous system, along with muscular changes.

*Epiphyseal Disease.*—Mr. J. W. HAWARD showed a specimen of disease of the epiphyses in a syphilitic subject. It was chiefly found in the bones of the upper extremities. The disease was in various stages. It occurred in a female child of eleven weeks old. It was healthy at birth. At the tenth week, the right arm hung down; the child became ill and feeble; it had snuffles, and a copper-coloured fundament. Over one elbow, there was a fluid swelling. There was syphilis in both parents. On *post mortem* examination, there was found general bronchitis. The viscera were otherwise healthy. At the lower end of each humerus, there was laudable pus around, but not in, the joint. The epiphyses were disjoined, but there was no periostitis. Epiphyseal disease was often the earliest indication of inherited syphilis. If taken early, it yielded to mercury. In the latter stages, the epiphyses became loose. Dr. Taylor of New York had made a microscopic examination of the changes just described, and found there was a cell-growth, with deposit of lime-salts. The disease was amenable to treatment in the early stages. In appearance, it broadly resembled rickets, but was really syphilitic.

*Physiological and Pathological Processes of the Breast.*—Dr. CREIGHTON of Cambridge gave some account of his observations on the breast, of which the full account is to be found in the report of the Medical Officer of the Privy Council. Dr. Creighton exhibited a large series of beautiful microscopic sections, and illustrated what he had to say by drawings on the black board, so that it is impossible to do justice to what he said by mere writing. He had made observations on the lower animals, as well as on human beings, in order to decipher the changes which go on in the breasts, both physiologically and pathologically. Some of the specimens illustrated the normal changes, the others diseased conditions. He said the changes in the breasts were easily studied. They were of two kinds: 1. The stage of evolution, or the presuckling stage; and 2. That of involution, or the suckling stage. From the decrease in size during the latter stage, it might be thought there was atrophy. The secreting structure was, indeed, reduced in size. During the stage of evolution, the breast unfolded itself like a flower-bud. During the process of involution, there was not only an upfolding, but there was subsidence of function. During this subsidence, products like milk were formed. These cell-growths were to be found ten days after the flow of milk ceased. They were identical with the changes which were brought about by pregnancy. The acini were filled with yellow pigment. These cell-growths were of the size of full epithelial cells, but were not identical with them in form. They were the most crude form of the secretion. The question which next arose was: "How were these waste products in the involution period disposed of?" The pathological interest of this lay in the fact that like cells were seen in the fringe of tumours of the breast. The breast passed half its time in the resting stage. These morbid changes were not found in the stage of evolution, but in that of involution. These waste products, or modified secretion, were found as pigmented cells through-

out the stroma. They represented one class of waste products. There were other waste cells, as crude products of epithelium, and these were also found in cancer. Tumours of the breast were referable to some disturbance in these cells or waste products. They were thus brought near to normal changes. Organs which were liable to cancer were also liable to catarrh.—The PRESIDENT, after thanking Dr. Creighton for his lucid exposition, said it would appear that, when cancer was developed in the breast, it was these cellular elements of waste or secretion which were involved. So, too, in the liver, it was not the fibrous tissue which was affected.—Mr. BUTLIN said the views expressed were too wide to be fully reviewed at that hour of the evening. He had seen these pigmented cells in a case of sarcoma; they were also found in the lymphatic glands of the femoral and inguinal regions. They were found in large numbers along with spindle-shaped cells. The change was produced gradually, and these cells were mixed with other cells in a state of degeneration.—Mr. KNOWSLEY THORNTON said these cells were common in the corpora lutea. He had looked for them in vain in the growing or advancing follicles, but always found them in the degenerative stages. They were also to be found in other parts of the ovary, as in the lymph spaces. Were these formed like epithelial cells, or merely stages of degeneration of epithelial cells?—Dr. CREIGHTON, in reply, said that his experience coincided with that of Mr. Thornton, but, in his view, these yellow cells of the corpora lutea were less of a mystery than they had hitherto been. If these yellow cells in the breast were transformed epithelial cells, they were not degenerate, but imperfectly developed cells. According to Goodsir, in secretion there were three elements: 1. Solid matters; 2. Entirely fluid matters; and 3. Middle matters.

## ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

MARCH 28TH, 1877.

S. CARTWRIGHT, F.R.C.S., President, in the Chair.

*Torsion of the Teeth.*—Mr. COLEMAN read a communication on some untoward results of immediate torsion of the teeth. Alluding to the supposed value of this operation in certain cases of dental irregularity, he showed how unsatisfactory the results might be when performed on imperfectly developed teeth. In certain cases, development was entirely arrested, or absorption took place, and the tooth never descended to a level with its fellows, or even receded beyond the dental line as occurred in a case, the model of which he showed to the members present; these results he ascribed to the severance of the pulp-vessels by the operation.—Messrs. CATTLIN, EDGELOW, STEVENSON, GREGSON, and S. CARTWRIGHT joined in the discussion; there being a division of opinion as to the merits of the operation, though it was generally maintained that it was not justifiable before thirteen or fourteen years of age.

*Tooth-Disease following Eruptive Fevers.*—Mr. S. J. A. SALTER read a paper on some reflex symptoms and results of irritation of the dental branches of the fifth nerve, and exhibited a series of specimens of dental and alveolar necrosis and exfoliation following the eruptive fevers—scarlet fever, measles, and small-pox. He said that a few isolated specimens of this condition, preserved in the Guy's Hospital Museum, had been attributed to mercury, but that explanation was refused by modern evidence. Mr. Nunn considered that they were among the specific sequelae of the eruptive fevers; that the pulps and caps of the forming permanent teeth (members of the tegumentary system) were poisoned by the disease, died, and were shed by the necrosis and exfoliation of the capsule of bone which encased them, and to which the necrosis was almost always strictly limited. He remarked that these cases usually occurred in children about five years of age, when dental development was most active; that the morbid condition was usually symmetrical; that the necrosis was limited to the alveoli and capsules surrounding the teeth; that he had never seen this condition excepting after eruptive fevers; and that he had had under his own care about eighteen cases after scarlet fever, eight after measles, and four after small-pox. In answer to some doubts as to the correctness of his pathological explanation of cause and effect, he observed: first, that the teeth must be regarded, as members of the dermal system, as liable to diseases affecting that system; secondly, that, when these cases happened, the jaws were the seat of intense nutritional activity, and that the poison of exanthematous fever would find a large mass of dermal material within the jaws; thirdly, that, whereas in the skin and kidney the poison could be cast off by desquamation, no such relief could be afforded to the poisoned tooth-pulp encased in bone, and that the only method of eliminating the virus was that which occurred:



fourthly, that no other part of the skeleton suffered, and that only so much of the jaw as was associated with the teeth died and was exfoliated; and fifthly, it was known as a fact established beyond dispute, that a poisoned tooth-pulp might cause necrosis of the jaw, as in phosphorus-disease. — Dr. WILTSHIRE considered that the necrosis was owing to impaired nervous nutrition, and not to the localisation of the poison engendered in exanthematous fevers. — Mr. S. H. CARTWRIGHT suggested the analogy which seemed to exist between the symmetry seen in the pegged teeth of hereditary syphilis and that seen in exanthematous necrosis; he ascribed both in part to trophic nervous influence, the local poison also having its effect. — Mr. NAPIER said that, if the condition of the blood were the cause of the local mischief, other parts of the system ought also to be affected.

*Irritation of the Dental Nerve.* — Mr. T. W. NUNN read a paper on some reflex symptoms and results of irritation of the dental branches of the fifth nerve. He gave an account of certain cases confirmatory of the statements made by the President, Mr. Cartwright, in his communication on Teething and its Complications, made to the Society on November 22nd. The first case was a remarkable instance of delayed dentition in a woman between thirty and forty years of age, giving rise by reflex irritation to ulcer of the cornea. The ulcer, which long obstinately resisted treatment, healed as soon as an upper bicuspid was cut. The following cases were: one of supraorbital neuralgia in a young lady aged about 11, immediately removed by lancing over the second or posterior molar; one of otalgia in a patient of the same age, cured by the same means after anodynes, etc., had failed to do good; two cases of keratitis with ulcer connected with the eruption of the upper central incisors; one of chorea in a young gentleman aged 12, in which the disorder disappeared with the completion of the eruption of the posterior molars; and another case where, coincidentally with the eruption of the posterior molars, an abscess of the thigh, which had been supposed to have become obliterated, resumed activity. The opinion was also expressed by the author that, during the dentition of the dentes sapientie, marked disturbance of the general health, especially in females, was common; most frequently in some form of gastric trouble, such as intense pain and vomiting after food. Many instances had fallen under his notice in which these symptoms had been relieved by lancing over the dentes sapientie, as yet hidden under the gum. There was a different class of cases which, he believed, had origin in the reflex irritation of teething; namely, deformities of the lower extremity, mainly of the foot. The deformities of the toes, known as hammer-toes and bunions, were really due to faulty nutrition of certain muscles — amyotrophic — consequent on impaired innervation; and such impairment was usually synchronous with the dentition of the second or posterior molars. Writers on ophthalmic surgery made no mention of dental irritation as being a cause of ulcer of the cornea; neither was the simple operation of lancing the gums suggested in that affection in one of the most esteemed and recent works on the Practice of Surgery. — The PRESIDENT gave several examples which had come under his notice of reflex action connected with the teeth, as also with other portions of the body; notably, a remarkable case of double squint dependent upon curvature of the spine. — Mr. SALTER mentioned a case in which the iris had changed colour as a result of dental lesion. — Dr. WILTSHIRE ascribed ulceration of the cornea to the action of reflex nervous irritation on nutrition. — Mr. STEVENSON had seen good result from lancing the gums in cases of reflex disturbance.

*Neuralgia.* — Mr. HAMILTON CARTWRIGHT showed a patient aged 30, who had suffered from neuralgia for many years, her case presenting some peculiar points of interest. The trigeminal nerve was chiefly involved, acute pain being experienced in the ear, eye, and supraparietal region, whilst unilateral hyperæsthesia existed over the entire left side of the body from the head to the knee. Trousseau's test for idiopathic neuralgia by pressure applied to the spine resulted in a paroxysm of pain when the fifth cervical vertebra was pressed — the patient starting as with an electric shock. Another hyperæsthetic spot was found in the left canine fossa; whilst pressure over the ulnar nerve also produced general pain. As all the teeth in her upper jaw were diseased, they were removed, with no relief to the symptoms. The pain over the canine fossa was evidently unconnected with them; and remained so persistent that it was found impossible to wear an artificial denture which had been provided for her. Her general health being attended to, a course of phosphorus was tried, with no effect; and subsequently arsenic was given, of which she was strangely tolerant, and, under its influence and that of bromide of potassium, she much improved; but the painful spot on the left superior maxillary bone still remained, and pressure on it of the slightest kind invariably resulted in a paroxysm of general pain. Though it was certain that no root was there, the gum was freely incised, and a portion of bone gouged away in some expectation of finding an impacted tooth. None was present; but from that

moment, six months ago, the neuralgia had nearly entirely passed away. Mr. Cartwright could not explain the success of this treatment, but thought that these sudden cures of neuralgia somewhat discountenanced the late Dr. Anstie's views that in that disease the posterior roots of the spinal nerves were invariably in a state of atrophy.

## CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 27TH, 1877.

THOMAS BRYANT, F.R.C.S., Vice-President, in the Chair.

*Badly United Fracture of the Leg treated by Excision of a Wedge of Bone.* — Mr. CHRISTOPHER HEATH read notes of this case. The patient, eighteen weeks before admission, had sustained a fracture of both bones just above the ankle. It was treated with splints and a stout bandage, but great deformity resulted, the foot being twisted outwards and the tibia thrust in, the fibula being correspondingly distorted. The condition was shown by photographs and a cast. Under antiseptic dressings, Mr. Heath removed a wedge of bone from the tibia with Linhart's chisel, and divided the fibula with bone-forceps. The limb was then brought straight, and treated at first with a back-splint and afterwards with side-splints, and the patient recovered with a very useful limb. The patient was shown to the Society.

*The Case of Miss Harriet Martineau.* — Mr. W. MOORE KING contributed this report, having been in attendance upon Miss Martineau since 1871. At that time, she was in fair health, and was working hard at correspondence. She was somewhat wasted, but her abdomen was enlarged. The heart's sounds were weak, but there was no murmur. Mr. King was not permitted to make any special examination of the abdomen, but was convinced it contained a large tumour. Miss Martineau attributed the swelling to an enlargement of the heart, displacing all the other organs. The practice of opium-taking had become habitual to the patient, in suppositories, injections, and by the mouth, to the extent of from twelve to fifteen grains daily. There was frequent bleeding from hæmorrhoids, on each occasion of which the patient's health was much reduced. (Edema of the legs ensued, and the patient gradually sank. At the *post mortem* examination, made under trying circumstances on June 29th, 1876, Mr. King found a pear-shaped tumour, which measured about eleven inches in its broadest diameter, occupying the lower two thirds of the abdomen; it was hard, and its surface smooth; it was attached by a pedicle formed by the left broad ligament. The tumour contained about half-a-pint of brown fluid; it was otherwise composed of a mass of light greyish brown material studded with lardaceous masses. The liver and abdominal contents generally were displaced upwards towards the thorax by the tumour; the liver and the kidneys appeared normal. The uterus was small, and unaffected. The thorax was not opened.

Mr. SPENCER WELLS gave a description of the tumour removed, and made some comments on the case, which will be found at page 543 of this week's BRITISH MEDICAL JOURNAL.

*Ascites in a Child cured by Paracentesis and Copaiba.* — Dr. DAY read notes of this case. The patient, aged 5½, was admitted into the Samaritan Hospital, under his care, on October 4th, 1875. She was one of ten children, all born healthy, and had never had whooping-cough, measles, scarlet fever, or peritonitis of any degree or kind. Three months previously, she first complained of pain in the stomach, when the body was noticed to be large, and it had increased in size ever since. Two inches above the umbilicus, the measurement was twenty-four inches, and the area of liver-dulness was apparently increased, but the outline could not be felt from the amount of fluid. The lower lobes of the lungs were dull on percussion, from pressure. Pulse, 120; respirations, 32; the urine was acid and threw down a copious deposit of white lithates; its specific gravity was 1032; it contained no trace of albumen; the bowels were free. A diet of milk, beef-tea, and eggs was ordered, with ten grains of compound jalap powder every morning and the syrup of iodide of iron three times a day. On October 20th, she was thinner in the limbs and more pinched in the face; the umbilical measurement was twenty-eight inches, and the superficial veins of the abdomen were slightly distended; the urine still contained an abundance of lithates. Tincture of digitalis and citrate of potash were ordered three times a day, and the iron omitted. On November 5th, the abdomen measured twenty-eight inches and a half. An aperient powder of sulphate of potash and powdered rhubarb was prescribed every other morning, the digitalis was discontinued, and the iron resumed. On the 17th, as the kidneys were not acting so well and the superficial veins were even more enlarged and tortuous, his colleague Mr. Knowsley Thornton tapped the abdomen, and drew off eighty-four ounces of a straw-coloured syrupy fluid, like ordinary ascitic fluid. No enlargement of the liver or spleen



could be felt. On the 24th (seven days after tapping), the urine was clearer, and the average quantity was from nineteen to twenty-three ounces in the day and night. On December 1st, the urine being clear and the bowels free, the tincture of perchloride of iron, in ten-minim doses, was ordered three times a day. On the 26th, she was again increasing in size, and there was a considerable quantity of free fluid in the abdomen. She measured twenty-seven inches round the abdomen. Copiba was now commenced. On January 5th, 1876 (ten days after commencing the copiba), the urine was clear and free. The umbilical measurement was twenty-five inches. On the 26th, the measurement was twenty-three inches and a half. On March 9th, the subcutaneous tissue was more developed and the umbilical measurement twenty-three inches. On the 26th, the measurement was twenty-two inches. On May 20th, the abdominal measurement was twenty-two inches a half, and the limbs were firm and strong. She had taken the remedy uninterruptedly for five months, and no other drug, and, on June 4th, she was in every respect well. The author considered the ascites was of a chronic character, due to cachexia and anæmia, or to some morbid condition of the capillary vessels, in the absence of glandular disease within the abdomen. He inquired the cause of the large belly in delicate children, and thought that it was often attributable to the accumulation of flatus, as the product of ill-digested food, and sometimes attended with more or less secretion of peritoneal fluid. He thought that ascites was sometimes a primary disease, independent of any visceral disorder. If paracentesis was advisable, it ought to be performed before the abdomen was enormously distended. To remove the accumulated fluid in such cases, and so to restore, for a time at least, the normal balance between effusion and absorption, was as rational, it appeared to him, as to bleed in cases of great distension of the right heart, when, as we have reason to know, a balance was once more so restored.—Dr. BURNEY YEO said that at present he had under his care a case of ascites somewhat resembling Dr. Day's, there being no evidence of any visceral disease. The patient was a male twenty-three years of age, and the ascites had gradually supervened during a period of eight weeks, there being no evidence of hepatic disorder or struma. Dr. Yeo thought the case probably one of subacute or chronic peritonitis, especially as the patient dated the commencement of the dropsy from an attempt to return a hernia, which was effected with difficulty.—Dr. GREEN said that he had last year under his care a boy eight years of age suffering from ascites, evidently due to induration of the liver. Paracentesis was followed by rapid reaccumulation. Dr. Barlow, who subsequently took charge of the case, prescribed the resin of copiba in doses of twenty grains *per diem*, and, in the course of three or four weeks, the ascites had almost completely disappeared, and at the same time the urine had increased in quantity. There had been no recurrence of the ascites. Dr. Green thought that all cases of considerable ascites were dependent on portal obstruction, and considered that the recovery in his case was probably due to re-establishment of the circulation.—Mr. HOWSE thought that the evidence in Dr. Day's case of the curative power of the copiba was rather an instance of *post hoc*; for undoubtedly, in some cases (as one of extreme ascites in which a single paracentesis was followed by no reaccumulation), simple tapping alone was sufficient. The improvement in the case was rather coincident with the administration of the copiba; for, although the quantity of fluid diminished, yet there did not seem to be any direct influence on the urine. Probably it acted simply as a tonic. The case might have been one of chronic peritonitis, and the very slight rise of temperature favoured this; whilst the fluid accumulation would account for the absence of pain. If due to chronic peritonitis, the exudation of fluid must be regarded as protective.—Dr. MAHOMED had lately seen three cases in the *post mortem* room in which the mesenteric glands were enlarged and chronically inflamed, without any corresponding lesion in the intestine. The subjects were all over twenty years of age. Some of the glands were as large as hen's eggs, and it was very likely that dropsy had been present in earlier life. Dr. Day's patient was strumous, and some enlarged abdominal glands might have compressed the portal vein. So also Dr. Yeo's case might have been due to an enlarged gland exerting pressure on a vein. He was under the impression (gained, he thought, from Dr. Wilks) that inflamed serous membranes never produced serous effusions, but always lymph or pus.—Dr. BARLOW could not accept the view that the dropsy was the result of cachexia; and thought it better to acknowledge one's ignorance where one was unable to assign a cause for conditions which could only be cleared up on *post mortem* examination. He himself had seen a case similar to that recorded by Dr. Murchison, in which, on the subsidence of the effusion, the enlarged glands could be felt. He recalled also a case of ascites from hepatic disease in a child, to whom he gave copiba in doses of ten grains *per diem*, with very good result; as the fluid disappeared, the spleen was felt to be greatly enlarged. Better results

were obtained by giving the copiba before having recourse to paracentesis. He had also seen many cases in which the view of chronic peritonitis seemed to be the only tenable one. In such cases, he had found the peritoneum without bands, but with small tubercles.—Dr. DAY said that, in another case, he should certainly administer the copiba first. He did not think the good effects of the copiba were due to increased action of the kidneys, as the quantity of urine passed was never increased more than to the extent of about five ounces daily. The child's general nutrition improved under the treatment. Perhaps the illness might have been caused by tubercular peritonitis, though he did not think there was anything in the case to prove that it certainly was so.

*A Case of Idiopathic Tetanus, successfully treated by large doses of Bromide of Potassium.*—Dr. SOUTHEY read notes of this case of idiopathic, or, as he preferred to call it rheumatoid, tetanus, which occurred in a boy ten years of age. The first symptoms of trismus were observed two days after a severe fright and drenching, due to the upset of a water-butt. They steadily exacerbated up to the date of his admission into St. Bartholomew's Hospital, upon the eighth day of his illness, when the paroxysms of general opisthotonos seized him at intervals of nearly every three minutes. Usually, when the spasms began, he uttered a short gasping cry. Each attack lasted from fifteen to thirty seconds, and although, between the seizures, the muscles of the trunk became less rigid, those of the neck and jaw were maintained in constant tonic cramp. The patient was treated at first with chloral, ten grains, and bromide of potassium, twenty grains, every two hours; and afterwards with the bromide alone in sixty grain-doses every hour and a half. When about two ounces of the bromide were taken in the twenty-four hours, the attacks became less frequent; but at first each separate seizure was rather more severe; and upon the evening of the eleventh day, he was able to open his mouth better. On the thirteenth day, the bromide was decreased to twenty grains every three hours, and on the fourteenth day was discontinued altogether. When the bromide had been omitted for twenty-four hours, the attacks returned at intervals of an hour, and the permanent rigidity of the muscles of the neck was re-established. His condition now steadily became worse, so that, upon the eighteenth day of illness, it became necessary to revert to the previous large doses (a drachm and a half) every hour and a half. After three such doses, the expression became more natural, and he was able to open his mouth again; but it was not till the twenty-fifth day of the disease that it was possible to discontinue the remedy. The patient remained in a state of remarkable prostration and drowsiness, sleeping the twenty-four hours round, and only waking up to take nourishment, for eight days, and passed all his evacuations under him; he subsequently steadily and rapidly convalesced. The bromide produced no acne or other objectionable symptom, and certainly appeared to exert marked inhibitory influence upon the tetanus. The quantity of urea passed by this patient, during the continuance of the tetanus, was observed by Mr. Pye, and was appended to the case. The largest quantity *per diem* amounted to 16 grammes; the smallest was 10.4; the mean average 12.72 grammes. During convalescence, the largest amount observed was 18 grammes; the smallest, 10.66; the mean average of four days, 13.54.—In answer to Dr. Yeo, Dr. SOUTHEY stated that the boy had been seen three months afterwards; he was then in good health, and fairly well nourished.

*A Case of Parenchymatous Nephritis, in which the Dropsy was combated by Drainage-Tubes.*—Dr. SOUTHEY brought this case, in which there was extreme general anasarca, before the Society; but, in consequence of the lateness of the hour, it was taken as read. The capillary drainage-tubes, however, and small silver cannulae, employed by him in the treatment of the general dropsy, were exhibited by him. The cannulae were scarcely larger than the ordinary subcutaneous injecting-needles, and were introduced by a fine trocar. They terminated with a little bulbous extremity, over which the capillary India-rubber tube was drawn after its introduction into the dropsical limbs. A tiny thread and small piece of adhesive plaster sufficed to maintain the cannula in the skin, and the connected drainage-tube was conducted below the patient and into a pan beneath his bed. The large amount of serous fluid which might thus be withdrawn in dropsical subjects from a single prick in each leg was quite surprising. The fluid continued to drip away for as many hours as the tube was retained *in situ*, and this without any discomfort to the patient. No escape of fluid took place beside the cannula. The whole was conducted outside the bed, and several pints usually thus drained away from highly dropsical subjects each twenty-four hours. The advantages were manifold of this exceedingly simple and cleanly method of relieving anasarca when this was extreme. 1. Instead of several needle-pricks, all of which were painful and likely to form troublesome sores and centres for erysipelas to depart from, one, or at most two—only one for each



limb—were needed. 2. The skin round about the puncture was not macerated by the oozing serum, nor irritated by it. 3. The patient was kept dry and warm and clean in bed. 4. The relief obtained was more speedy as well as more thorough. 5. Should the escape of fluid prove too rapid and become attended by circulatory disturbance in the dropsical limbs, or by uræmic symptoms, the quantity drawn off could be easily regulated, controlled, or temporarily arrested, by a tiny clamp placed upon the tube. 6. The serous fluid, which in cases of renal anasarca contained very large amounts of urea, could be tested for this, and the quantity thus escaping be exactly ascertained. Thus, in the particular case brought forward by Dr. Southey, the average amount of urea which was thus excreted amounted to 4.7 grammes, or 72.56 grains, for twenty-four hours. In point of fact, Dr. Southey had drawn off as much as fourteen pints of serous dropsical fluid in twenty hours from a patient by two such tubes; and, in answer to questions put to him, he was able to state that he had seen no inconvenience arise from the maintenance of the cannula in the skin in the same situation for forty-eight hours; the prick-hole closed at once and without ulcerating when it was withdrawn; and it was his belief that this mode of treating extreme and unyielding anasarca, from whatever cause arising, would come to be very widely adopted. The whole apparatus was as simple as it was easy of application, and entirely efficacious—In answer to Mr. Howse, Dr. SOUTHEY remarked that the puncture was most conveniently made in the calf of the leg, or dorsum of the foot. The cannula was introduced into the cellular tissue.

#### PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, FEBRUARY 24TH, 1877.

THOMAS HAYDEN, F.R.C.S., President, in the Chair.

*Disease of Knee-joint.*—Mr. TYRRELL exhibited a cast in illustration of the improvement effected by operation in the case detailed by him at the meeting of the Society on January 13th, 1877 (see BRITISH MEDICAL JOURNAL, February 24th, 1877, page 233). He also showed the parts removed in excision of the knee-joint from a girl aged 10. The cartilages of the femur had disappeared, those of the tibia were also slightly eroded, and the ligaments were partially absorbed.

*Aneurism, Eroding Bodies of Dorsal Vertebrae, and Bursting into the Posterior Mediastinum.*—Dr. J. W. MOORE showed the heart and aorta and part of the spinal column of a man aged 40, who died rather suddenly after some weeks' illness—cough and pain between his shoulders being the prominent symptoms. The heart and its valves were healthy. The aorta was extensively atheromatous. There was a small true aneurism in the anterior wall of the ascending portion. A much larger aneurism sprang from the commencement of the descending aorta on its posterior aspect. The sac had become adherent to the spinal column; the bodies of the second, third, fourth, and fifth dorsal vertebrae were extensively eroded, but the intervertebral cartilages had escaped almost unscathed. The aneurism had burst into the posterior mediastinum, and so had led to the man's death.

*Mediastinal Sarcoma.*—Dr. E. H. BENNETT presented a very unique specimen of intrathoracic sarcoma which had been forwarded by Sir William Miller, M.D., of Londonderry. The growth occupied the anterior, middle, and posterior mediastina, involving the pericardium, arch of the aorta, not of the left lung, and the œsophagus. Anteriorly, there were evidences of a local recent pericarditis. In another place, the pericardium was adherent, and had clearly been so for a long time. In this situation, the morbid growth had invaded the muscular tissue of the heart. The external walls of the pulmonary artery were also engaged. The innominate vein, with the exception of its epithelial coat, was likewise involved. Caseous degeneration had taken place in the centre of the mass. The bronchial glands, although embedded in the tumour, were not diseased; but the subpleural tissue was studded with secondary sarcomatous deposits. These, owing to fatty degeneration in their central parts, were umbilicated, like "Farre's tubercle". There were also secondary deposits in the pulmonary parenchyma. The axillary, like the bronchial, glands had escaped contamination, as is usual in this disease, which was encephaloid sarcoma—the round-celled sarcoma of Virchow.

*Purpura Variolosa.*—Dr. NIXON showed specimens from the body of a man aged 28, an intemperate brewer's porter, who had been attacked with rigor, followed by persistent shivering, but without pain in the back or vomiting. A scarlatiniform rash appeared, with slight sore-throat. Clear evidence of exposure to small-pox poison aided Dr. Nixon in making the diagnosis of purpuric small-pox when large purpuric patches appeared on the abdomen and back. The conjunctivæ

were blood-shot. Temperature 103.2 deg.; pulse 130; respirations 32. Hæmatemesis and melæna ushered in death on February 6th. The blood was fluid. The pulmonary tissue was hyperæmic, owing to extravascular bleedings. The heart's cavities were empty. The kidneys were apparently healthy. The liver was in a state of acute granular fatty degeneration.

*Spontaneous Rupture of Heart.*—Mr. JAMES LITTLE exhibited the aorta, heart, and pericardium of an elderly man who died suddenly in his sleep. The pericardium was filled with blood, which had escaped through a rent in the visceral layer of the serous membrane covering the left ventricle. Under this membrane, a false aneurism of the heart existed at the base of the left ventricle, behind the posterior segment of the mitral valve. The left ventricle was in an advanced stage of fatty degeneration and softening, but there were traces of antecedent hypertrophy. The sequel of pathological events seemed to be atheroma of the aorta, consequent hypertrophy of the ventricle, invasion of the coronary arteries by the atheromatous degeneration, starving and fatty degeneration of the hypertrophied left ventricle, aneurism of its wall, and rupture of the visceral pericardium.

*Malignant Tumour of Jaw.*—Mr. TYRRELL laid on the table the left half of the lower jaw of a woman aged 50. It was the seat of a large malignant growth, which had commenced four months previously, according to the patient's own statement.

#### HARVEIAN SOCIETY OF LONDON.

THURSDAY, APRIL 5TH, 1877.

T. CARR JACKSON, F.R.C.S., President, in the Chair.

*Traumatic Meningitis.*—The PRESIDENT related a case of traumatic meningitis, which occurred in a girl aged 16, and was the result of a railway accident. She first had sickness, followed by pain in the head. Then there came on tenderness of the spine, dilatation of the pupils, and ultimately coma and death. There was neither convulsion nor spasm. On *post mortem* examination, the chief mischief was found in the tentorium, which was covered with lymph. The substance of the cerebrum and cerebellum was quite healthy.—Mr. OWEN, Drs. SYMES THOMPSON, GRIFFITH, CLEVELAND, and FITZPATRICK took part in the discussion.—Mr. JULER remarked that pus might form in the membranes without fracture or injury to the inner table of the skull.

*Diagnosis and Treatment of Dyspepsia.*—Dr. FARQUHARSON read a paper on dyspepsia. After alluding to the imperfect observation of dyspepsia permitted by out-patient practice, he traced the course of food along the alimentary canal. Digestive derangements from imperfect mastication were then described. The different forms of stomach pain were then given. Attention was directed to the state of the tongue in dyspepsia. A deeply fissured tongue often meant little; whereas a thin white fur, composed of minute dots, was generally found along with pain immediately after food. Pain after a longer interval was accompanied by a pale flabby tongue, with reddish tip and centre. The treatment of dyspepsia consisted of two parts, that of food and that of drugs. The latter was the principal part with patients applying for gratuitous relief. The pain occurring immediately after food was usually relieved by alkalies; whereas acids were indicated where suffering was not experienced until an hour or two after the commencement of the digestive act. For the relief of the nausea and sickness remaining after the bowels were thoroughly cleansed, nothing was so effectual as hourly drop-doses of ipecacuanha wine. Nux vomica was also a valuable remedy. Pain might be but the protest of the stomach against an overload, or be the result of deficient tone from general nervous exhaustion. In some cases, each meal was followed by diarrhoea; and for these cases attention was directed to Ringer's plan of minute doses of the liquor hydrargyri perchloridi. In speaking of diet, Dr. Farquharson pointed out that there are three forms of dyspepsia: 1. The dyspepsia of fluids, as it is called, where the stomach seems intolerant of all forms of fluid; 2. The digestive derangements following intemperance in the matter of animal food; and 3. The dyspepsia connected with indulgence in tea, or other warm and weak infusions of tannin.—Mr. OSMAN VINCENT, Dr. GRIFFITH, Mr. MYERS, Dr. PULLAN, Mr. OWEN, Mr. W. B. OWEN, Mr. WAKEFIELD, and Mr. JULER spoke in the discussion.—Mr. MYERS pointed out the dyspepsia occasioned by overwork and anxiety, especially in soldiers.—Dr. FARQUHARSON replied; and the meeting adjourned.

STAFF-SURGEON FREDERICK AUGUSTUS BRICE has been promoted to the rank of fleet-surgeon in Her Majesty's Fleet, with seniority of March 31st.



## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, MAY 5TH, 1877.

### THE SCIENTIFIC BASIS OF MEDICINE.

THE admirable lectures delivered before the College of Physicians by Dr. T. Lauder Brunton, of which we have lately completed the publication, will have served once more to remind all thinking men how indissolubly the progress of practical medicine is connected with the progress of scientific research during the last half century. He pointed out that, when the older licentiates of the College now living were studying their profession, the discoveries of Lavoisier were novelties; digestion was still regarded as a process of solution; the distinct functions of the sensory and motor nerves were unknown; and the doctrine of reflex action was still far in the future. The advance of medicine for many centuries was slow; those which it has made during a single life-time in this generation have been so great, that we are entitled to give our fullest concurrence to his conclusion, that the advance of medicine was so slow because she went astray from the paths of physiological and pathological experiment, and that her swift progress and great triumphs, during the last half century, have been due to the recent steps towards a reliable and true scientific basis for medical observation. No one, indeed, can study his most interesting review of our present knowledge of the normal and abnormal conditions of digestion, and of the means of remedying its defects, to take only one example from his most instructive lectures, without feeling that medicine speaks here in a comparatively new language; that she advances with firm footsteps on no treacherous ground; and that in this direction of real, exact, and scientific investigation lies a great future for medicine, in which we may expect triumphs in the art of healing which will throw into the shade all that has yet been achieved.

In Professor Hermann's excellent little pamphlet on "Vivisection", a translation of which has been recently published by Messrs. Williams and Norgate, he points out that, though the fundamental facts of the circulation have been known for two centuries and a half, it is only within the last quarter of a century that, by the establishment of physiological laboratories, we are enabled to work out the further examination of the mechanism and influence of the nervous system in the maintenance and regulation of these wonderful arrangements. Almost all the branches of medicine, besides continually building further on the results of physiology, found themselves, as he points out, on such experiments directly, and with infinite advantage. "How", he asks, "could the effects of poisons and drugs be investigated except on living animals? Or must we rather take man for the subject of the experiments?" In the future progress of medicine, are we to debar ourselves from the means of acquiring a knowledge of the processes of disease by the artificial induction of such processes in animals, and the analysis of their functional consequences? Without these means, we should have known nothing of the nature and means of propagation of the most fatal and noxious intestinal worms and parasites; nor should we have any hope of solving the ultimate facts connected with the generation and the prevention of diseases, such as typhoid, cholera, and cattle-plague. It is curious, indeed, to see men who approve of a direct annihilation of animals in the field, the garden, and the vineyard, whenever they come

into conflict with the interests of man, declare that, without any respect to the very highest personal interests of mankind, the authority which they assume over animals shall be denied to the physician and the physiologist. Mr. Holt and those who act with him, no doubt, approve the extermination of locusts and cockchafers, mice and rats. No doubt, "he proscribes", as Dr. Hermann says, "the flies that disturb his sleep, and drowns the cat's litter when the increase seems too great for his household". The claim of animals to life is one to which the humanitarian must find it very difficult to point the limits. There are a few animals which lead a blameless life, those that live on carrion; but to those Mr. Holt would perhaps hardly desire to extend his protection.

It is curious, from the point of view of the infliction of pain, that Mr. Holt has omitted from his calculation such statistics as those of Professor Kramer of Zürich, collected from the German Cattle Census of 1873. "In the German Empire, there are every year castrated 65,000 horses; 650,000 cattle; 2,000,000 lambs and sheep; 8,000,000 pigs; and innumerable fowls." This pain is inflicted for purely mercenary reasons, always without anaesthesia, and commonly by quite unskilled persons. It is, perhaps, too much to hope that this agitation, which has been conducted with so much virulence and so little regard to exactness of statement, should now subside; but it is satisfactory to be assured, by the vote in the House of Commons on Wednesday night, that the art of healing will be enabled to proceed on its high and humane mission, unimpeded by more than the outcries and exclamations of a class of persons whose intolerance is probably the true measure of their ignorance on the subject upon which they desire to legislate.

### THE INDIA SANITARY REPORT.

THE chief interest in the Annual Report of the Sanitary Commissioner with the Government of India is, as usual, centered in the scientific work, contributed by his special assistants, Drs. T. R. Lewis and D. D. Cunningham; and their lately published communications on the subjects of Leprosy in India and on Oriental Sore are marked by the same carefulness in observation and caution in drawing conclusions which from the first have specially characterised their researches.

Report I, on Leprosy in India, is prefaced by a short inquiry into the distribution of the disease in British India, and accompanied by an excellent shaded map. This map, which was compiled with great care from other maps of the different districts drawn on a large scale and tinted in accordance with the ratios found in the various columns of the original Census Reports, shows at a glance that, while leprosy is generally distributed throughout the peninsula of India, it appears to an extraordinary extent in three large districts; namely, Beerbhoom and Bancoorah, in the Burdwan division of Lower Bengal; the Kumaon division of the North-Western Provinces, extending across the southern range of the Himalayas; and the Deccan and Konkan divisions of the Bombay Presidency. Taken by presidencies, leprosy is almost twice as prevalent in Bombay as in Madras, while the percentage in the Bengal Presidency but slightly exceeds that of Madras. It is highly probable that the proportion in the Bengal Presidency is higher; for no doubt the returns from the sixteen millions of Bombay are more accurate than those from the enormous population of Bengal, amounting to one hundred and thirty-five millions. The total returns show that there are nearly one hundred thousand lepers in the peninsula of India, or one leper to every one thousand eight hundred and forty-five persons; while in certain districts, such as Kumaon in the Himalayas (in which the principal number of observations were made), there is one leper to every three hundred and eighty-eight individuals.

The chief results of the inquiry, so far as it has proceeded (for this report refers the work of one year only), are, that no grounds exist for considering leprosy even in the slightest degree contagious, while the strongest evidence points to the influence of heredity in the propagation of the disease. If we admit that heredity is the chief (perhaps



the only) means whereby leprosy is propagated, it would appear, at first sight, evident that the disease may in time be stamped out by the compulsory segregation of lepers. But the writers point out that, even if this were attempted to be carried into effect, it would be wholly impracticable, for it would not only be necessary to segregate those suffering from developed disease, but also those hereditarily disposed to it. "How and by whom," the writers ask, "could the predisposition be determined? It would, indeed, be even more important to secure the latter class and such persons as are only manifestly affected to a slight extent; for it would appear that persons of this description furnish by far the greater portion of the children who are, so to speak, potentially leprosy; time and circumstance only being required for the development of the disease."

Fortunately, the disease, even in such a leprosy community as that of Kumaon, appears not to be on the increase; and this is accounted for by the presence of a tendency to sterility which appears to be induced by leprosy, and by the great mortality among the children of lepers, even among such of them as are born before leprosy has manifested itself in the parents; whence the writers conclude that "it is evident that, unless there be influences other than heredity at work in the locality tending towards the production of the leprosy condition, no serious increment need be apprehended"; and they add: "It will be our endeavour to ascertain, on a future occasion, whether any such leprosy-inducing conditions can be detected in the specially affected localities."

The Report is also accompanied by a map showing the distribution of leprosy in the Kumaon district, and by three excellent plates (copied from photographs) illustrating the anæsthetic and tuberculated forms of the disease.

"Oriental Sore", which forms the title of the second Report, is a term proposed by Dr. Tilbury Fox (and adopted by Drs. Lewis and Cunningham) to express a peculiar form of cutaneous affection known in the East by such local names as "Delhi boil", "Mooltan sore", "Aleppo bouton", etc.

The origin and nature of this "sore" have been, since special attention was first directed to it in 1864, a vexed question. Some observers have believed that they detected certain "bodies" in the sore to which a parasitic origin must be ascribed; and one writer has described "a brown apparently cellular substance" which "may be considered the actual exciting cause of the disease", with which substance he believed he had succeeded in producing on his own arm veritable "Delhi boils". Be this as it may, the writers of the Report before us made several attempts to reproduce the sore by inoculation, but found, on comparing the sores thus produced with those resulting from irritating small surfaces of healthy skin with acid and with iodine, that the microscopical elements of which these artificially induced little ulcers consisted were identical.

The first three chapters are devoted to the general history of the disease, and to a consideration of the special local conditions at Delhi possibly bearing a causative relation to the sore; while the next two are occupied with its clinical history and pathology, of which a most careful and exhaustive account (illustrated by a plate and several woodcuts) is given.

The writers sum up as follows.

1. There is no evidence of any parasitic agency in the production of the disease; and it appears probable that the deleterious effects are due to the chemical constituents of the water, which is remarkable for its extreme hardness.

2. It seems probable that, although the salts which cause the hardness of a water may of themselves not be the actual deleterious ingredients, nevertheless this quality may serve as an index of properties in it which tend to favour the production of cutaneous disorders. Several salts exert a peculiar action on the skin; those of iodine and bromine, for example, produce very characteristic eruptions.

3. The special skin-affection in question is in no way distinguishable from lupus. Its clinical history is similar, as is also its morbid ana-

tomy; and the treatment which has proved the most satisfactory is that which is generally recommended for lupus.

4. The tendency which this form shows to become endemic may be taken advantage of for the purposes of nomenclature; and this form of oriental sore may, therefore, be designated *lupus endemicus*.

#### HOW SMALL-POX SPREADS.

Now that small-pox is so prevalent, although possibly on the decline, we think it right to call attention to a point which may have far more to do with the spread of the disease than the casual outgoings of a few attendants on small-pox patients or the clean linen from a poor woman's laundry. We state positively that it is possible, and extremely probable, for patients who have certainly recovered from their illness, and who have even lost their scabs, to be centres from which fresh cases may originate, either within two weeks or even months after such patients have been discharged as "cured". The patient's recovery from the acute stage of his disease is, no doubt, complete at the time of his discharge from the special hospital. As a rule, he is thought fit to go about in public when all visible scabs have fallen off; but we think that, if this too common, and, in our opinion, dangerous practice be carried out, it will be one attended by no inconsiderable risk to the public at large. After all scabs have disappeared from the face, the arms, and possibly the skin of the hands, abortive or dried-up pocks can still be detected under the thick skin of the heel and ball of the great toe, and probably latest of all on the outer edge of the foot; and moreover, after all scabs have fallen from the skin, there is still a desquamation which may last for many days and which does carry infection.

We believe this danger from deep-seated dried-up pocks to be less in severe than in mild or abortive cases, since in severe cases the skin more readily peels off, and by the end of six weeks or two months the skin of the sole of a patient who has had a severe attack, if examined, will be found quite sound. On the contrary, in mild cases, or in cases in which the eruption has been abundant but aborted, the skin of the sole will be found at the end of this time (six weeks) studded with small brown (and occasionally yellow) spots; or, if the skin over the majority of these have been broken and the underlying brown spot picked out, there will be much ragged skin coexisting with several almost invisible and still unbroken brown spots (dried-up pocks), which, being specific morbid products, are presumably capable of giving rise to the disease. There is yet another situation in which pocks are found long after the supposed recovery; viz., *under the nails*. This is, of course, most usually seen in severe cases, because they are longest under observation; but it is by no means unusual to see brown spots through the nails even in mild cases, if they be looked for. If the pocks under the nails be fairly numerous, and especially if situated at the root, their presence is rapidly manifested by the nail coming off. If they be few in number, their presence will be shown by the destruction of a small rounded portion of the nail near the lunula, or by their being visible as brown spots through the nail. Can the presence of pocks in this situation account for solitary cases breaking out after the disease is supposed to have disappeared?

It is a recognised rule in scarlet fever, that the patient should not be considered "cured" until his skin is quite sound. Should not the same rule apply to small-pox? and is it not equally important that the desquamation which follows the scabs, and that from the nails, palms of the hands, and soles of the feet, should be complete before a small-pox patient be discharged from hospital? This danger arising from the "sending out" of patients still in a condition capable of causing infection is increased in two ways. Firstly, the insufficiency of accommodation in special hospitals leads medical officers, during the pressure of epidemics, to discharge at the earliest possible period all patients who have recovered from their acute illness, in order to make the most of a limited accommodation. Many of the patients thus discharged have a number of these dried-up or abortive pocks about them, although no



evident scabs. A mild case of small-pox is just as liable to spread the disease as a severe one, or, in our opinion, even more liable to do so, since it is far more likely that mild cases will be discharged too early than severe ones. Secondly, during the latter part of epidemics, when additional accommodation has been provided to take all cases as they apply for admission, the same tendency to discharge patients too soon is still at work, but arises from another cause. The medical officer may forget that special hospitals for infectious disease have certain quarantine duties to perform, and failing, as is likely, to find anything of medical interest in a ward full of patients who have seemingly quite recovered, he discharges them whilst they may still have deep-seated dried-up pocks on them, or perhaps some untreated abscess, of which they will be careful to keep him in ignorance. When small-pox patients are discharged, they naturally think there is no danger in their mixing freely with their friends and the general public; but if, as we suggest, patients are discharged at too early a period either from the sick-room or the hospitals, the spread of the disease is likely to be increased, and the hospitals for the isolation of cases will then become sources of danger instead of safety, since patients, friends, and public are in a condition of fancied but very unreal security.

### THE PLAGUE.

THE startling news forwarded by telegram from Teheran on the 25th ult., that plague had appeared at Resht, attacking there twenty-four persons and killing of these sixteen, has not yet been confirmed. Notwithstanding the forebodings of the Ottoman Sanitary Administration and of others in Mesopotamia as to the prospects of a reappearance of plague this year and of its wider diffusion than in the previous year, an outbreak thus early in the year on the southern shore of the Caspian had hardly been anticipated, and, assuming an extension from Mesopotamia, would hardly have been deemed probable. Resht, however, is too near to Teheran on the one hand and to Russian territory on the other for any doubt to be suffered to remain long upon so important a matter, and we may anticipate very soon to have definite detailed information upon the subject.

In Bagdad, plague is increasing; but, so far as can be judged from the imperfect data which have been transmitted westward, the present outbreak does not yet seem to have assumed greater dimensions than the outbreak of last year at the same period. About the middle of April, the deaths from the disease are stated to have averaged a little over thirty daily; and this estimate probably represents some approximation to the actual state of the epidemic in the city, so far as this can be gathered from the mortality caused by it. Such official or asserted official records as have been made public are so irreconcilable, that they help little to a clear knowledge of the progress of the epidemic. Thus it was telegraphed from Teheran on the 25th ult. that, from the 16th to the 23rd of April, plague had caused one hundred and seventy-six deaths in Bagdad, according to the sanitary officials there; but later information from Constantinople gives the mortality from plague in the city during the week ending April 28th as two hundred and fifty-eight.

The information as to prevalence of plague in other parts of Mesopotamia is exceedingly scanty. The most that can be said at present is, that the disease is not limited to Bagdad; but of the extent of its prevalence in the surrounding district, and in the area of its diffusion the previous year, hardly any news has been permitted to transpire. There is reason to believe, however, that to the time of the last received news from Bagdad that city alone of the great towns on the Lower Euphrates and Tigris had been infected.

At the Royal Observatory, Greenwich, last week, the mean temperature was forty-four degrees, or three below the average.

THE Municipality of St. Petersburg has voted 1,500,000 roubles for the care of the sick and wounded.

THE Fishmongers' Company have made a grant of £250 to the fund for rebuilding the Metropolitan Free Hospital.

SIR HENRY THOMPSON will preside at the annual festival to be held at Willis's Rooms, in aid of the funds of University College Hospital, on Wednesday, the 16th inst.

A CONVOY of nurses and ambulances of the International Society for the Aid of the Wounded left Paris on the evening of May 3rd for the seat of war.

THE medical names included among the candidates for the Fellowship of the Royal Society are Sir Joseph Fayrer, M.D., K.C.S.I.; Dr. W. C. McIntosh, Dr. William Roberts (Manchester), and Professor William Turner, M.B., Edinburgh.

THE following members of the medical profession form part of the deputation of the Municipal Council of Paris now in London: Drs. Bourneville (editor in chief of the *Progrès Médical*), Lamouroux, Levraud, Loiseau (Ch.), Martin, and Villeneuve. Dr. Bourneville desires especially to study the institutions of nursing and the hospitals for consumption in London.

DR. HUGHLINGS JACKSON will deliver the annual oration at the Medical Society of London on Monday evening next, at 8.30 P.M., at the Society's rooms in Chandos Street. The subject of the oration is, Ophthalmology in its Relations to Medicine, a matter of great and progressive interest to practitioners of medicine, and on which Dr. Jackson has made for years a series of patient and masterly clinical researches.

THE appointment to the Chair of Surgery in King's College has not yet been filled up, and it is stated that the delay is caused by the hope that Professor Lister may yet be induced to accept some office in the school. Arrangements appear not yet to have been made, and nothing further can be decided till the next meeting of the College Council. Meantime, we hear that the Charing Cross Hospital authorities mean to take steps to strengthen their staff and school in their newly enlarged institution, and propose to themselves a serious competition with King's College and Hospital.

A PARIS telegram announces that another physician of Paris, M. Louis Carrère, has died from sucking the windpipe of a patient, a little girl suffering from croup, for whom he had performed tracheotomy. Dr. Cintrat fell a victim to duty in a similar way a short time ago. It is impossible not to regret most bitterly this lamentable sacrifice of life, and we cannot but think that the risk involved in the proceeding described is sometimes needlessly incurred. It is no doubt necessary in some cases, but only very rarely, and would be so less frequently if surgeons would perform tracheotomy more deliberately, and, in the case of a child, operate above the thyroid cartilage instead of below it.

MR. GLADSTONE writes to the Society for the Protection of Animals liable to Vivisection: "You are already aware that my sympathies are greatly with you, nor do I wish this to be a secret; but I am overwhelmed with occupations." We have before us the second programme of this Society, and we see that a part of its intention is to secure the extension of the existing Act to the total prohibition of painful experiments on animals. With the view to this object, this Society is at the present moment posting the streets of London with pictorial illustrations and with placards of a kind of which it is hard to suppose that any reasonable person can do other than regard them with the most extreme disapproval and disgust; and we cannot but grieve to find a statesman of Mr. Gladstone's position identifying himself with an association of which the humanitarianism defies reason, truth, humanity, and propriety.



## THE CONJOINT EXAMINATION FOR ENGLAND.

WE have much satisfaction in announcing that the representatives of the several examining bodies in England, meeting in conference on Tuesday last, agreed to a complete scheme for an Examining Board in England.

## MADAME NILSSON.

THE Committee of the Lady Augusta Stanley Memorial Institution for Trained Nurses are pushing their appeal for funds with commendable energy and success. Madame Nilsson, the famous soprano, has already contributed two sums of £1,000 each towards the building fund; and on the 6th of June next she has consented to give a concert for the benefit of the institution, which promises to realise at least £1,500. So noble an example of generous sympathy deserves to be widely followed, and reflects the greatest honour upon a lady who thus devotes her influence and splendid talents to aid the cause of suffering humanity.

## CHAIR OF ANATOMY IN UNIVERSITY COLLEGE.

WE understand that Mr. J. C. Ewart, M.B., is a candidate for the Chair of Anatomy at University College, rendered vacant by the resignation of Mr. Ellis. Mr. Ewart was for some time Demonstrator of Anatomy at the University of Edinburgh, and during the last two years has acted as Conservator of the Museums at University College. In Edinburgh, Mr. Ewart gained considerable experience in lecturing and carrying on the general work of a teacher of anatomy. Since coming to University College, he has produced a complete change in the museums, and more especially in the zoological department. He has also formed a typical collection of vertebrate and invertebrate animals, including a number of very elaborate dissections. To the Anatomical Museum, many beautiful dissections have been added, and an useful collection of bones, specially prepared to show the attachments of muscles and the different segments of the skull. Mr. Ewart is well known as a histologist. He is the author of several papers on the minute anatomy of the eye, which have received considerable attention abroad. In his first memoir, he confirmed, in 1873, Hannover's description of a layer of cells covering the anterior surface of the retina, histologists since Hannover's observations having failed to find them. He studied anatomy for some time with Professor Waldeyer, and made himself familiar with the methods of teaching in several of the Continental schools.—Mr. Thane, who has for some time acted as Senior Demonstrator at University College with much industry, success, and acceptance, is, we believe, also a candidate.

## THE ANTI-VIVISECTION BILL.

THE *Times* of Thursday contains an excellent detailed report of the debate on Mr. Holt's Bill, of which the object was to render punishable the performance of any painful experiments on a vertebrate animal, even with anæsthetics, except for the purpose of alleviating pain in, or curing, an injured animal. The debate extended to such length that we cannot attempt here to reproduce it. The agitation, carried on in so unscrupulous, and we even venture to say in so degrading, a manner by agents of the various societies established for the purpose, could not fail to appeal to the sympathies of the less instructed members of the House, and to the emotional and uninstructed public. As a rule, the medical profession and physiologists have regarded the proceedings of these unscrupulous and fanatical persons with silent contempt, and disapproval amounting to disgust; but it has not been thought desirable or worth while to give to them a relative importance by attempting to meet their exaggerated misstatements by any public counterstatements. The division in the House of Commons on Wednesday showed that they have made less way than could have been expected. Dr. Cameron made out a very good case in the excellent speech in which he moved the rejection of the Bill. It was thrown out by 222 to 83. The absence of Mr. Lyon Playfair, owing to domestic affliction, was much to be regretted; and the silence of Mr. Lowe was a decided loss to the

House and the cause of science. Dr. Lush spoke vigorously and to the point. There is, however, we fear, a prospect of this most offensive and feeble agitation proceeding with the same virulence with which it has been recently conducted; and it will, we think, be desirable for medical men in their own neighbourhoods, and, indeed, for all who are interested in the cause of real humanity, to oppose plain statements of fact to the exaggerated misstatements of the lecturers of the Anti-vivisection Society at the public meetings which they summon.

## SMALL-POX IN LONDON.

PRECAUTIONS to prevent the spread of small-pox appear to be still urgently needed. The epidemic is still slightly on the increase in the Poplar district, but is diminishing elsewhere. A case of some difficulty appears to have arisen in the workhouse of St. George's-in-the-East. A poor woman in the house developed small-pox of a most virulent type within three days of her confinement; and Dr. Belcher, the medical officer in attendance, considered it his duty to have the patient removed without delay to the Homerton Hospital, where she died immediately on admission. This appears to have been done, knowing the case to be a malignant one, as a matter of safety to the other inmates of the workhouse. The result is, of course, to be regretted; and the Board of Guardians referred the matter to the Local Government Board, who concurred with the guardians that a grave indiscretion had been committed. Dr. Belcher appears, however, to have acted for the best, and would certainly have incurred a most serious responsibility if, after retaining the case within the workhouse, other cases of small-pox had broken out there.

## MR. LEIGHTON, R.A.

MR. LEIGHTON's grand figure in bronze of an athlete wrestling with a python has been, we are glad to hear, purchased with the first proceeds of the Chantry Fund for the sum of £2,000, and is now public property. It is unquestionably one of the greatest works of sculpture which has ever been produced by an artist of the British school, and will be specially admired by those who take interest in studying the representation of the human form in violent and heroic action. The upper part of the figure especially is a masterpiece of anatomical study, rivalling the antique models.

## DEATH ATTRIBUTED TO CHLORIDE OF LIME APPLIED EXTERNALLY.

AN inquest has been held at Windhill, near Bradford, on the body of an infant, which had been dressed in clothes in the manufacture of which chloride of lime had been freely used, and an excess of which had not been removed. The lime, it is said, irritated the child's skin, and brought on an illness which resulted in death. The jury returned a verdict of "Death by misadventure".

## WESTMINSTER HOSPITAL.

A LONG letter from Sir Rutherford Alcock, representing the views of the House Committee, appeared in Wednesday's *Times*, answering the various objections as to the retention of the hospital in its present locality. It is, in the main, exceedingly good; but it does not deal with two serious defects: the continuance of the medical school in the confined area at the back of the hospital, and the present most objectionable condition of the out-patient department. The latter we have before now had occasion to condemn. Mere structural alterations in the wards, improved system of drainage, increased accommodation for the nursing staff, and wards for the isolation of particular and infectious cases do not overcome these grave defects, the removal of which are essential for placing the hospital upon a firm sanitary basis. The amount demanded by the House Committee (£12,000 or £15,000) is a very moderate and modest sum in these days of princely gifts to charities. Should the public show a willingness to respond to the present appeal, we strongly recommend the House Committee to effect the necessary alteration in the particulars to which we have called attention. It is a serious matter to close so large a hospital for three months, and it would be far better to make a clean sweep than do the work



piecemeal. The present position of the hospital has some advantages, but sooner or later its removal will be a necessity. The Government must before long require the site. By that time, the best position for a new hospital will be more apparent, and then we expect that the alternative of its present site and that of the generous offer of a noble Duke will not be the question. If the Government become the purchaser, the Royal Chelsea Hospital site will form one of the several not unimportant factors in the problem.

#### HOME HOSPITALS.

A DISCUSSION relative to the advantages and necessity of establishing home hospitals for all classes who require, and can afford to pay for, their treatment has been carried on during the past few weeks. Mr. Henry Burdett of the Greenwich Hospital is the originator of the present scheme, and he proposes to form a Home Hospital Association on the model of the Improved Industrial Dwellings Company (limited), with the following objects:—To provide hospital treatment, skilled nursing, and other accommodation, for the benefit of all classes, when attacked by illness, who can afford to pay for their treatment, and for the use of the medical profession generally; to acquire land and to build hospitals; to co-operate with the managers of the present hospitals supported by private charity with the object of preventing the abuse of hospitals by well-to-do people; to provide for the assistance of the medical profession and for the benefit of the public a well regulated hospital to which the former can send with confidence private patients who can afford to pay adequately for the accommodation which they require, and in which the patients will have the comfort of being treated, if they prefer it, by their own doctor. In order to carry out this scheme practically, it will be necessary to erect a hospital or hospitals on the pavilion principle, which will allow arrangements to be made by which the several grades of patients can be conveniently separated and the organisation of the hospital placed upon a suitable basis. It cannot be doubted that there is a decided impulse in the public mind towards the provision of hospital treatment for the better classes under proper regulation, and it will be necessary to erect special hospitals for this purpose, if the wants of the public and the profession are to be adequately met. It has been suggested more than once that pay-wards attached to the present hospitals would meet every requirement; but it is surprising that such a scheme should be advanced by anyone who is familiar with the objects for which the voluntary hospitals have been established, as the impossibility of practically carrying out this idea is obvious to all who realise the difficulties which would have to be overcome. For instance, none of the present hospitals are in a position to vote any funds for speculative purposes; and yet, if an attempt is to be made to meet the requirements of the better classes who desire hospital treatment, a large expenditure would be necessary before any adequate or proper accommodation for the different classes of paying patients could be secured in the existing hospitals. The professional difficulties are numerous and insurmountable; for which of the great hospitals would allow a general practitioner, for instance, or any member of the profession, to attend a patient in its wards because such patient was able to remunerate him for such attendance? and, if the treatment of paying patients is to be confined to the members of the hospital staff, the opposition of the majority of the profession would necessarily be excited. Again, many surgeons would object to send private patients requiring operation into the wards of the large general hospitals, because he would be afraid to face the relatively imperfect hygienic arrangements which many existing hospitals are believed to have. Finally—and these, to our minds, are the most cogent arguments against such a plan—there would arise many serious financial difficulties in any such arrangement; the jealousies of the poorer class of patients would be excited; the well-to-do patients would decline to submit to treatment in any institution partaking of the nature of a charity, whether they were asked to pay or not; and a project which, under happier auspices, might be made to meet a great professional

and public want would be marred and, we fear, irretrievably discredited. Pay-wards have been tried to a limited extent already, and the experience gained does not encourage any extension of the movement in the same direction. But none of the difficulties above enumerated would have to be met, if a new hospital be erected to which admission should be by payment, and by payment alone; for such an institution, to be successful, must be entirely free from all eleemosynary character, and, in every sense of the word, self-supporting. Mr. Burdett's scheme bears on the face of it an honest attempt to solve all the difficulties, professional and general, which have proved fatal to other similar movements. As we suggested in the *BRITISH MEDICAL JOURNAL* a week ago, Mr. Burdett has secured the support of the Lord Mayor, who has consented to receive a small deputation on the subject to-day (Friday), which will consist of Sir Sydney Waterlow, Bart, M.P., treasurer of St. Bartholomew's Hospital; Mr. Albert S. Sanderson, a Director of the Bank of England, Mr. Ernest Hart, Mr. Joseph Moore, Chairman of the Seamen's Hospital Society; Mr. F. Cleve, C.B., and a few others. Letters have been received expressing approval of the movement, from Sir James Paget, Dr. Quain, Dr. Andrew Clark, Professor Busk, and other leading members of the profession; and there seems a reasonable probability that at last a practical solution will be found to this question, which will ensure alike the support of the profession and the public. Every medical man would be at liberty to treat his own patients in the Home Hospital, and the patients would have the comforts of the attendance of their own medical attendant in addition to every possible provision which complete hospital arrangements and unlimited resources can command. We congratulate Mr. Burdett, whose large experience in hospital management may be accepted as a guarantee that every new improvement in hospital construction and the most complete arrangements will be found in the Home Hospital, upon the support he has already received, and we wish him every success in his honest endeavour to meet the wants of the public and the medical profession generally.

#### HYDROPHOBIA.

THE number of deaths from hydrophobia during each of the ten years from 1866 to 1875 inclusive, in each county in England and Wales, is given in a return recently presented to Parliament. It appears that the total number of victims to this disease during the period in question was 334, of which 110 are recorded against Lancashire and 62 against the West Riding of Yorkshire. These districts stand highest on the list, many of the counties showing *nil*. Thirty-five deaths are credited to the parts of Middlesex, Surrey, and Kent included in London. The 334 deaths are apportioned to each of the ten years as follows: thirty-six to 1866; ten to 1867; seven to 1868; eighteen to 1869; thirty-two to 1870; fifty-six to 1871; thirty-nine to 1872; twenty-eight to 1873; sixty-one to 1874; and forty-seven to 1875. One death only from hydrophobia is returned as having occurred in Scotland during the ten years referred to, and that took place in the county of Forfar in the year 1870.

#### TRAINING OF NURSES.

A TRAINING school for nurses has been established in connection with St. Bartholomew's Hospital. The scheme was originally suggested by Sir Sydney Waterlow, M.P., for providing a superior class of efficient attendants for the institution; and, furthermore, to enable the public to avail themselves of the services of competent and certificated persons. The governing body of the hospital have cheerfully seconded the efforts of the treasurer, and a large block of buildings within the area of the hospital has been set apart and fitted up as a "Home" for the present nursing-staff and the candidates for training. The "Home" is placed under the care of a lady superintendent (Miss Hubbard), assisted by the ward superintendents, or "sisters". In the course of an inaugural address delivered in the anatomical theatre of the hospital on Tuesday last by Dr. Duckworth, he stated that the school would be subject to the direction of himself and his colleague Mr.



Willet, and that the course of training would comprise a systematic series of lectures and demonstrations, coupled with thorough instruction in ward duties. The period of training is fixed at not less than twelve months, at the end of which time the proficiency of the probationers will be tested by a series of clinical examinations preparatory to the grant of a certificate of competency from the hospital authorities. They will then be free to remain in the service of the hospital, or to seek private engagements. A large number of young women, between the ages of twenty and thirty-five, have already sought and obtained admission to the school as probationary nurses.

#### HEALTH OF LONDON.

THE Registrar-General's weekly return states that, during the last week, 6,125 births and 3,794 deaths were registered in London and twenty-two other large towns of the United Kingdom. The mortality was at the average rate of 24 deaths annually in every 1,000 persons living. It ranged from Plymouth, 15, to Oldham, 38. Three more deaths from typhus were recorded in the Bristol City Workhouse. In London, 2,535 births and 1,557 deaths were registered. The annual death-rate, which in the four preceding weeks had declined from 30.3 to 22.6 per 1,000, was last week 23.0. The 1,557 deaths included 89 from small-pox, 47 from measles, 14 from scarlet fever, 3 from diphtheria, 30 from whooping-cough, 18 from different forms of fever, and 12 from diarrhoea. The fatal cases of small-pox rose last week to a higher number than has been returned in any week since the middle of March; 41 were certified as unvaccinated, 14 as vaccinated, and 34 were "not stated" as to vaccination. Three children of a carpenter, aged nine years, six years, and four months, died within three days of each other of small-pox in Percy Terrace, Hackney, all being "not stated" as to vaccination; and in Peckham the deaths of four children were referred to the same disease, the medical certificates relating to which contained no information as to vaccination. The deaths referred to diseases of the respiratory organs, which in the four previous weeks had declined from 645 to 343, were 349 last week, and exceeded the corrected weekly average by 60. In Greater London, 3,022 births and 1,824 deaths were registered, equal to annual rates of 36.1 and 21.3 per 1,000 of the population.

#### A ROYAL SAVANT.

THE Emperor of Brazil visited the Hôtel Dieu some days ago, while Professor Sée was delivering a lecture on the diseases of the stomach. The audience rose; but on a gesture from the lecturer, who said, "Gentlemen, we have another savant among us", resumed their places. The Emperor sat on the students' bench until the end of the lecture.

#### NUTRITIVE VALUES OF FLOUR.

In the May number of the *Philosophical Magazine* will be found a paper, by Messrs. Wanklyn and Cooper, on the nutritive value of different kinds of flour. A new process for the valuation of the nitrogenous or proteine substances in flours is described, and by applying the process to different flours the following conclusions are established. Wheat flour, no matter where grown, is, the authors find, always of about equal richness in proteine. Barley, oats, and maize do not sensibly differ from wheat in yield of proteine; and rye is richer than any of them in proteine. Important consequences may be expected to follow from these researches.

#### LEGISLATION FOR HABITUAL DRUNKARDS.

A MEETING of the Metropolitan Counties Branch of the Association will be held in the rooms of the Medical Society of London, 11, Chandos Street, on Friday next, May 11th, at 8 P.M., to discuss the important subject of the necessity of legislating for the care and treatment of habitual drunkards. The discussion will be opened by Mr. Stephen S. Alfred, the energetic Secretary of the Society under whose auspices the Bill now before Parliament has been prepared; and it is expected that the meeting will be addressed by Dr. Cameron, M.P., and other gentlemen who have taken an interest in the matter. A

resolution approving of the principles of the Habitual Drunkards Bill will most probably be proposed for acceptance. We are requested by the Council of the Branch to express a hope that the great social and professional importance of the subject will ensure a large attendance; and to state also that any members of the Association, though not actually in the Branch, will be welcome to attend the meeting and to express their opinion with regard to the proposed adoption of legislative measures in respect of habitual drunkards.

#### CHEAP MEAT FOR THE POOR.

COLUMBIA Market, Bethnal Green, has been opened by a limited liability company for the sale of American meat and other provisions, on terms which will place nutritious food within the means of even the humblest. The project has met with the cordial approval of the Baroness Burdett-Coutts, who at once granted the use of the Columbia Market for the purpose. Immediately upon the opening, the market was crowded with purchasers. In a spirit of philanthropy, the company have decided to take a profit of not more than one halfpenny in the pound.

#### WEEKLY TABLES OF MORTALITY AND METEOROLOGY IN BOSTON, U.S.

WE have received a copy of this weekly return, which differs materially from that adopted by our Registrar-General, as the number of deaths in each day of the week are given, from all causes and from twenty-one different diseases, including the seven chief zymotic diseases, inflammatory affections of the lungs, consumption, brain- and heart-disease. The number of deaths at the following ages are given, viz.: under one, between one and two, two and five, and above seventy. The meteorological observations are taken at the following hours, viz.: at 7 A.M., 2 P.M., and 9 P.M.; so that they differ from the times of observing in this country, which are usually 9 A.M., 3 P.M., and 9 P.M. The daily means, the maximum and minimum, are also given, as well as the relative humidity, direction and velocity of the wind, and the rainfall. There is also a column for remarks, as well as weekly summaries.

#### ANOTHER SUGGESTION FOR THE SPHYGMOGRAPH.

MR. GEORGE THOMPSON, of the Bristol Lunatic Asylum, Stapleton, writes to us:—The invitation contained in the *JOURNAL* of the 28th ultimo causes me to draw attention to a modification of the sphygmograph which I have made, and which, I think, might be found useful to others. It consists of an arrangement which causes a negative tracing to be made upon a glass slide. By this means, positive prints can be produced on sensitised paper. These prints, being fixed, can be pasted in the case-book with synchronous symptoms, and side by side with the treatment adopted and effects produced, or distributed amongst other workers for comparison; the number of prints to be obtained being, of course, unlimited. For "bleaching" the slide, I use a mixture consisting of one part of oil of juniper in seven parts of highly rectified spirit. This, burnt in a spirit-lamp (occasionally shaken), produces a fine film sufficient to arrest the active rays, and dense enough to be seen when held against a white paper, but which does not blotch or smudge. The inscription should be written negatively, a difficulty which is soon got over by practice. The varnish I use is the "Bristol varnish for negatives", and it is run over the slide as in ordinary photographic operations. It dries in a few minutes.

#### SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE annual general meeting of the Society was held, by kind permission of the Royal Medical and Chirurgical Society, in their rooms, Berners Street, on Friday, April 27th, at 8.30 P.M. The chair was taken by Mr. Fuller, Treasurer. From the statement read by the Secretary, the receipts available for payments during 1876 had been £1,354:18:11; the expenditure had been £1,300:5:11, leaving a balance of only £54:13. A sum of £2,885:10 had been given to fifty-eight widows and thirteen orphans. The expenses had been



£214:15:11. The funded property had been increased by the purchase of £792:13 Metropolitan Consolidated Stock. During the year, eleven members had died, four had resigned, and thirteen new members had been elected. The number of members at the end of the year was four hundred and two. Five widows had been admitted as fresh recipients of grants; three had died or become ineligible. One orphan had been declared eligible, and two had become ineligible for further grants. A legacy of £1,000, duty free, from the Rev. H. C. Morgan, had been received. Mr. Prescott G. Hewett was elected a Vice-President in place of Sir William Fergusson, deceased; Mr. N. H. Clifton, a Director in place of the late Dr. Carr; and Mr. Goodchild, Dr. C. Brodie Sewell, Dr. Blandford, Sir William Jenner, Mr. Morratt Baker, and Mr. Rouse, were elected Directors in place of the six seniors who retired by rotation. A vote of thanks to the editors of the medical journals for their kind advocacy of the interests of the Society was carried unanimously. The meeting was closed by a vote of thanks to the Chairman.

#### AUTO-INSPECTION.

IN reference to the article in our last number, headed "Auto-Inspection of Nuisances", Dr. Baylis, the medical officer of health for Bromley, informs us that the Urban Sanitary Authority have for many years been loyally struggling to overcome the numerous obstacles always encountered in the drainage of towns, especially in this, and have only recently succeeded in obtaining a suitable outlet by means of the West Kent Drainage scheme, now in process of being carried out. Pending its completion, and junction of the Bromley sewers now being designed, he contends it would be as useless, as it would be impolitic, to force reconstructions of privies and cesspools to meet existing requirements, just when a complete drainage is about to supersede them altogether by its own greater simplicity and effectiveness. He also states that the introduction of the Kent water-supply has led to serious difficulties, by overtaxing the powers of the cesspool system, which is quite incapable of disposing of the increased quantity of water thus poured into it. The cesspools overflow in consequence, with very serious results. The Sanitary Authority, therefore, has to steer between Scylla and Charybdis. They at once close wells when found actually impure, but dare not make indiscriminate raids for fear of worse consequences. He also states that a similar discretion has to be used in respect of cesspools. When found initiating a nuisance, they are cleansed without delay; but he asserts it to be one of the vices of this vile system among houses, that the evils attendant upon cleansing often exceed those of letting them alone. In conclusion, he refers to his annual report, which, though fully pointing out the considerable increase in zymotic fatality in 1876, together with its true import, also gives the whole mortality at the low rate of 16.4 per 1,000 *per annum*. He also bears testimony, so far as his observation extends, to the zeal and efficiency of the subinspector of nuisances.

#### SURGICAL AID SOCIETY.

ABOUT two years ago, we alluded to a correspondence which then took place between Sir Charles Trevelyan and Mr. Jeula relative to the manner in which the Surgical Aid Society administers its charity. The Voting Charity Reform Association has just addressed a letter on the same subject to the Committee and subscribers of the Surgical Aid Society. It is signed by the Duke of Northumberland, as President, and says:—

"It is too manifest to need lengthy discussion, that it is as inconsistent as it is uncharitable to compel maimed and crippled invalids to submit to a wasting and fatiguing canvass for letters—painful and degrading enough to persons in health, and the very opposite of all that is required for a poor surgical convalescent patient, upon whom it may possibly inflict a further permanent injury. Indeed, the only argument that can be advanced in favour of the continuance of such a mode of distributing charity is the cynical one, 'that it pays'.

"The main questions at issue between the Charity Voting Reform Association and the Surgical Aid Society are, whether the system of compelling convalescent surgical patients to canvass the town for an

indefinite number of letters is a good or a bad one? Does it not bring discredit on the Charity, and work great injury on the afflicted, with a waste of money, time, and energy altogether out of proportion to the actual benefits the Society professes to confer?

"The answer to these questions will be gathered from the following facts. 'The Surgical Aid Society publicly sets forth as one of its most prominent features, and upon which it mainly relies for support, that it gives away every description of (surgical) appliance' to the poor and needy. On this statement, the benevolent public subscribe very nearly £3,000 a year, and in return obtain letters of recommendation. A more careful perusal of the rules of the Society discloses the fact that a letter merely places a poor applicant for relief in communication with the Surgeon of the Society, who, after investigating the nature of the case, certifies as to its coming within the rules of the Charity, and that a certain instrument is needed. Letter 1, then, it appears only confers the privilege of sending the patient on dozens of distressing weary walks to as many different parts of London to beg for letters to *cover the expense* of the wooden leg, crutch, or truss, as the case may be; and this is what is called *sitting away every description of appliance*.

"The Committee, moreover, in their last annual report, say, 'they believe that by this plan the patients are stimulated in their exertions to secure the required letters'; and in a case set forth in the same report purposely to illustrate the excellent working of the system, it is stated of a poor widow woman who had lost her leg, that she having 'saved 10s. towards its cost, and having worked hard to get letters, the Committee considered the case deserving of immediate help'. To call help 'immediate' which was not given till the poor woman 'had saved 10s., and worked hard for letters', is using the word in a new sense; and why 'working hard to get letters' should be considered a test of merit, it is hard to conceive. One would have thought that the fact of having saved 10s. would have been sufficient to make the case more deserving of immediate help. This, in the words of the Rev. Septimus Hansard, is indeed 'cruelty mocking charity'; and, whatever the Committee of the Surgical Aid Society may assert to the contrary, the compelling poor cripples to 'work hard to get letters' is at once objectionable in principle, and as demoralising in fact, as begging for votes."

In a foot-note, another case is mentioned, on the authority of "a London clergyman". He says: "The poor woman we spoke of the other day came to me on her crutches at church last evening. After three months' writing and wandering up and down London, she has obtained twelve Surgical Aid letters. Finding this entitled her only to a leg without a foot, and that six more must be got or fifty shillings in cash, she has had to fall back on a local subscription, being weary of her toilsome pilgrimages. She assures me the cost of trains, omnibuses, etc., in begging for letters has been 23s. 6d." Instances like these speak for themselves: while the letter of the Voting Charity Reform Association enters into various financial details, showing that the funds at the disposal of the Surgical Aid Society would admit of the introduction of a better system.

#### BIRMINGHAM MEDICAL INSTITUTE.

THE third annual meeting of this Society was held on Thursday, March 29th. Dr. Fletcher, the retiring President, occupied the Chair, and about forty other members were present. The annual report showed that the Institute was now established on a sound basis, and that, during the last year, considerable progress had been made in its organisation. Commodious rooms had been occupied on lease for a series of years in Queen's College; a reading-room, containing all the principal English and foreign periodicals, had been opened; the library had been augmented by several thousand volumes, by gift or purchase, and considerable progress had already been made by the sub-librarian in cataloguing the books on a satisfactory system. The report further showed that the finances were satisfactory; the amount of principle invested, including a building fund of more than £3,000, being over £9,000, with promises in addition of several hundred pounds in donations towards a building fund. Building plans were laid before the meeting, but their consideration was postponed for the present. The following are the officers of the Institute elected for the ensuing year. President: Dr. Bodington. Vice-Presidents: Mr. Crompton and Mr. Berry. Honorary Secretaries: Mr. G. H. Evans and Mr. Priestley Smith. Honorary Librarians: Mr. L. Tait and Mr.



W. Bates. The following retiring members of the Committee were re-elected, viz., Dr. Fletcher, Dr. T. Underhill, and Mr. W. C. Garman; Mr. C. J. Bracey and Dr. Savage were elected to the two other vacancies.

#### OPENING OF THE EAST LONDON CHILDREN'S HOSPITAL.

THIS hospital was formally opened on Wednesday last by Her Royal Highness the Duchess of Teck. The entrance-hall was tastefully decorated with flowers, and an empty ward on the ground-floor was furnished as the reception-room, with seats for nearly three hundred visitors. The Duchess, having inspected the two wards now open, and expressed much interest in the work of the hospital, proceeded to the reception-room, where the Bishop of London conducted a short service; the hospital was then declared to be opened, and about thirty purses were presented by ladies and children. A *déjeuner* followed, at which about four hundred visitors were seated in a large tent erected on the site of the block yet to be added to the building. The company met under the presidency of Lord Enfield, and was distinctly representative of all classes of supporters. The wards were then visited by all; they are bright, cheerful, and airy, and the presence of many young babies was especially noticed. An infant suffering from marasmus seen in a swing-cot excited much compassion. The whole place presents a view of good medical work systematically carried out. The hospital is largely nursed by ladies, and there are two resident medical officers. The three wards now open and available for patients will accommodate about ninety children and infants, and it is hoped that funds will soon be forthcoming to complete the building and open the additional wards. Mr. Norris, the treasurer, seemed to be very hopeful. Donations to the amount of about £2,500 were announced by the secretary. The hospital appears to be much valued, both by its supporters and by the patients; various ministers of religion, manufacturers, and others, spoke of the need long felt for such an institution and of their readiness to support it. The hospital has never been in debt; it has no funded property, and trusts for its present and future success to the annual support of the public.

#### THE DERBY AND DERBYSHIRE NURSING ASSOCIATION.

WE have received the report of this Association for the past year, and we are glad to observe that this institution, which is one of the best of our provincial nursing establishments, continues to prosper. The report has been drawn up by the Honorary Secretary, Dr. W. Ogle, to whose unwearied exertions the Association is infinitely indebted. The objects of the institution are—(1) the training of nurses; (2) the supplying the public with nurses; and (3) nursing the sick poor. Under each of these heads a large and satisfactory amount of work has been accomplished. There are at present in the institution twenty-seven nurses duly qualified for service in private families, and, during the year, they have attended two hundred and one cases. Six nurses are at work amongst the poor in the different districts of Derby, and seven hundred and seventy-five families have benefited by their attendance. We are glad to observe that several of the clergy have availed themselves of this agency for the relief of their sick poor. There can be no doubt that in this way the relief will be more effectual and more economical than when left to the ordinary district visitors. In working among the poor, the nurses not only give personal attendance, but more than 5,000 dinners, more than 4,600 light puddings, and more than 5,800 pints of beef-tea have been sent out from the institution; representing an outlay upon invalid diets alone of £363:7:7. Besides these, a large number of couches, Bath chairs, perambulators, air-pillows, waterproof sheets, and other appliances for the sick have been in constant circulation. The six nurses are employed in all quarters of the town; but one has been specially engaged with a guaranteed salary for one particular district; so that all the sick poor in that neighbourhood, and not merely the worst cases, may receive attention. It is much to be desired that the number of such district nurses could be largely increased. So useful and prosperous is the Derbyshire Nursing Association

that it has been under the necessity of enlarging its premises—£2,200 have already been contributed out of the £6,000 which will be required for the purpose; and it is a strong proof of the estimation in which the Association is held in the town, that the conveyancer and the architects have offered their services gratuitously, and that a contractor has undertaken to build at cost price.

## SCOTLAND.

A VALUABLE series of lectures is being delivered in Edinburgh by Dr. Arthur Mitchell, as Rhind Lecturer on Archæology, in which he is dealing with the subject of primeval man and his age on the earth.

ON Saturday last, forty men were engaged all day cutting snow on the road between Castleton, Braemar, and the spital of Glenshee. The road has been blocked since early in December.

THE Local Authority of the Burgh of Forfar last week lodged in the Court of Session—in consequence of a process raised against them by the Board of Supervision to compel them to provide a sufficient and proper water-supply for the burgh—a minute, embodying a scheme for securing such a provision.

THE death-rate of Edinburgh for last week was again low, being little above the average of the whole of last year. The deaths registered were 83, which gives a death-rate of 21 per 1000 of population; from zymotic diseases there were nine deaths, seven of which were caused by whooping-cough.

THERE died at George Town, near Dumfries, on the 21st ultimo, Mary Currie, widow of a farmer, John Currie, at the age, it is stated, of one hundred and six years. An elder sister of the deceased still resides near Lochmaben. Last winter, Mrs. Currie walked twice to Dumfries, a distance of two miles. Except that her hearing was impaired, she was in possession of all her faculties to the last.

#### MEDICINAL PLANTS OF SCOTLAND.

AT the closing meeting of the North British Branch of the Pharmaceutical Society, a paper was read by Dr. Craig on the Medicinal Plants of Scotland. He pointed out that there were about sixty-three natural orders official in the *British Pharmacopæia*, and that of these, about one-third were represented in Scotland. Upwards of three hundred and sixty plants were official in the *British Pharmacopæia*, and of these twenty-four or twenty-five were indigenous to Scotland, or about one in fifteen of all medicinal plants. A paper was afterwards read by Dr. A. P. Aitken on Fermentation, in which he dwelt on the value of Pasteur's researches on this subject, and the practical advantages which brewers might derive from a careful study and application of Pasteur's doctrines to the processes of brewing.

#### ABERDEEN UNIVERSITY.

THE ceremony of "capping" the students who were successful in the recent medical examinations took place in the Marischal College Buildings on the 26th ult., in presence of a large assembly, composed chiefly of ladies. The students mustered in strong force, but no disturbance took place beyond a good deal of singing, which was kept up during the whole ceremony. Fifteen candidates received the degree of M.D.

#### FIRE AT THE EDINBURGH ROYAL INFIRMARY.

AT about four o'clock last Saturday afternoon, a fire broke out in a wooden erection at the Royal Infirmary used as a dining-hall by the ward assistants. The building was constructed about a year ago, and, though situated in the rear of the infirmary, it communicated with the latter by means of a wooden passage. No one, it is said, was in the hall after half-past one o'clock on Saturday, and it was three hours later when flames were first observed issuing through the roof. In-



formation was at once sent to the police-office, and a division of the fire-brigade lost no time in turning out to the fire. By a combined attack at several different points, the fire was rapidly subdued. The roof, however, was partially burnt off, the windows were destroyed, and considerable damage was done to the furniture in the hall. It is not known how the fire originated.

#### SUICIDE OF A PATIENT IN THE GLASGOW INFIRMARY.

A CASE of most determined suicide occurred in the Royal Infirmary, Glasgow, last week. On Friday, a woman, named Elizabeth Pater-son, thirty-one years of age, was received in the infirmary from a police-office, where she had been taken on account of having made an attempt to kill herself by cutting her throat. She was badly hurt, and, being in a delirious state, was closely watched by a nurse. About six o'clock on Sunday morning, she jumped out of bed, and, rushing to the window of her ward managed, before she could be prevented, to draw down the upper sash. The nurse did all in her power to restrain the unfortunate woman, but, in spite of all her efforts, she got outside and threw herself from the window, which is four storeys high. Falling on the pavement, she was so seriously injured that she died in a few minutes.

#### UNIVERSITY OF EDINBURGH.

IN connection with the extension of the Edinburgh University Build-ings, a communication has been received from the Treasury, stating that the assurance given by the Building Committee that the rest of the requisite funds over and above the £80,000 of Government grant promised will be forthcoming, is hardly sufficient. Recognising, how-ever, the vigorous efforts the Committee have made, the Lords have so far modified the conditions that, if by the time the estimates for 1878-9 are being prepared, a further sum of £10,000 has been ob-tained from private sources, the first instalment of £20,000 from the Government subscription will be provided.

#### A STROKE OF FORTUNE.

IT is not often that we have to record so welcome and large a windfall as that which has descended into the lap of Dr. Proctor, a physician practising in the little village of Rhynie, Aberdeenshire. By the death of Miss Macpherson Grant, the wealthiest heiress of Scotland, who died a fortnight since intestate, he unexpectedly, as a cousin and nearest of kin, inherits one of the most beautiful estates in Scotland, together with a fortune of between £50,000 and £80,000. Four other relatives of Miss Grant also, in by no means wealthy circumstances, be-come entitled to sums of £50,000 each. The story is altogether a romantic one. Miss Macpherson Grant was herself the daughter of a country medical practitioner, and, by a singular train of events, became the sole heiress to the estate of an uncle, the traditional nabob of the last century, who had realised a great fortune in the Indies. Many years since, Miss Grant concluded a sort of compact with another lady: they mutually undertook to abide together in single blessedness. A year or two since, Miss Grant's companion broke her part of the compact by marrying. From the moment that this resolution was announced, Miss Grant refused to speak to her life-long friend; and, although for three or four months afterwards they lived in the same house, and, we believe, slept in the same bed, she exchanged no word with her. Subsequently she revoked the will by which she had left the whole of her property to her once faithful friend and companion in celibacy. It is stated that this lady is preparing to dispute the revocation on the ground of mental incapacity. We have mentioned only some salient points of this history, which is, indeed, a strange romance of modern life.

### IRELAND.

DURING the quarter ending March 31st, measles was very prevalent in Belfast, no less than 101 deaths having taken place during that period.

THE second of the course of Sanitary Lectures was delivered last week in Dublin by Dr. Emerson Reynolds, who selected for his address "The Story of a Mountain Stream"; and last Wednesday the third of the series was given by Dr. Tweedy.

#### UNIVERSITY OF DUBLIN.

THE President of the College of Physicians, Dr. Gordon, has been recently acting at the Commencements and Medical Degree Examinations in Trinity College, in the place of the Regius Professor of Physic, Dr. Stokes, whose state of health, we regret to say, compels him to keep his room.

#### PRACTICAL PHYSIOLOGY.

A MEETING of the teachers of physiology in the Dublin schools was held on Friday week. It was agreed, by the majority of the pro-fessors present, to recommend the Council of the College of Surgeons to receive a certificate of attendance on a voluntary course of practical physiology in lieu of one of the three courses of lectures on anatomy and physiology now required from candidates for the Letters Testi-monial. The fee for the practical course is proposed to be five guineas. We trust that the Council of the College will have the far-sightedness to perceive that, by adopting this recommendation, they will be acting for the best interests of the College and of the students of the Dublin school.

#### TRAFFIC IN DISEASED MEAT.

MR. NEWMAN, valuer of diseased cattle under the Board of Guardians of the North Dublin Union, was prosecuted at Blanchardstown Petty Sessions last Monday for having sold a diseased cow to a butcher to be sold again to the public as food. The evidence of Dr. Cameron, City Analyst, showed that the animal was far advanced in disease, be-ing one of the worst cases he had ever seen. The defence was that the cattle-inspector had told the defendant that the animal was fit to eat; and, he being absent, the case was adjourned for his evidence.

#### THE ARMY MEDICAL DEPARTMENT: MEMORIAL FROM THE COLLEGE OF PHYSICIANS OF IRELAND.

A MEMORIAL has been recently forwarded to the Right Hon. G. Hardy, Secretary of State for War, by the President and Fellows of the College of Physicians, in which they point out that the result of the abolition of the regimental system and the general policy of the unification of the Army Medical Department as carried out by the Circular of 1873, has been to deprive medical officers of those social comforts and advantages which, under the Royal Warrant of October 1858, had induced many of them to enter the service; and that the sudden abrogation by the Warrant of 1873 of the privileges set forth in the Warrant of 1858, without adequate compensation, cannot but be looked upon as most unjust. The memorialists draw attention to the fact that the privilege and allowances in reference to forage and servants, granted as an ap-panage of rank by Royal Warrant 1858, existed to medical officers prior to issue of Royal Warrant 1873, are now practically withheld from the medical officers promoted subsequently to that date, forage being granted to medical officers only when horses are deemed neces-sary for the performance of their duties. They also regret to observe that the medical officers are not permitted to exercise a disciplinary control over the men of the Army Hospital Corps; that medical officers attached to hospitals are charged with a number of duties of an unprofessional character, involving a knowledge of matters entirely outside the province of a medical officer, without commensurate pay or assistance, additional duties and responsibilities being thrown upon them. Besides these, medical officers are dealt with differently from the departmental officers as regards leave, sick leave, the privilege of exchange and quarters; sixty-one days' leave only being granted in the year to the medical officer, who is obliged to nominate a substitute to perform his duty; and, as regards sick leave, only six months are granted on full-pay, beyond that period a medical officer is placed on half-pay, even though his illness may have been incurred in the service.



Also, that no medical officer who has completed three years' home service is permitted to exchange; and that senior medical officers of many years' services, and holding in many instances the relative rank of Major and Lieutenant-Colonel, are required to perform duties hitherto always performed by junior medical officers, such as garrison orderly duties, inspecting prisoners and cells, attending on rifle practice, etc., thereby lowering the status of the senior executive medical officers. The memorialists express strongly their disapprobation of the system of compulsory retirement of medical officers after ten years' service, as set forth in the Warrant of 1876; and, in conclusion, urge that the several matters referred to in the memorial may be amended, so as to remedy the grievances under which the medical officers labour, and effect the changes the memorialists suggest, which they believe will conduce to the greater efficiency of the Medical Department of Her Majesty's Land Forces.

#### ROYAL COLLEGE OF SURGEONS OF IRELAND.

A MEETING of the Fellows was held on Tuesday May 1st, pursuant to the provisions of the Supplemental Charter, to witness the election of eight examiners to examine candidates for Fellowship and Letters Testimonial; three examiners for the diploma in Midwifery; and three to examine students as to their proficiency in General Education. The outgoing examiners in General Education and for the diploma in Midwifery were unopposed, and were all re-elected; but those for Letters testimonial and Fellowship were opposed by Messrs. Foy, Frazer, Little, Robinson, and Swan; with a result of substituting the latter gentleman for Mr. Gogarty. The following were elected. *For Letter's Testimonial and Fellowship*: Benjamin Wills Richardson, Edward Stoker, John Barker, Edward O'Grady, William O'Leary, Henry Gray Croly, William Thomson, Robert L. Swan. *Examiners in Midwifery*: Henry Croly, senior, John R. Kirkpatrick, William Roe. *Examiners in General Education*: Frank James Davys, Michael Joseph Malone, Robert Morton.

#### PATHOLOGICAL SOCIETY OF DUBLIN.

THE closing meeting of this Society for the session was held on Saturday last, the President, Dr. Hayden, being in the chair. The specimens exhibited were numerous and of unusual interest. After the exhibition of the specimens, the President proceeded to award the gold medal of the Society. The subject chosen for competition was "The Pathology of the Oesophagus", and two essays were sent in. The President announced that the medal had been awarded to the author of the essay bearing the signature "Kanna", and requested that gentleman to come forward. Amidst the acclamations of the students, Mr. John Knott made his way to the President, who, in presenting him with the medal, complimented him in flattering terms upon the execution of his essay, which in point of research, systematic arrangement, and originality of thought was one, he said, of exceptionally rare excellence. Mr. Knott is a student of the School of the Royal College of Surgeons, and a pupil of the House of Industry Hospital. After the presentation of the medal, a special meeting of the Society was held, according to notice, for the consideration of the report of the Conference of the Council and the Committee, appointed at last general meeting, to consider the reforms needed by the Society. The Dublin Pathological Society, while the parent of all similar societies, differs from them in the presence of students and the absence of discussion at its meetings. Certificates of attendance have been, up to the present, issued to students admitted by members' tickets who have regularly attended the meetings of the Society; and at the close of each session a gold medal has been awarded for the best essay on a subject selected by the Council. Some members of the Society being of opinion that it would be advisable to have discussions on the specimens shown, as in the London Society, considered that, as an almost necessary consequence, students should be no longer admitted to the meetings. It was likewise urged that the students could not benefit to any extent by their attendance at the Society's meetings, and that pathology could not be learned in that way.

The Conference having carefully considered these points, advised that in future discussion be permitted at the meetings of the Society, and this was unanimously adopted by the meeting. With regard to the exclusion of students, a middle course was proposed, viz., that they should withdraw after seeing the specimens, and discussion then take place thereon. It was evident that this plan was an infeasible one, and an amendment was proposed and carried by a large majority (25 to 6), that students be excluded altogether. For the future, no certificates will be granted to students for attendance at the meetings of the Society, and the medal will not be awarded. This exclusion of students is looked upon with great disfavour by a large number of the members of the Society, especially the senior ones. Already, some of the original founders of the Society and a few of its most respected members have, we believe, seceded, and a further secession is feared. We trust, however, that the "reformed" Society will, in the future session, set to work with increased vigour, and thus give a fresh impetus to the study of that branch of science which the old Society did so much to establish.

#### THE DUBLIN CORONER'S "MEDICAL WITNESS" FEES.

THE Court of Queen's Bench have granted a conditional order for a *certiorari*, for the purpose of obtaining the opinion of the Court with respect to a decision made by the Public Auditor, allowing a fixed salary of £75 a year, paid by the Corporation to one medical man (Dr. Egan), instead of payment by fees per inquest to any qualified practitioner summoned by the coroner, as provided by Act of Parliament (9th and 10th Vict., chap. 47). It will be remembered that the subject has been already referred to in the JOURNAL; and that the first action in the matter was taken by the President, Dr. Jacob, and Council of the Irish Medical Association.

#### HEALTH OF DUBLIN.

THE total number of deaths registered in the Dublin Registration District, during the week ending April 21st, represented the enormous annual mortality of 36.5 in every 1,000 of the population by the census of 1871. Forty-eight deaths resulted from bronchitis (being twenty-five over the average number in the corresponding week of the previous ten years), and fourteen from pneumonia and unspecified lung disease. Whether it is that the high death-rate is frightening the Corporation into abnormal activity, we cannot say; but we are glad to observe, within the last week, that the Sanitary Police have been successfully prosecuting several persons in both the Northern and Southern divisions of the City, and also in Kingstown, for having their premises in a filthy state, and their houses unfit for human habitation. The average rate of mortality for the week ending Saturday last was 28.9 per 1,000. One of the thirty-two deaths from zymotic diseases registered during the week was that of an infant six months old from small-pox. The deputy-registrar of the district in which this death occurred states that he has failed to trace the origin of the infection.

#### HEALTH OF IRELAND FOR 1876.

THE births registered during last year amounted to 140,438, affording a ratio of 1 in every 37.9, or 26.4 per 1,000 of the population, against an average rate of 27.0 per 1,000 of the previous ten years. The deaths registered numbered 92,499, being equal to a ratio of 1 in every 57.5, or 17.4 per 1,000, being 0.3 per 1,000 persons over the average rate for the ten years 1866-75. The deaths from the eight principal zymotic diseases amounted to 8,820, being 9.5 per cent. of the total deaths, and equal to 1.66 in every 1,000 persons living. The average annual number of deaths from these diseases during the previous ten years was 12,222. Only 21 deaths were caused by small-pox, from which 535 deaths resulted in the preceding year; measles caused 593; scarlet fever, 1,992, being only one-half the number in the preceding year, and nearly 1,000 under the average for the ten years 1866-75; diphtheria, 347; whooping-cough, 1,439; fever, 2,530; diarrhoea, 1,828; and simple cholera, 70.



## ROYAL COLLEGE OF PHYSICIANS OF LONDON.

A MEETING of the Fellows of the Royal College of Physicians took place on Thursday, April 26th, when the following members nominated by the Council for election to the fellowship were all elected: William John Little, M.D. Berlin, 18, Park Street, W.; William Henry Parsey, M.D. Lond., Hatton, Warwick; Charles Rooke France, M.D. Edin., Plymouth; Christian Godfried Heinrich Bäumler, M.D. Erlangen, Freiburg in Baden; George Vivian Poore, M.D. Lond., 30, Wimpole Street, W.; William Jelly, Madrid; Evan Buchanan Baxter, M.D. Lond., 28, Weymouth Street, W.; Frederick Thomas Roberts, M.D. Lond., 53, Harley Street, W.; Robert Farquharson, M.D. Edin., 23, Brook Street, W.; David Ferrier, M.D. Edin., 16, Upper Berkeley Street, W.; Norman Moore, M.D. Camb., St. Bartholomew's Hospital, E.C.

The following By-law was also enacted for the second time. Any candidate for the College licence, who shall have obtained a degree in medicine or surgery at a British, colonial, or foreign university recognised by the College, after a course of study and an examination satisfactory to the College, shall be exempt from re-examination on such subjects as shall in each case be considered unnecessary.

## MILITIA SURGEONS.

WE have received many warm and gratifying letters of thanks from militia surgeons, referring to the deputation of the Parliamentary Bills Committee of the Association to Mr. Hardy, of which we last week published the report. Mr. Ernest Hart, while cordially acknowledging the very kindly recognition conveyed in these letters, desires to ask the surgeons of militia, who are interested in this question, to favour him also with their criticisms of Mr. Hardy's reply, and with any statement of fact or argument which may be used to carry the question a step further, and to assist in bringing the case under the favourable attention of the House of Commons.

We are requested by Mr. Ikin to publish the following letter, addressed to the Chairman of the Parliamentary Bills Committee:—

"Dear Mr. Hart,—Allow me, as senior militia surgeon in the North of England, to thank you most sincerely for your able and unanswerable statement on Monday last. I am sure the whole body of militia surgeons will feel grateful to you, and all the other gentlemen who kindly joined the deputation. I hope these acknowledgments will be allowed to appear in the next number of the BRITISH MEDICAL JOURNAL, and believe me, dear Mr. Hart, yours faithfully,  
"Ernest Hart, Esq."

"J. I. IKIN.

## THE AMENDMENT OF THE MEDICAL ACT.

WE have just received from Dr. R. H. S. Carpenter, Honorary Secretary of the East London Medical Defence Association, a draft of the proposed Bill for the amendment of the Medical Act, 1858. The object of this Draft Bill is to repeal and improve the 40th section of the Medical Act, 1858, in order that no person shall take a medical title for the purpose of gain, unless entitled to do so by qualification, which also must be registered; and, again, that no person shall be allowed to practise for gain until he becomes properly qualified to do so. The 82nd section of the proposed Draft Bill is intended to carry out the original intention of the 42nd section of the Medical Act, 1858, which provides that penalties recovered under the Act shall be paid to the treasurer of the Medical Council. Up to the present time, the metropolitan police-receiver has claimed and retained the penalties recovered, under the provisions of an old Act of Parliament which the 42nd clause of the Medical Act was intended to override. The third section of the new Draft Bill proposes the recognition of respectable foreign diplomas. It is worded thus: "A doctor of medicine or bachelor of medicine of any foreign or colonial university whose examination is proved to the satisfaction of the Council by such University to be equal to that required, for the time being, by the College of Physicians of London for their qualification of membership" [shall be entitled to registration]. We have of many times indicated the necessity for passing some such short Bill as this, in the interests of the profession and not less of the public, that we are disposed heartily to welcome the spirit of this Bill. We believe that it is likely to meet with very influential support both in the Medical Council and in Parliament. In the meantime, it will be desirable that it shall be submitted to the frank criticism of all sides, in order that whatever settle-

ment of this important question is arrived at may be generally satisfactory to the profession at large. The Bill has been introduced into the House of Commons by Dr. Lush, Sir Trevor Lawrence, Lord E. Fitzmaurice, and Mr. Grantham.

## CONGRESS OF GERMAN SURGEONS.

## I.

THE sixth Congress of the German Surgical Association was held in Berlin this year as usual under the presidency of Professor B. von Langenbeck, and was an unusually brilliant meeting. The Society, which meets annually in Berlin, possesses attractions of no ordinary nature for those who devote themselves to the study and teaching of surgery. In the various clinics and in the University of Berlin, where its meetings were held, there were usually present from three to six hundred surgeons, besides numerous students from the Berlin school; and the Congress had drawn together the noblest representatives of German surgery. Visitors were present from nearly every country; Russia, Austria, America, England, and Scotland, being all represented.

The amount of scientific matter brought forward and digested is far too great to allow a complete *résumé* to be given in these pages; but it may be of interest to the English surgical world to have a short sketch of the doings of its German *confrères*.

A preliminary meeting to shake hands and exchange greetings took place on the evening before the real work began, and, after a social chat, a *nause Süssung*—a clay-moistening—was indulged in in the supper-room of the splendid new hotel, the Kaiserhof, which, after being completed and burnt down, is now rebuilt. Here, on the evening of Tuesday, April 3rd, might be seen the possessors of names that are illustrious enjoying a quiet supper, a cigar, or a glass of beer, in the sensible homely unaffected German fashion.

The earnest work commenced next day, Wednesday, April 4th, when the large hall of the University was crowded with an attentive audience. In a few well-chosen words, Professor von Langenbeck opened the Congress, welcomed those present, paid a touching tribute to those who had died within the year, especially Simon of Heidelberg and Sir William Fergusson, and resigned his presidency. Professor Volkmann of Halle proposed that the life-presidency be conferred on Professor von Langenbeck; this he refused, but accepted the office for another year. The other formal business was transacted, and the meeting was ready for the scientific work within ten minutes of the opening hour.

Hüter of Greifswald commenced with a discussion of the question of Partial Resection of the Elbow-Joint. He gave his own experience, *pro* and *con.*, and indicated the value of preserving, where it was possible, the olecranon and the attachment to it of the triceps, a matter of much import for the future power of the limb.

Busch of Bonn gave a series of Clinical Studies on Epithelioma, that had led him to practical results of great interest and value. He called attention to the hitherto unsuspected part which is played in epithelioma and cancer by the mechanical retention of the epithelial (cancer) cells. In epithelioma of the lip, for instance, the crusting over of the growth in its earliest stages necessitates and aggravates the burrowing of the cells and their invasion of the deeper parts. Hence the importance of constant removal of the crusts by alkaline lotions and applications, especially in the forms where the disease appears as a saucer-shaped ulcer. He detailed several cases which had been benefited and even cured by simple cleanliness and alkaline applications. In tumours of the mamma, he also drew attention to the importance of the same factor, and adduced cases from his own experience where, by careful removal of all loose epithelium and crusts from the nipple by such applications, and by kneading and manipulating the mamma, he had been able to squeeze out through the lacteal ducts large masses of retained epithelium, and to cause the disappearance of tumours which were indistinguishable from cancer in an early stage. Busch showed slides and sections in support of his observations.

On the third day (Friday) of the Congress, Professor Esmarch of Kiel drew attention to the fact that we are not warranted in dismissing every case of cancer as incurable where an operation cannot be performed. He recalled the history of a lady who, when declared incurable, took arsenic on purpose to destroy her life. She failed in her design, but cured her disease. He adduced, with illustrative drawings, a large number of patients the subjects of cancer or epithelioma, or of diseases indistinguishable from them, where large doses of iodide of potassium or of arsenic had cured the apparently hopeless malady.



Professor Lücke of Strassburg followed with an exposition of the results obtainable by Percussion of the Bones in the Living, and declared his conviction that by practice it is possible in favourable situations to diagnose the existence of central abscesses and sarcomata in bones, partly from the note obtainable on percussion, and partly from the characters of the pain awakened by the proceeding.

Gussenbauer of Liège described a Case of Locked Jaws from Cicatricial Contraction, where he performed a plastic operation on the cheeks and mouth that enabled him to obtain a success impossible by any of the methods hitherto employed. He divided the cicatrix, turned in a flap from the parotid region so that the cuticle lay inwards, divided the neck of the flap after union was obtained, and covered the outer surface of the flap by a subsequent plastic operation, thus obtaining a new cheek with skin on both its surfaces.

A paper on the operative treatment of knock-knee concluded the business of the first day.

In the evening, after each day's work, most of the members assembled for convivial purposes in a restaurant in the Kaiser Gallerie, a splendid new arcade Unter den Linden.

## MEDICO-LEGAL CASES.

### CERTIFICATES OF DEATH.

At the Southwark Police Court, on April 19th, Mr. Charles Downes was summoned under the Births and Deaths Registration Act for making a false certificate or declaration respecting the death of Louisa Moore. Mr. Pridham, who prosecuted on behalf of the East London Medical Defence Association, stated that the defendant practised in a very poor neighbourhood, and that he employed an unqualified assistant. The child in question was taken to him, and he attended to it. The child died, and the defendant gave the mother the following certificate: "I certify that I attended Louisa Moore, nine months old; that I last saw her on the 4th of March last; that she died on the 14th, at 7, Adams Place; and that, to the best of my knowledge and belief, the cause of death was as hereunder written—Primary convulsions. One day. Witness my hand this 14th day of March, 1877.—Signed, Chas. Downes, M.R.C.S., White Street." Defendant never saw the child, and, therefore, had committed a very serious offence, for which he was liable to a penalty not exceeding £10, or, if indicted, to a term of imprisonment not exceeding two years. The facts came to the knowledge of the coroner, and an inquest was held, when the coroner censured the conduct of Mr. Downes and forwarded his certificate to the proper quarter, and the Association considered it its duty to take the present proceedings. Johanna Moore, the child's mother, said that the child had been attended by Mr. Benton, the defendant's assistant. Shortly after the death, she called at defendant's and told him the child had died suddenly in fits, and asked him to give her a certificate of death. He replied that he would, and the certificate produced was handed to her by the assistant. The defendant never saw the child at all. Emma Frisby said she was present at the death of the child; and, after the death, she accompanied the last witness to defendant's, and saw him and his assistant. When the certificate was asked for, Mr. Downes said, "I can't give her one"; but afterwards the assistant filled one up and took it to Mr. Downes and brought it out signed. Witness paid him sixpence for it. George Benton, the defendant's assistant, after being cautioned by Mr. Benson, said he had no legal qualification. The child was brought to him, and he gave the mother some medicine. He recollected her coming for the certificate of death, when Mr. Downes wanted him to fill one up and sign it. Witness told him that would not do under the new Act, as the Registrar would not receive one unless signed by a qualified medical assistant. Witness, at the request of Mr. Downes, filled a certificate up, and the defendant signed it. The sixpence was taken for medicine supplied some days before, and not for the certificate. The defendant assured his worship that he had no intention of committing fraud or any breach of the law, after thirty years' practice in a poor and very thickly populated neighbourhood. In fact, he frequently attended cases and supplied medicine to many who objected to make their distress known to the parish officer. When he signed the certificate, he thought that doing so in the presence of his assistant would not be objected to. He afterwards found out his mistake and regretted it. He did not take sixpence for the certificate, as he never charged for one. Mr. Benson observed that the Association had very properly brought the defendant before him, as it was important that the Act of Parliament should be strictly carried out, for, if certificates were to be signed by medical men who never saw the deceased, there would be an opening for foul play and serious excesses. It was a very dangerous practice. He fined the defendant £5, and 2s. costs.

## ASSOCIATION INTELLIGENCE.

### SOUTH EASTERN BRANCH.

A MEETING of the Executive Council of this Branch will be held at the Bridge House Hotel, London Bridge, on Friday next, May 11th, at 3 o'clock.

CHARLES PARSONS, M.D., *Honorary Secretary*.  
2, St. James's Street, Dover, May 4th, 1877.

### METROPOLITAN COUNTIES BRANCH.

A GENERAL meeting of this Branch will be held at the rooms of the Medical Society of London, 11, Chandos Street, Cavendish Square, on Friday, May 11th, at 8 P.M., when Mr. S. S. ALFORD will open a discussion on the Necessity for Legislative Measures in the Treatment of Habitual Drunkards.

ALEXANDER HENRY, M.D. } *Honorary Secretaries*.  
ROBERT FARQUHARSON, M.D. }  
London, April 21st, 1877.

### SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE meeting of this Branch which was to have been held at Llanelltyd will be held at Swansea, on Tuesday, May 15th.

ANDREW DAVIES, M.D. } *Honorary Secretaries*.  
ALFRED SHEEN, M.D. }  
May 1st, 1877.

### BATH AND BRISTOL BRANCH.

THE sixth ordinary meeting of the session will be held at the Work House, Bath, on Thursday, May 24th, at 7.15 P.M.: H. F. A. GOODRIDGE, M.D., President.

The evening will be devoted to a discussion on "The restraint of Hæmorrhage during and subsequent to Operations on the Limbs". The subject will be introduced by Mr. Nelson C. Dobson, F.R.C.S. R. S. FOWLER, Bath. } *Honorary Secretaries*.  
E. C. BOARD, Clifton. }

Bath, April 24th, 1877.

### SOUTH MIDLAND BRANCH.

THE annual meeting of this Branch will be held at the Town Hall, Northampton, on Thursday, May 31st, at 2 P.M.; President, H. W. SHARPIN, Esq.; President-elect, WM. MOXON, Esq.

Gentlemen who intend to read papers, or be present at the dinner, are requested to communicate early to the Secretary.

J. M. BRYAN, M.D., *Honorary Secretary*.  
Northampton, May 1st, 1877.

### STAFFORDSHIRE BRANCH: ORDINARY MEETING.

THE second ordinary meeting of this Session was held at the London and North-Western Railway Hotel, Stafford, on Thursday, February 22nd, 1877: Present, Dr. MILLINGTON, President, in the Chair, and twenty-seven members.

*New Members.*—The following members of the Association were duly elected members of the Branch: Dr. T. T. Broomhill, Mr. T. E. D. Bryne, Mr. John Pearson Cresswell, Mr. W. H. Davies, Mr. J. Walton Hamp, Mr. H. W. Larkin, Mr. F. E. Manby, Mr. J. P. Massingham, Mr. G. H. Percival, and Mr. L. Tait.

*Specimens.*—Mr. VINCENT JACKSON exhibited two Calculi removed successfully from the Urinary Bladder. One weighing 810 grains was removed by lateral lithotomy from a very delicate boy aged 12, the subject of a severe lumbar spinal curvature. The second, weighing twelve grains, was removed by lithotomy from a gentleman aged 56.

Mr. J. HARTILL exhibited specimens of Lithic Acid and Oxalate of Lime Calculi of large size passed *per urethram* by different patients.

*Communications.*—1. Dr. J. H. TYLECROFT read a paper on the Efficacy of Revaccination.

2. Mr. J. H. HARTILL read Short Notes on Two Cases of Foreign Bodies in the Trachea.

### MIDLAND BRANCH: MONTHLY MEETING.

THE sixth and last monthly meeting of this Branch was held at the house of the President, on Friday, April 20th.

A paper was read by Mr. JOSEPH WHITE, President of the Branch, on the Progress of Surgery during the past Thirty Years.

A cordial vote of thanks was accorded to the President, both for the paper, and his kindness in entertaining the members during the winter months.



## SPECIAL CORRESPONDENCE.

## VIENNA.

[FROM AN OCCASIONAL CORRESPONDENT.]

*Veneral Wards in the General Hospital.—Treatment of Syphilis.—Regulation of Prostitution.—A Novel Test of Sexual Intercourse.—Diseases of the Throat.—Stenosis of the Air-passages.—Diseases of the Ear.—Instruction in Midwifery and Gynecology.—Dissecting Rooms.—Practice in the Turkish Army.*

TURNING now to the venereal wards, it will be found that the beds are numerous (nearly 300), but from the customs of the people there would be no difficulty in filling more. Professors Sigmund and Zeissl may be both said to belong to the "dualistic school" as regards the origin of chancre unicist. Dr. Auspitz, who has charge of the department for syphilis and skin-diseases at the Polyclinic, is an unionist in theory, and thinks it is beneficial in some cases to excise chancres. Both he and Professor Zeissl are of opinion that it is possible for an individual to be infected with syphilis more than once in a lifetime; and Dr. Auspitz has been heard to state "that cases of repeated infection are now so numerous, that it is not worth while placing them upon record". However, whatever may be the different views held as regards theoretical points, all agree as to the treatment to be adopted; mercury is never given until the secondary symptoms have begun to show themselves. Iodide of potassium does not meet with that amount of consideration which it is generally thought to merit. For the skin-eruptions of the secondary stage, subcutaneous injections of peptone-mercury are being extensively used, and this preparation is thought to have some influence in combating the severity of the attack; it has the disadvantage of producing occasionally a small slough where the syringe is inserted into the skin. On the whole, it is not difficult to imagine that, if some other preparation of mercury were administered by the mouth, the result would be equally good, and the time of the patient considerably saved. For chronic gleets, medicated bougies, composed of gelatine and some one of the astringents, are highly recommended for private patients. The bougie is worm-like in shape, and its whole length is passed down into the urethra, and there it remains until dissolved. I may state, *en passant*, that the ladies of the *demi-monde* in Vienna are under strict police supervision; no solicitation is allowed in the streets, and none of the women are to be seen in the public thoroughfares alone after dark; twice weekly they must present themselves for medical examination; women of the better class are allowed to choose their own professional attendant, and pay him the requisite fee at each visit out of their own pocket, and in return receive a certificate, for the truth of which the giver is held responsible. The existence of brothels is not permitted by the state. By these means, venereal diseases amongst the public prostitutes are kept in abeyance.

To a recent number of the *Wiener Medicinische Wochenschrift*, a physician in Russia contributed a somewhat amusing article, in which he states that he has discovered, in the breath of those persons who have indulged in the sexual act within six hours, a peculiar odour which infallibly points to the antecedent. As might be expected, the smell is peculiarly strong and lasting in prostitutes, and the writer can detect an unfortunate at a distance of six yards without using his eyes but simply his organ of smell, and has been able to bring home a case of rape by this method of examination. Becoming more personal, the author states that he is so fully convinced of the correctness of his assertions, that, being once engaged to a young and beautiful lady, he was forced to terminate the acquaintance, as, on one occasion when visiting her, he found that the tell-tale odour was emanating from her mouth and nose.

Professor Schrötter's wards for diseases of the throat are naturally a great attraction for foreigners. Each course lasts six weeks, and every morning, Sundays excepted, opportunities are given for each student to use the laryngoscope for himself, Dr. Schrötter passing round from one to the other, ready to give any information or assistance that may be required. Numerous cases of stenosis of the trachea have been treated with more or less success during the present session by means of mechanical dilatation, the instruments employed being those invented by Dr. Schrötter himself. These consist of various sized dilators made of tin; their shape may be conveniently described as triangular with rounded angles, in length twenty millimetres, the entire breadth varying according to the size used. These sizes are twenty-four in number, each one exceeding the preceding in the scale by half a millimetre measured across the broadest side. Through a hole a long piece of string is passed, the two free ends of which are drawn by a stilette through a hollow sound, curved

something like a catheter, and either held in the hand or fastened round hooks on the handle of the sound. A small rod accurately fits the aperture of the tube, and the whole instrument has the appearance of a curved sound terminating in a somewhat bulging manner. An opening is made into the trachea below the point of stenosis and a tracheotomy-tube inserted. A hand-mirror is now used for the introduction of the sound into the larynx; when the dilator has passed the epiglottis and is fairly in the tube, the strings are relaxed and the sound withdrawn over them, the instrument that is left in the windpipe gradually working its way downwards until it fills the strictured portion, when a pair of spring clips is inserted through the tracheotomy-tube and clasps the weight; the strings passing through the hole are left hanging out of the mouth and are used for withdrawing the apparatus, when required. When the dilatation is considered to be sufficient, the tracheotomy-tube is withdrawn and the wound allowed to heal.

In the treatment of laryngeal stenosis, curved hollow tubes of different sizes are used; these are passed through the strictured part at frequent intervals, and are allowed to remain in for five minutes at each sitting. It is very noticeable how many cases of phthisis laryngea are met with in these wards and in the throat department of the Polyclinic, and, on inquiry, it is found that consumption is so common in the city, that in various parts of the country it is known by the name of the "Vienna disease". For the cause of this the climate has generally to bear the blame, as, during the heat of summer, from the nature of the soil and situation of the town, an immense quantity of small dust-particles is always present in the atmosphere; in the winter, the cold is excessive, although the present one has been exceptionally mild; but all seasons are subjected to sudden changes of temperature. It is possible, however, that the careless life of enjoyment led by all classes of the Viennese may have something to say in the matter.

The clinics for diseases of the ear also command much attention, and Professors Gruber and Politzer have a large number of the visitors improving their knowledge of this speciality; and, from the number of the patients, there is much to see and, at the same time, to learn, every assistance being rendered to enable the student to overcome his various difficulties. Both teachers use ear-specula which require a hand-mirror to throw the necessary light, either natural or artificial, into the auditory meatus. For injecting air into the Eustachian tube, Dr. Gruber uses his own modification of Politzer's instrument; this consists of a balloon with a fixed caoutchouc catheter at the end. Instead of making the patient swallow water, as in the other method, at a given time, he is told to say the word "hook" loudly and somewhat slowly, and, while so doing, the air is expelled from the balloon. By the pronunciation of the above word, the root of the tongue is raised and prevents the injected air from escaping through the posterior nares, and it can be ascertained by means of the otoscope that air has been driven through the Eustachian tube. The advantage claimed for this method is, that, when there are many patients to be operated upon, it becomes very tedious to supply each one with a fresh glass of water, and people naturally object to drink one after another from the same glass.

In cases where it is thought necessary to perform paracentesis on the membrana tympani, Dr. Gruber prefers to use for the purpose the galvano-cautery, while Dr. Politzer remains steadfast to the bistoury. For the treatment of chronic inflammation of the middle ear, injections of weak solutions of salicylic acid or of iodide of potassium are the favourite remedies.

In the lying-in wards, the beds are always well filled, and annually six thousand or more women are delivered. Hence, for those wishing to improve their knowledge in midwifery, an excellent chance offers itself. For obstetrical operations on the dead body, there are numerous instructors; in every course, lasting, on an average, five weeks, all the members of the class have one or more opportunities of doing every operation which it is possible to perform on a cadaver and a dead fetus. For gynecology pure and simple, the teaching cannot be so highly spoken of as could be wished; still there is no lack of material for those whose only object is to improve their own manipulative skill.

On paying a visit to the University dissecting-rooms, they will be found to be very small and totally inadequate for the number of students, about two hundred and eighty, who are attending. The accommodation is also not very good, each individual having to find his own towel; but soap, not a large allowance, is kindly provided, as is also a weak solution of Condy's fluid for disinfecting the hands. The supply of bodies is enormous, so much so that a part is only allowed to be kept a week and is then thrown away, finished or not; if it be the latter, a similar portion of another subject is allotted, and the student



completes what he had not done in the previous one. Those dissecting do not waste spirit or covering upon the parts they are working at, but leave them lying fully exposed to the air; dissected parts are kept in a trough in the rooms, preserved in spirit, ready to be used by anyone who wishes to acquire knowledge. The bodies are not, as a rule, injected, but separate parts can be so served, if required, on payment of something extra. Ordinary students for the winter session pay a sum equal to about twelve shillings, and for this receive as many parts as they can dissect.

I had the opportunity, a few weeks ago, of having a conversation with an American surgeon who had just arrived from what was the seat of war. Six months before, he had left Vienna and had joined the Turkish army in a professional capacity, and the account he gave of existing matters is not encouraging for those who are contemplating offering their services on the same side. My informant stated that the food supplied was not excessive in quantity and not good in quality; that the amount of real practice to be obtained was extremely small, and that, to get what was due in the shape of remuneration for services rendered, a large amount of blunt unparliamentary language was requisite. Be this as it may, if those who are thinking at present of rendering aid to the sick and wounded can only be induced to spend their time in Vienna, they will find every opportunity of improving themselves professionally, and in after-life will feel quite satisfied that their labours here were not in vain.

## PARIS.

[FROM OUR OWN CORRESPONDENT.]

*Dr. Peter's Introductory Lecture.*—*Dr. Brouardel's Introductory Lecture.*—*M. Pajot's Introductory Lecture.*—*The Depopulation of France.*—*Infant Mortality.*—*Still-born Children: The "Tours".*—*Prizes of the Temperance Society.*—*The Weather and Deaths in Paris.*

AT the opening of the summer session at the School of Medicine, on March 15th, Professor Peter, recently appointed to the Chair of Medical Pathology, delivered his inaugural address. He began by paying a respectful tribute to the memory of his late masters, Cruveilhier, Monneret, and Trousseau. In speaking of the latter, he said that, as a clinician, he was scarcely equalled, but certainly not surpassed, by any of his contemporaries. He then took a succinct review of the history of medicine, and referred to the difficulties with which it had to contend before it could be ranked as a science—a title which even now some narrow-minded people would deny it. He endeavoured to show to what extent the genius of Laennec influenced its evolution; for Laennec not only invented auscultation, but, at the same time, created a new method. In the history of medicine, he said, the nineteenth century will bear the title of the Laennec century. He next pointed out the part to be played by the physician in society, which, he said, might be summed up thus: "The physician, finding himself in presence of two miseries, physical misery and social misery, is always on the side of the oppressed against the oppressors." M. Peter is a most eloquent speaker, and, but for his voice, which hardly reached the upper benches of the great amphitheatre, may be ranked as a first-rate lecturer.

On March 19th, Dr. Brouardel, who has been appointed to officiate for Professor Tardieu on account of ill health, commenced his course of lectures by recalling to mind the important part which the eminent Professor took in renovating the science of medical jurisprudence in France. He then paid a just tribute to the memory of the lamented Dr. Lorain, who contributed, in no small measure, to raise to its present standard this most difficult branch of medicine, and, had his life been spared, would have rivalled the leading medical jurists of the day. M. Brouardel then dwelt upon the necessity of every medical man possessing a sufficient knowledge of medical jurisprudence, to enable him to afford useful assistance to the ends of justice, as any physician or surgeon who may be found wanting in this respect would mercilessly be held up to disgrace and ridicule.

On the following day, the large amphitheatre of the School of Medicine was crowded, the great attraction being the opening lecture of Professor Pajot. Owing to failing health, brought on by excessive fatigue, he had been obliged for some time to solicit the services of an *agrégé* to replace him *pro tempore*. In this introductory lecture, M. Pajot simply announced the programme of his course, in doing which he said he would leave to the younger aspirants the task of elucidating all that concerns gestation and its anomalies, while he reserved to himself the right of demonstrating the mechanism of parturition and the treatment of its irregularities. He was received with hearty cheers as a sign of welcome, and in the course of his lecture he was frequently interrupted by reiterated applause.

That very sore subject, the steady and progressive depopulation of France, is still very justly occupying the minds of the public. It is one of the first questions to be discussed at the reopening of Parliament. The principal cause adduced generally is the frightful mortality of infancy and childhood; for it has been shown officially that France loses annually 120,000 infants. This is certainly a most important item, and must to a great extent contribute to the diminution of the population; but this is not the only, nor yet the principal, cause. The principal cause, to my mind, lies in non-generation, or the voluntary suppression of the chances of conception—a practice rife among the continental races of Europe, excepting perhaps the Germans; for it is a well-known fact that, in France at least, a sort of contract is entered into by newly married couples, to the effect that they are to have no children or only a certain number.

What is the cause of the excessive infant mortality in France? It is generally admitted that it is due principally to the premature or artificial feeding of infants whether with the milk of animals or any other food; for it has been proved that, while the mortality among infants brought up by wet-nurses is estimated at about 20 per cent., that among others brought up by the hand ranges from 50 to 60 per cent.; whereas the mortality among infants nursed by their own mother is only 5 and never exceeds 10 per cent. These figures are sufficiently eloquent, and clearly point to the remedy.

Another cause of the gradual depopulation of this country is alleged to be the increasing number of still-born children. These, according to Dr. Bertillon, are more frequent among the illegitimate than among the legitimate children, and have, since the suppression of the "*tours*", increased in the proportion of 100 to 133. The frequency of infanticide is also another cause, and this frequency is likewise attributed to the suppression of the "*tours*". These *tours* formed part of the Foundling Hospital, and were established throughout the country, in 1811, for the reception of new-born infants abandoned by their parents. They were merely boxes, which revolved on a pivot, and, on a bell being rung, were turned round by the persons inside to receive any child that might have been deposited in them, without attempting to ascertain who the parents were. The greatest secrecy as to the origin of the children was thus observed; but, since the suppression of the *tours* in 1860, other arrangements have been made, and are still put into practice. By the present regulations, the child is admitted officially, accompanied with a certificate of its birth which bears the name and address of the mother only, that of the father not being required. But this system has not the advantage expected, as the number of admissions has not been reduced, while cases of infanticide have increased to an alarming proportion. The arguments for and against the re-establishment of the *tours* are very strong on both sides; and the Society for the Protection of Infants have taken up the subject. They offer a prize of 500 francs (£20) for the best essay on the question, "*Faut-il rétablir les tours?*" The prize is open to all nationalities, but the essays should be written in French, and should reach the office of the Secretary-General of the above Society, 4, Rue des Beaux Arts, Paris, before the 1st November next. The essays must not be signed, but must bear a motto, corresponding with a similar one written on a sealed envelope, which will enclose the name of the author. This will afford British philanthropists and moralists an opportunity of expressing their views on this all-important subject.

The Temperance Society of Paris, founded principally through the efforts of the highly esteemed Dr. Lunier, has also offered prizes on the following subjects. To determine, with the aid of clinical observation and experiments, the difference which, as regards the effects on the organism (the alcoholic strength being equal) exists between natural wines and brandies, on the one hand, and, on the other, artificial or manufactured wines, or wines simply strengthened with the addition of alcohol and brandies of the same origin. The prize for this is 2,000 francs, or £80.—The second question is, to ascertain, with the aid of clinical observation and experiments, whether the addition, to an alcoholic liquor of equal strength, of any other aromatic principle besides absinthe, such as the essence of aniseed, fennel, tansy, and other analogous plants, increases its toxic properties. The prize for this is 1,000 francs.—The third question is on liquors: Give the comparative legislations relative to the sale of liquors in the different states of Europe. Ascertain, in the study of this subject, of what modifications French legislation would be susceptible in regard to the repression of the abuse of alcoholic liquors. The prize is 1,000 francs. The same forms are to be observed as those mentioned above, and the essays must be forwarded to the address of Dr. Lunier, Secretary-General of the "*Société Française de Tempérance*", 6, Rue de l'Université, Paris, and must reach his office before January 1st, 1878.

The very changeable state of the weather which always characterises spring is evidently unfavourable to the general health; for in this



season we have not only to contend with the diseases peculiar to the time of the year, but those of winter and summer are also prevalent. Thus infantile diarrhoea and diphtheria have already swelled the mortality returns. That for the week ending April 19th gives the general mortality as amounting to 1,025, of which 754 were in private houses and 271 in the hospitals. Of the general total, there have been 14 deaths from infantile diarrhoea, 65 from croup and diphtheria, 86 from pulmonary affections, and 207 from pulmonary phthisis. The deaths from other causes do not call for particular notice.

## CORRESPONDENCE.

### PROFESSIONAL CONSULTATIONS.

SIR,—I have long wondered that no one has protested against the manner in which professional consultations are too often conducted in the present day. For some time, no one has endeavoured to call the attention of the profession to the matter, though privately many complain.

Now, so far as my own experience enables me to judge, I have no hesitation in stating that it is quite exceptional for a consultation to be conducted with decorum, and it seems that, with the Brodies, Brights, etc., of bygone days, the courtesies and amenities have departed. In these days of universal progress, when, in our own profession especially, the barriers between the different grades are rapidly disappearing, and the many conventional distinctions of physician, surgeon, and general practitioner are daily becoming less and less defined; no one is so transcendently superior to his compeers that he may revert to the days when the consultant delivered an *ex cathedra* opinion, and handed his prescription to the obeisant apothecary, whose appointed duty was confined to passive obedience to the orders of the physician, be they ever so absurd or inappropriate.

Now that the physician, surgeon, and general practitioner are constantly approaching, by education and intelligence, a common standard, it is the more necessary that in all our mutual relations we should observe every proper courtesy towards each other; and especially, when we meet in consultation, that no one should presume to depart from the recognised mode of procedure.

But what is the too common practice of which I complain? It is that remarks are made and opinions expressed which, intentionally or inadvertently, indicate the diagnosis, prognosis, or treatment of a case before the consultation, properly so called, has taken place. I maintain that the consultant should defer any indication of opinion to the patient or friends till, having heard the history of the case and examined the patient for his own decision, he has conferred privately with his colleague and is at liberty to express his judgment at large; for by a consultation I understand the mutual discussion and counsel of those who are engaged to assist in the treatment of a patient by every practicable means. It would be preposterous to assert that consultations are so conducted usually, and I believe a large section of the profession would agree with me that all these details are continually ignored.

In my young days, I often had the advantage to meet Sir Benjamin Brodie in consultation, and I have a grateful recollection of the kind and considerate manner in which he acted towards me; how delicately he indicated to the patient or his friends any divergence of opinion, and how graciously he sustained me in the confidence of my patient; how he always insisted that whatever he advised was the result of our joint consideration and concurrence, and ratified it by both our signatures.

Now, when one consults in an anxious or doubtful case, what a contrast! The nature of the case declared during the examination, as abruptly followed by the advisable treatment and the probable result, without any consultation or audience even, and, therefore, with little or no regard to one's own opinion and previous advice; and, as has happened to me more than once, the dictum *ex cathedra* met by the remark that the treatment suggested, or rather ordered, had been tried already and failed. Or, again, even supposing all decorum has been observed, there is such despatch that little advantage or consolation accrued to either patient or doctor. Now, if an adequate fee be paid for a consultation, it is manifestly but just that sufficient time should be devoted to it to satisfy all reasonable expectations; yet how often it happens now-a-days that one hears the remark that a consultation has proved abortive for want of time.

No doubt, an ordinary fee is not a sufficient recompense to a busy man whose time is valued by so many guineas an hour. It is, therefore, only reasonable that the fee should be proportioned to the

time occupied by a difficult and obscure case, as is customary with counsel. It is desirable that patients should be informed that a long consultation demands a large fee, and that they should be prepared to pay adequately for time consumed in a consultation. I think that two guineas should be the minimum fee when two medical men meet to consult, at any rate for the first consultation; and, when a first-rate consultant is required to give a differential opinion in a case that demands much time and consideration, it might be raised even as high as five guineas with great advantage to all concerned.

When we consider the momentous importance of a careful and exhaustive consultation in an anxious and difficult case, in which the highest talent is engaged, such a fee does not appear excessive; and I have no hesitation in saying that it would be cheerfully paid, in the assurance that neither time nor trouble would be spared in the investigation. What can be more galling to a medical man who has given long and anxious consideration to a case and expressed a decided opinion on it, than to have that opinion directly negatived by a consultation of a few minutes' duration, in which the case is but half-considered? Personally, I have experienced that mortification more than once or twice, and consequently do not feel very ready to suggest consultations. I have also on several occasions lost my patients through the delusive hopes suggested by consultants. Now, though I do not impute improper motives, the event has occurred so often that I find my faith rudely assailed.

As consultations should, and indeed must, take place for the sake of both patient and medical man, it is imperative that they should be so conducted as not to disparage those who participate in them more than is absolutely unavoidable, and I maintain that only very exceptional circumstances can justify a consultant in taking charge of a patient so placed.

If this letter be the means of directing professional opinion to bear on the subject of consultations, I trust you will not grudge the space for it in your columns.—I am, sir, faithfully yours,

London, April 1877.

J. C. WORDSWORTH, F.R.C.S.

### HIPPOCRATIC MEDICINE.

SIR,—In your leader of April 21st on the Hippocratic Medicine, you dissent from Dr. Duncan's opinion that it is futile to hope for an era in medicine other than those of Hippocrates and of the fifteenth century, and you go on to say that it is less discouraging to hope for a scientific and positive era. I entirely coincide in your view, and, as some speculations and experiments of mine not yet published, but which may some day see the light, traverse some of the ground in question, I propose, with your permission, to say a few words on the subject. The historical aspect of the question would necessarily lead me too far for a mere letter; and, therefore, I shall pass over this part of the subject with this single observation—that it appears to me that nothing of first-rate importance has been said upon it since the days of Cullen. Very much has undoubtedly been done in matters of detail, and some of the observations of our own day are exceedingly valuable.

I do not know that any age in the history of medicine has been so fertile in this way as our own—certainly I know of none which has been more so—but it still appears to me that our time is characterised rather by minute and careful observation than by that greater power of the imagination which comprehends what your leader calls "the confusion of details" in general expressions and formulates general laws. The various "pathies" of our day, with their narrow and sectarian supporters, have not yielded themselves to the force of laws of Nature; the condition in which medicine at present finds herself being, I think, not inaptly comparable with the position in which astronomy was before the vortex-theory fell under the Newtonian laws of motion. In one sense, no doubt Dr. Duncan's observation is correct, in this, namely, that whatever advances we make must be by using the careful and minute observations of our predecessors, and must be by no means contrary to these. But statements which are true so far as they go may yet be comprehended under wider statements, just as Kepler's laws were seen to be contained in Newton's. Kepler's laws were not proved untrue by the statement of Newton, but their importance was much diminished in significance; since, in fact, they sank from the position of general statements into that of particular cases of still more general laws. In the same way, it appears to me that the carefully collected observations of physiology and pathology are destined to lose their importance when more comprehensive formulæ are stated. It is, indeed, because I feel convinced that the not distant future of medicine must take this direction, that I am tempted at present to offer a few remarks which may appear crude, but which nevertheless seem to me to be true.



I suppose it will be admitted that, for the practitioner of medicine and for the public, the import of scientific advance is to be measured by our power of affecting the body favourably in what is called disease. It is not because of our learning, nor our philosophy, nor even so much because of our diagnostic skill, that we are sent for, though all of these, and especially the last, are important, as it is because we are thought to be able to cure disease. The practical question, therefore, for the public and us is this: Is there a science of therapeutics? And, if there be not, is it rational and proper to expect that there ever will be one? For my own part, I should answer the first question by a "No", but the second, I think, should be answered affirmatively. It seems to me that already it is possible to make some general statements which have even the force of laws of Nature. In the first place, assuming the universal existence in all therapeutic action of a thing or agent acting and a body acted on, a statement without any exception must be this.

1. Agents or remedies affect the body in proportion to the quantities in action and inversely as the resistance of the person acted upon. A remedy in this sense would be any and every agent capable of acting on the economy, and would, therefore, include cold and heat, motion and rest, as well as drugs proper. It will be noted (a) that I have put this statement as applying to quantities in action, which must by no means be confounded with quantities administered. Then (b) I do not know of any experiments which determine whether resistance is to be measured directly, or whether the proportion may not be as the square root or some other root of the resisting power. As an instance of what I mean by resistance, probably the best illustration I can take is the power of the body to resist cold. We might take any other standard, such as work, or as power to withstand the administration of some drug, as arsenic, for instance. But it so happens that the amount of energy consumed in raising an unit of weight of water through an unit of temperature is known and has been actually measured, and, as we want a standard for comparison, I prefer to take this. In the process of having a cold bath, for instance, I find I can raise about twelve pounds of water at 60 deg. Fahr. to 69 deg. Fahr. without any inconvenience; that is, there is lost, as is easily seen from the following

simple calculation— $\frac{12 \times 9 \times 772}{2,240} = 37$  foot-tons of energy in this

simple process. If the loss of energy amount to fifty foot-tons, I shiver and am uncomfortable; that is to say, this is the limit of my resistance. Other men, no doubt, have much higher resisting powers, while that of others is certainly lower. If we were to proceed farther and compare this with the specific heat of animal tissue, which some experiments of mine place at about seven hundred and eighty-four foot-pounds, other interesting results would appear; but, for the present, I think this is a basis for the measurement of resistance, and is something to start from. It has, further, the advantage of being a standard for comparison with the application of energy in other directions.

2. All remedies whatever which affect the economy exert a twofold and contrary action in time. If we call these action and reaction, or primary and secondary, then we may otherwise state this law in this form: that the secondary action of any and all acting remedies is contrary to the primary. (Query: Is the secondary action always proportional to the primary?)

3. By virtue of causes at present unknown (perhaps the constitution of the body and of remedies respectively may be the reason), remedies have selective affinity for the body or for parts of it. The selective affinity is to be determined entirely by experiment; e.g., arsenic acts on the skin, iodide of potassium on the fibrous tissues, etc., mercury on the salivary glands, and so on, by virtue of selective affinity.

4. From reasons not yet known, but which may again depend on the constitution of remedies, different quantities of different but similarly acting remedies are required to produce given effects upon bodies of equal resistance. Posology, like selective affinity, must be determined entirely by experiment.

5. The time after which reaction succeeds action is different in the case of different remedies and of differently constituted bodies, and this also must be determined by experiment.

These seem to me to be all laws of Nature in this particular department of science. In practice, it appears to me that their acceptance would introduce law and order where we often at present find only empiricism and chaos. Thus the physician would determine, as he does now, what is the part affected and the causes of the affection, and then he would administer remedies having selective affinity for the affected part in such quantities as would be inversely as the resistance of the person affected (this he might have measured when the patient was in health), and at such intervals as previous experiment might have shown him was the time required in the particular instance for reaction to succeed action.

The importance of this subject, and, if I am not mistaken, its novelty, must be my apology for troubling you with so long a letter.—I am, yours, etc.,

A. RABAGLIATI, M.A., M.D., Surgeon, Bradford Infirmary.  
Bradford, April 23rd, 1877.

#### THE DENTAL REFORM ASSOCIATION.

SIR,—I must beg you will allow me to reply to a letter from Mr. Samuel Cartwright published in your JOURNAL of April 21st, in which it is stated that, at a meeting of the Dental Reform Association at which he presided, I proposed and carried the following resolution, which, in the letter referred to, is placed between inverted commas, after the manner of a quotation, thus: "That qualified surgeons engaged in dental practice who have not thought it necessary to take the licentiatehip shall be debarred by law and under penalty from styling themselves surgeon-dentists, dental practitioners, or dentists." This is a grave mistake on the part of Mr. Cartwright. The only resolution I proposed was embodied in the following words: "That those persons only who possess the licentiatehip in dental surgery of the Royal College of Surgeons shall be entitled to use the designation of dental surgeon, surgeon-dentist, dental practitioner, or dentist." It will be seen, on comparison, that the two resolutions are not identical. Again, Mr. Cartwright should, I think, have quoted Resolution 5, as it modifies all that has gone before and materially affects even the quasi-resolution he has printed as mine. Resolution 5 is to the following effect:—"That nothing in this Act shall apply to the prejudice or hindrance of persons in practice, or to persons whose professional education commenced before the passing of this Act." This at once disposes of the question of the qualified surgeons engaged in dental practice raised by Mr. Cartwright.

The resolution I proposed and carried, with two dissentient hands only held up against it, is based upon, and is consistent with, the facts set forth in two memorials addressed to the College of Surgeons, signed by, and strongly advocated by, Mr. Cartwright, myself, and many others. In the first, dated December 11th, 1855, the following statement is made:—"But a strictly medical or surgical degree cannot in itself prove that the possessor is familiar with the practice of dental surgery, yet the student, feeling the necessity of some sort of recognised qualification, devotes that time to a strictly medical education which should have been shared in acquiring a practical knowledge of dental surgery; hence it happens that men enter upon their professional career having yet to learn those practical details so essential to their legitimate success." In other words, they are, at the onset of practice, incompetent. In the second memorial, presented to the College sixteen months later, viz., April 4th, 1857, the following statement is made:—"The President and Council of the Odontological Society are fully prepared to show that the acquisition of a fair amount of proficiency in the requirements peculiar to dental practice necessitates close application on the part of the student over a period little short of three years; and are of opinion that any attempts to materially shorten that term would be attended with great disadvantage." In fact, Mr. Cartwright and others, myself included, have, in the documents quoted, emphatically declared that a special education extending over little short of three years is necessary for the training of a competent dental surgeon, whether holding a medical or surgical degree or not; and Mr. Cartwright's deeds have supported his words; for he has been engaged in teaching at a special dental school from its foundation up to a comparatively recent period, and even now holds, or held six months back, the treasurership of the London School of Dental Surgery. Yet, after making these distinct declarations, Mr. Cartwright, with some others equally pledged, forwarded recently to the College of Surgeons resolutions which advise that the possession of any medical diploma should annul the necessity of the licentiatehip or special diploma as a qualification for dental teachers and office-bearers. Surely, this is a distinct departure from long held opinions and pledges, and involves the repudiation of special education.

It may be also gathered from Mr. Cartwright's letter that he is prepared to deny to the specially educated dental surgeon the exclusive use of a descriptive title, on the ground that any qualified medical man may designate himself a dental surgeon, although it is admitted by Mr. Cartwright that a general diploma does not indicate special competence. But any person whatever may designate himself a dental surgeon: a fact proved by the failure of a prosecution entered against a dental practitioner who, without a medical qualification, styled himself a surgeon-dentist.

As regards the Dental Reform Association, its aims (so far as I understand them) are to provide in the future a body of highly qualified



dental practitioners who, as such, shall have the exclusive use of a professional designation whereby they may be distinguished from those who practise without a recognised qualification; to obtain an accurate record of existing practitioners and of those persons whose professional education has already commenced, and also to obtain the registration under the title of Licentiates in Dental Surgery of those persons who have taken, or who may hereafter take, the diploma of Licentiate in Dental Surgery of the College of Surgeons.

Now, such a measure would in no way debar the surgeon from performing operations upon the mouth and teeth, but it would hinder him, in common with any other member of the public (for the privilege is now common to all), from declaring himself by the adoption of the special title specially educated, unless he possess the special qualification. Mr. Cartwright further advocates the cause of the member of the College who has studied the specialty, but declines to take the proof thereof in the Licentiate'ship of Dental Surgery. This argument cuts at the root of all professional qualifications. A person may study surgery and decline to take a surgical diploma; but the law will not allow him to be the judge of his own competence, and denies him the use of an unauthorised professional title; and the same rule is quite as much needed for the regulation of the practice of dental as of general surgery.

The need of special education and qualification for the dental surgeon was fully recognised twenty years ago, and effectively met by the establishment of the dental department of the College of Surgeons. Now, the question whether a special education is or is not necessary for the effective practice of dental surgery, as the subject is now understood, is again raised. If it be necessary (and I believe in its absolute necessity), then it is alike necessary for all persons who would practise dental surgery. There can be no exception, for exception would be but another word for incompetence, and this would entail a lowering of the value of the licentiate's diploma. Fortunately, there are now many highly competent dental practitioners who have been educated under the dental curriculum of the College of Surgeons, and it will be for them to declare the value of the education they have received. In fact, a large share of the dental practice, both in London and the provinces, is now held by persons specially educated, and they are quite competent to speak upon this sadly vexed educational question. I am much mistaken if they will not with almost one voice say that, if the licentiate'ship be deemed by the College of Surgeons in any respect an insufficient qualification, let it be made sufficient and complete; but do not degrade it by a forced association with a less relevant medical diploma.

The relative value, from the dental point of view, of the M.R.C.S. and the L.D.S. of the College of Surgeons may be thus stated. The former fully embraces general, but does not include dental, surgery. The latter fully embraces dental and much and sufficient of general surgery. Hence, for the dental surgeon, the licentiate'ship is the needful, significant, and truly relevant qualification.

The heavy charge Mr. Cartwright has laid at my door must be my justification for writing so long a letter. Those of your readers who are interested in the subject will find a *verbatim* report of the meeting of the Dental Reform Association in the May number of the *British Journal of Dental Science*.—I remain, yours truly,

Caterham Valley, April 23rd, 1877.

JOHN TOMES.

SIR,—As a member of the Dental Reform Committee, and, therefore, supposed to be favourable (as I find) to the resolution, the terms of which are given in your last issue, will you allow me space for the accompanying letter, which expresses the feeling of many besides—Yours truly,

EDWIN SAUNDERS.

To the Secretary of the Dental Reform Committee.

April 21st, 1877.

Dear Sir,—It is with very great regret and reluctance that I ask you to regard me as no longer a member of the Dental Reform Committee. In the *BRITISH MEDICAL JOURNAL* of this day, I see a letter from the Chairman containing the text of a resolution passed at the last meeting of that Committee, which I cannot but regard as detrimental to the best interest of our calling, by building up, or attempting to build up, a wall of separation between it and the great surgical body. It has always appeared to me, that our true policy lies in union with the great profession of surgery, and anything which tends to hinder or sever that union must lead to a degradation of our status. Such a resolution, therefore, I can only look upon with sorrow and amazement, more especially as a discouragement to the higher aspirations and generous enthusiasm of the younger members of the profession.—Believe me, yours truly,

EDWIN SAUNDERS.

# THE F.R.C.S. OF ENGLAND.

SIR,—I wish the suggestion made by Professor Humphry, and assented to by Dr. Allfrey, that members of the College be allowed to pass the examination for the Fellowship as soon as their professional acquirements enable them to do so, had been in force ten years ago; and, should it ever come into force, the younger members of the profession will have a golden opportunity accorded them, the want of which when they were students will be regretted by many of ten years' standing.

I think it only fair that any new measure should be retrospective as well as prospective; and that, if greater facilities be granted to the younger members, on the one hand, so, on the other equal facilities should be accorded to those who are members of some years' standing.

I am quite aware of the fact that members of eight years' standing are admitted to the examination for the Fellowship, but I do not think that a very great boon. After being away from a dissecting-room for that period of time, a man's anatomy becomes very rusty, and however deftly he may cut for the stone, tie the femoral, or relieve a strangulated hernia, I think he would hesitate somewhat in describing the posterior occipital space or Meckel's ganglion.

Assuming fifty members yearly take the Fellowship under Professor Humphry's scheme, will that add much to the status of the electoral body of the College? You will gain additional votes, but will you gain additional wisdom? for, as Tennyson says, "Knowledge comes, but wisdom lingers".

There are gentlemen who as members have been in practice many years, have been surgeons to country hospitals, and who, having gained the respect of those they live among, have been made mayors and magistrates for town or county, and whose knowledge of surgery, men and manners, would make them of great value as an electoral body. Some rule should be put in force for the election of such men to the Fellowship.

Had the "obnoxious ten years' clause" come into force, it would not have affected the status of Mr. Woodman or Dr. Allfrey; and I feel sure there are members of the Council and Court of Examiners who would have been well pleased to see their old house-surgeons placed on the list of Fellows; but these must, under existing regulations, pass through their professional career without having any voice in the management of the College.—I am, etc.,

April 14th, 1877.

AN OLD U. C. H. HOUSE-SURGEON.

SIR,—I suppose there is no doubt that one of the objects, and probably the chief one, of the Charter of 1843 was to introduce into the College the principle of representation and election. This should be borne in mind. Professor Humphry, in his letter which appeared in your number of April 7th, recognises this; but he only dwells on the diminution of the numbers of the elective body when the honorary Fellows shall have passed away. I think there are two considerations to which attention should be drawn. The first is that Fellows by examination do not represent the large body of the College, who are as excluded from its government as in the days of old; the second is that the Fellowship is not merely like the M.A. degree of an university, a mark of proficiency as a student and a title of honour, but that, though almost always attained in early life, it unfortunately makes a division among men engaged in the same profession, and carries a suggestion of superior knowledge ever afterwards. And so the Fellowship is held up as an object of ambition and a stimulus for encouraging scientific study. Practically, however, it is seldom that it can have this latter effect. A young man has means and leisure to pursue his studies for a few additional years, and then prefers the Fellowship examination. For this he deserves all praise, and gives good promise for the future. But now it is no longer a stimulus to him, for he has gained it. It is, in fact, a means, not an end, and by it appointments are open to him by which he may advance himself in life. He may distinguish himself later or he may not. If he do, it will be from some other stimulus, from love of science, or a wish to rise in his profession and gain eminence, with all its advantages; if he do not, it is hard that he should, by the mere title, be of a superior grade and a representative of British surgery.

On the other hand, there are through the country men who, not having intended to devote themselves to surgery exclusively, or not having had the means for the lengthened studies required for the Fellowship, have gained for themselves a high position, are widely trusted and consulted, perhaps are surgeons to provincial hospitals and equal to every emergency of surgery; and yet, these are members only, and never will be more. It is an illusion and an irony to say that they can become Fellows by passing an examination; they have not leisure to prepare for it, and they will not risk their well-earned reputation by



submitting to its chances. Besides, they do not need it, and it can be of no help to them now. They, no doubt, would like the title, and be pleased and proud to have a voice and interest in their College; but that is all. On the other hand, the College does or ought to want them; it ought to have their vote in its elections, and their co-operation in its proceedings, and it has not. These men can feel no interest in a body to which they only nominally belong. The College is the College of the Fellows alone; it has put the members wholly aside.

It seems that the proposal for modifying the examination after ten years has been rejected; and there was reason for objecting to this, on the ground that an examination should be the same for all. Professor Humphry's proposal, as I understand it, is that the examination shall be the same, but that the course of study need not be so; and to this the same objection does not apply. But neither of these plans would remedy the present evil by drawing in the older members, nor does any alteration in the regulations for the examination necessarily oppose an honorary Fellowship. This latter I venture to suggest. Let that be made permanent which has hitherto been a temporary arrangement; let members of twenty or twenty-five years' standing be admitted to the Fellowship, if they desire it, and under such conditions of recommendation or otherwise as may be thought right. Let there still be Fellows by examination. The young men who are seeking to be exclusively surgeons will pass that, will gain in early life the surgical appointments in hospitals, and the prestige which will assist them in establishing their position, and will always be able to sign themselves Fellows by Exam. The Fellowship will not be lowered by the admission of older honorary Fellows; for, if study and reading give one form of knowledge, experience and observation give another not less important. The College will gain by being a really representative body; by attaching to itself in reality, and not merely in name, a class of men who probably have no strong feeling of attachment to it now; and by removing a not unreasonable ground of complaint, and, therefore, of disunion.—I am, etc.,

April 17th, 1877. AN OLD MEMBER OF THE COLLEGE.

#### VOTING AT THE ROYAL COLLEGE OF SURGEONS.

SIR,—Some years ago, I took part with others in suggesting that the system of voting by proxy-papers should be introduced into the elections for the Council of the College of Surgeons. I then resided in London. Now, as a resident in the country, I venture to return to the same subject, for it appears to me that this plan would carry with it several advantages.

It would be interesting if the Secretary of the College would give us, in a statistical form, the number of Fellows who have taken part in the elections compared with the total number on the roll for, say, the last ten years. It would then be possible to form an opinion as to how many Fellows are prevented from voting at the election in consequence of their not being able to visit London on the appointed day.

Yours faithfully, WM. FAIRLIE CLARKE.

Southborough, Tunbridge Wells, April 26th, 1877.

#### OSTEOTOMY.

SIR,—In the JOURNAL of April 28th is a lecture by Mr. Barwell, the substance of which is osteotomy. In the course of it, Mr. Barwell mentions my name in connection with the use of the *chisel*, but in a way which I deem likely to convey an erroneous impression, though unintentional on his part. He says, "Mr. Maunder and myself have used it in several cases without fatal issue; a little suppuration followed, I believe, in one of the former gentleman's cases. All the operations above referred to, except my own, were performed either high up in, or at the neck of, the femur."

I have divided the femur nine times with the chisel to correct various deformities resulting from hip-joint disease, knee-joint disease, and ununited fracture; below the trochanters, through the shaft and just above the condyles. In two only of the earlier cases, when the operation was a novelty, was there slight suppuration, but not the smallest approach to a "fatal issue"; while in the remaining seven *no suppuration whatever* followed, and this *without* antiseptic treatment. Further on he claims "priority in England" for resorting to osteotomy in the neighbourhood of the joint to correct deformity at the knee. On this point Mr. Barwell is mistaken. On October 9th, 1876, I advised and assisted Mr. Taylor of Guildford in the performance of osteotomy of the femur with the chisel just above the condyles, as a substitute for the proposed removal of a wedge of bone. The result was highly satisfactory. On December 6th, 1876, instead of excising the ends of the bones (a very severe measure), in a case of ankylosis of the knee-joint, I divided the femur just above the condyles and the

tibia just below its tubercle with the chisel and extended the limb, in the London Hospital, in the presence of a large number of visitors. The result has been most gratifying. The appearance of the limb in Fig. 5 of Mr. Barwell's illustrations precisely represents the configuration of the extremity in my patient. I was present on December 21st,\* 1876, the date of Mr. Barwell's first operation, when that gentleman used *my* chisel; and I may add that I took some pains to determine the right sort of instrument which would neither chip at its edge nor splinter the bone. The chisels which have been used by many surgeons, both in and out of London, were made from my pattern.

I am, yours, etc., C. F. MAUNDER.

Queen Anne Street, April 28th, 1877.

#### TRANSFUSION.

SIR,—Will you kindly allow me a little space wherein to reply to the remarks made by Drs. Roussel and Aveling, in their letters published in your issue of April 14th, upon the case of transfusion reported by me?

As regards the courteous letter of the former, I may explain that the report was written and handed to the Secretary of the Section nearly two years ago, and therefore only represents our opinions at that time. Since then, one of us has had (as only one of us could have) the advantage and pleasure of seeing Dr. Roussel's instrument in operation at a meeting of one of the societies during the present session; and if, in correcting the proof, we still adhered to the original, I think neither we nor any of your readers have reason to regret that decision, as it has been the means of getting from Dr. Roussel himself a clearer and more succinct account of the advantages of his excellent instrument than we were capable of giving.

It is, however, gratifying to us to find that the grave faults we pointed out in Dr. Aveling's apparatus have been carefully eliminated from Dr. Roussel's, as that gentleman categorically explains in his letter. I believe, moreover, that every one will agree with him in considering normal blood as the best possible fluid for transfusing, the objection hitherto made to its use being that we had no suitable instrument for that purpose; and, although Dr. Roussel's instrument comes surprisingly near to perfection, it has not yet reached that point, for I am sorry to say, in apparent contradiction to his statement that no transfusion has ever been arrested by coagulation in his instrument, that an unsuccessful case has lately occurred, when, as my friend Dr. Heywood Smith informs me, "On March 19th, I was myself performing transfusion, when I had to desist through clotting in the small cannula of the efferent tube in Roussel's instrument. The operation thus failed, as time was lost; as also the blood of the giver and the life of the receiver."

I feel it will be somewhat more difficult to reply to Dr. Aveling, who, from the tone of his letter, seems to consider our criticisms of his instruments as personally offensive, than which I can assure him nothing was further from our thoughts; witness the manner in which we speak of his instrument as one of the best of its kind.

If Dr. Aveling will take the trouble to read again our remarks about the quantity transfused, he will find that our words were "not above eight ounces"; and, consequently, taking it as literally as he appears to wish, anything he may suggest short of our extreme maximum, does not make that maximum "an evident misstatement". He further makes an unwarrantable assumption, when he states that only twenty-one drachms of fluid were transfused; our words, "three or four", showed that we gave no rigid number, as it was difficult to say when absolute dilatation failed; and, moreover, he will notice that we speak of a period of "unsuccessful manipulation", when "no blood, or but a very small quantity", was passing into the patient, and it was this uncertainty (another fault of Dr. Aveling's apparatus) that warranted us in making the estimate of not above eight ounces. As regards his discrediting the clot-theory because (in his opinion) the time was too short to form one, I can only repeat my former statement, that the clot in question was found by us in the dish of water.

It seems, also, that one of our strong objections to the instrument—the risk of introducing clots into the system of the patient—is a risk much more imminent in Dr. Aveling's hands than in ours, for he finds his clots in the efferent tube of the instrument; that is to say, it is much nearer the system of the patient than in our case, and I presume that it matters little to the patient who gets a clot or a pulmonary embolism whether it happens at the beginning or end of the operation. It is no argument against us to say that Dr. Glynn succeeded in transfusing twenty ounces with the instrument, as we

\* Mr. Barwell has informed me that the date of his first operation, given as December 21st, should have been December 2nd.



ourselves specially state that "Dr. Aveling's apparatus may often succeed".

While I demur to Dr. Aveling's opinion, to the effect that defibrinated blood is only a liquid manufactured from blood, or that the question of its use is answered almost universally in opposition to my opinion, I have as little intention now as I had before of entering fully into its merits. Had the question appeared to be of sufficient importance to be opened anew, I have no doubt that many more capable pens than mine would have taken it up.—I have the honour to be, sir, your obedient servant,

GEORGE HOGGAN.

7, Trevor Terrace, Rutland Gate, S.W., 21st April, 1877.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### SANITATION IN SOUTHSEA.

ALL interested in the cause of sanitary progress, and especially those who appreciate the advantages of Southsea as a watering-place and hope for its future prosperity, will learn with satisfaction that the Portsmouth Town Council has fully, if somewhat tardily, supported their medical officer of health in the course he recently took in condemning a house in Clarence Parade, Southsea, as unfit for habitation. After futile attempts, which extended over a period of more than three months, to get the owner to put the drainage of the house in a healthy condition, the medical officer granted a certificate that the house was unfit for human habitation. The result of this certificate was that the landlord lost his tenant, but the sanitary defects of the house were immediately remedied. The medical officer thus incurred the displeasure of a section of the Town Council, and was called upon to make a special report, which, when made, was referred to him for further information by a large majority. At an adjourned meeting of the Council, however, on the 17th instant, after a somewhat lengthy discussion as to the relative sanitary duties of the Town Council and of the medical officer of health, a resolution approving the conduct of that officer, and adopting his report, was agreed to by a majority of sixteen out of twenty-four who voted. If the amendment, for which only four voted, had been carried, it would have amounted to a vote of "want of confidence" in the medical officer of health, which would have had a most disastrous effect upon the sanitary reputation of the borough, and especially of Southsea. Under present circumstances, intending visitors to Southsea can be assured that, in case of any serious sanitary defect being discovered in any house in that watering-place by the tenant, and if the defect be not promptly remedied, the medical officer of health will, on being satisfied as to the facts of the case, give a certificate affirming that the house is unfit for habitation. This assurance should add materially to the health-reputation of Southsea.

**VACCINATION.**—Mr. Jacob Ashley of the Chipping Sodbury Union has received from the Local Government Board £10:6 for successful and efficient vaccination: this being the fifth grant awarded to him.—The Local Government Board have awarded to Mr. C. D. Batt a grant of £17 for efficient vaccination in the Witney District of the Witney Union.—Dr. E. W. Orton, of Bedworth, Warwickshire, has received from the Local Government Board the sum of £18:4 for efficient vaccination: this being the second grant which he has received.

## MILITARY AND NAVAL MEDICAL SERVICES.

### THE LATE DR. MACKAY.

WE are glad to hear that a fund is being raised by the medical officers of the navy for a testimonial to perpetuate the memory of the late Dr. Alexander Eugene Mackay, Deputy Inspector-General of Hospitals and Fleets. The intention is to raise a suitable monument over his grave, to place a memorial-slab in any church that may be agreeable to the family, and to employ the surplus in presenting to his family some testimonial to mark the regard and esteem in which he was held by his brother officers. The following officers have consented to act as a central committee in London: Inspector-General Thomas Nelson, M.D.; Deputy Inspectors-General James Vaughan and D. J. Duigan, M.D.; Fleet-Surgeons G. J. Willes, M.D., Seaton Wade, and Alexander Fisher, M.D. Fleet-Surgeon Andrew Graham, M.D., of the

Army and Navy Club, acts as Honorary Secretary. Subscriptions will be received by Messrs. Stilwells and Co., 22, Arundel Street, Strand, W.C.

### ARMY MEDICAL OFFICERS.

WE have before us a chart of the degeneracy of the army medical department during the last seven years, the purpose of which is to show the bad quality of the junior medical officers entering the department. The author has taken the marks of the *last* on the list of each session as the guide. This is hardly fair; at any rate, the *general average* should be taken. It could easily be shown (only it would be invidious to do so) that the standard of excellence in the Army Medical Department is not below that in some other branches of the public service, by the marks respectively gained at the same examinations. Certainly, the medical men entering the army are not so deficient in knowledge as some who are entering civil life. Six men—all qualified practitioners—were rejected by the London examiners at the last examination, and refused admission into the Army Medical Department. It is to be presumed that they are gone to practise elsewhere. Of course, every one would rejoice if the army got more accomplished men than it does get, and we are among those who try to bring about that end; but it must not be forgotten that no one can enter it who has not the double qualification for medicine and surgery from some licensing body,\* and who has not moreover, undergone a further examination from the London examiners. It can in no way tend to improve the position and prospects of the medical officers for some of the body to be depreciating those who are already in the ranks of the Army Medical Department in the estimation of those combatant officers with whom they have to mix, as well as of the public at large. It creates a good deal of heart-burning, and there are other more fair ways of trying to improve the department.

### ADMINISTRATIVE APPOINTMENTS IN INDIA.

SIR,—Two-thirds of the English army serve away from India; twenty-seven of the forty-two administrative appointments are allocated to the former. Is it not, therefore, a positive injustice to disfranchise probably a-third to one-half of the medical officers because unable to qualify under a *local rule never published*, and meant for a service in which they may never be employed as administrative officers? It was formerly the rule in the combatant branch, that no officer who had not served in a regimental capacity in India could hold a brigade command. It was cancelled owing to the great inconvenience which resulted, and the unanimous protest of the colonels affected. *No rule should be retrospective.* With regard to the assertion that the rule was well known throughout the service, I assert that I for one never heard of it until I saw a notice of Dr. Playfair's question.—I am, etc.,

April, 1877.

SENIOR SURGEON-MAJOR.

## MEDICO-PARLIAMENTARY.

### HOUSE OF COMMONS.—Tuesday, May 1st, 1877.

**Londonderry Lunatic Asylum.**—In reply to Mr. R. Smyth, Sir M. HICKS-BEACH said: The Board of Governors of the District Lunatic Asylum of Londonderry, proposed some little time ago to erect a new asylum, their existing asylum being very much overcrowded. They have, however, lately rescinded that decision, and the Lord Lieutenant does not at present propose to recommend to the Privy Council to sanction the erection of a new asylum for Derry, but to inquire whether the present asylum might not be enlarged.

Thursday, May 3rd.

**The Anti-Vivisection Bill.**—Mr. HOLT moved the second reading of the Cruelty to Animals Bill, the object of which, he said, was to remedy a defect in Martin's Act, by rendering punishable the performance of any cruel experiment on any vertebrate animal, whether domestic or not. The fourth section forbids all cruel operations, even with anaesthetics, except for the purpose of alleviating pain, or curing the injured animal. Disclaiming any intention to attack scientific men, he contended that the Act of last year was not efficient.—Dr. CAMERON moved the rejection of the Bill, which, he said, would repeal the Act of last year, and this, he showed at some length, was strong enough to prevent the infliction of wanton cruelty.—Mr. HARDCASTLE supported the Bill because he believed it unsafe to trust scientific men; and to show to what lengths they were ready to go, he read to the House revolting details of cruel ex-

\* Are not these licensing bodies the parties who are really to blame for the inferiority of some who are allowed to enter our professional ranks?



periments performed by French surgeons and at St. Bartholomew's Hospital. He denied altogether the right of man to inflict such torture.—Mr. M'LAREN, who also supported the Bill, did not desire entire prohibition, but thought there was too much latitude allowed at present, and cited the testimony of Sir W. Fergusson, that no important discovery had been made through vivisection.—Mr. FORSYTH thought the Bill went too far, as by prohibiting all vivisection, although the animals might have been reduced to a complete state of insensibility, we should deprive ourselves of one of the most useful sources of knowledge for the alleviation of human suffering.—Mr. COWPER-TEMPLE contended that the Act of last year was not effective for its purpose, and Sir G. JENKINSON also spoke in favour of the Bill.—Sir H. SELWIN-IBBETSON pointed out that all the cruelties referred to belonged to a past state of things, and were dealt with by the Act of last year. This Act, he asserted, was a sufficient protection against cruelty, and in carrying it out, both in letter and spirit, the Home Secretary had met with no difficulty from scientific men.—Mr. HOLT replied; and, after some observations from Mr. BROMLEY-DAVENPORT, the Bill was thrown out, on a division, by 222 to 83.

## MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentleman was admitted a Licentiate on April 26th, 1877.  
Sugden, D'Arcy, St. Bartholomew's Hospital

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on April 25th.

Burg, J. S., Manchester  
Cripps, E. C., Cirencester  
Eccles, F. R., M.D. New York and M.B. Toronto, Warwick, Ontario  
Hemsted, Arthur, L.R.C.P. Lond., Ickford, Oxon  
Hughes, D. A., Westbourne Park  
James, Alfred, Merthyr Tydfil  
Joel, E. B., Devonport  
Kay, William, L.S.A., Coatbridge, Lanarkshire  
Lyddon, Richard, Folkestone  
McGeagh, William, M.D. Belfast, Belfast  
Mayne, W. F., Honiton, Devon  
Prowse, W. B., L.S.A., Wallingford, Berks  
Sugden, D'Arcy, L.R.C.P. Lond., Finsbury Park  
Tidswell, H. H., Bayswater  
Wilson, E. M., Gilston Road, S.W.  
Worgan, T. E., Balham  
Wright, A. H., M.B. Toronto, Toronto, Canada

The following gentlemen were admitted members on April 26th.

Collingridge, William, Hornsey  
Dresser, A. K., Hammersmith  
Earle, J. H., L.S.A., Brentwood  
Edmunds, Richard, Bangor  
Elsmere, Edward, Shrewsbury  
Evans, C. W. De L., Bangor  
Gillard, C. R., Clapham Road  
Henchey, J. H., M.D., Laval, Quebec  
Hammersley, Joseph, L.S.A., Lewisham  
Horrocks, Peter, L.S.A., Over Darwen  
Howat, G. R., L.S.A., Southgate  
Jee, H. C., Nuneaton  
Lee, Roger, L.S.A., Burton-on-Trent  
Lewis, O. B., Wimbledon  
Meek, J. W., L.S.A., Macclesfield  
Poynder, J. L., L.S.A., Southsea  
Williams, D. J., Llandovery, South Wales  
Wright, G. A., Romford  
Wright, A. W., Trinidad

Out of the eighty-one candidates examined, only eight failed to acquit themselves to the satisfaction of the Court of Examiners, and were referred to their professional studies for six months.

The following gentlemen passed their primary or anatomical and physiological examinations on May 1st.

Messrs. C. H. Gwyon, J. B. S. Greathead, Daniel Ritchie, William Shaw, and Henry Stanford, students of the Edinburgh School; Anthony Snowden, R. R. Jones, and W. A. Hewitson, of the Newcastle School; G. H. Crowther and W. M. Hurtle, of the Leeds School; Joseph Tonks and C. J. Lewis, of the Birmingham School; William Gruggen, of the Liverpool School; and Brabazon Casement, of the Dublin School.

Ten candidates were rejected out of the twenty-four examined.

The following gentlemen passed on May 1st.

Messrs. M. L. Brown, J. M. Chisholm, B. J. Guillemard, G. W. Whiteley, and H. J. Clarke, of the Edinburgh School; T. J. Hudson, F. W. England, R. T. Farrer, and G. D. Todd, of the Leeds School; W. E. Thomas and H. P. Jones, of the Dublin School; Archibald Bland, of the Cork School; R. D. Jones, of King's College; and C. L. Young, of the Bristol School.

Eleven candidates were rejected.

The following gentlemen passed on May 2nd.

Messrs. A. K. Morgan, A. H. Pierson, and R. T. Bedford, of Guy's Hospital; Robert Cox and E. A. Hunt, of St. George's Hospital; Charles Wells and E. P. Griffith, of the Middlesex Hospital; G. B. Wray and W. D. C. Williams, of University College; A. P. White and P. S. Kendall, of the Edinburgh School; Knowlson Townsend, of St. Bartholomew's Hospital; L. H. Hackman, of St. Mary's Hospital; F. H. Emerson, of King's College; and Alfred Mantle, of the London Hospital.

Nine candidates were rejected.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, April 26th, 1877.

Jackson, Thomas, Great Torrington, Devon  
Knaggs, Robert Henry Edward, Trinidad, West Indies  
Scott, David Francis, 9, Mount Place, E.  
Thresh, John Thomas, Southgate, Wakefield  
Tribe, Herman Thomas Bedingfield, Chatham

The following gentlemen also on the same day passed their primary professional examination.

Blott, Herbert, St. Bartholomew's Hospital  
Cocksedge, Charles Ernest, London Hospital  
Evans, Edward Prichard, Middlesex Hospital  
Fraser, Graeme Bisdee, St. Mary's Hospital  
Heald, Robert, University College  
Homes, James, University College

UNIVERSITY OF ST. ANDREW'S.—The following gentlemen received the degree of M.D. on Friday, April 20th.

Arminson, John, M.R.C.S., Preston  
Chisholm, Edward, M.R.C.S., Sydney, New South Wales  
Furnell, Michael C., F.R.C.S., Madras  
Gaye, Henry S., M.R.C.S., Newton Abbot  
Larkin, Henry W., M.R.C.S., Bilston  
Marriott, Peter, M.R.C.S., Mentone  
Miller, Matthew, L.F.P.S., Glasgow  
Pickett, Jacob, L.R.C.P.E., London  
Powell, George D., L.R.C.S.I., Dublin  
Thomson, John, M.R.C.S., London

## MEDICAL VACANCIES.

The following vacancies are announced:—

ALRESFORD UNION—Medical Officer for the First District and the Workhouse.  
ARDNAMURCHAN, Parish of—Medical Officer. Salary, £120 per annum, with house, etc. Applications to be made on or before the 7th instant.  
ARROUHAR PARISH—Resident Medical Officer. Salary, £60 per annum. Applications to be made on or before the 11th instant.  
BOSMERE and CLAYDON UNION—Medical Officer for the West Needham District.  
BRITISH LYING-IN HOSPITAL, Endell Street—Physician to the out-patients. Applications to be made on or before the 7th instant.  
CHESTER GENERAL INFIRMARY—Visiting Surgeon. Salary, £80 per annum, with residence, board, and washing. Applications to be sent in on or before the 21st instant.  
CHIPPENHAM UNION—Medical Officer for the Workhouse.  
COUNTY ASYLUM, Prestwich, Manchester—Resident Clinical Assistant.  
DAVENTRY UNION—Medical Officer for the Workhouse and First and Second Districts.  
DONCASTER GENERAL INFIRMARY and DISPENSARY—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be made on or before the 5th instant.  
NOTTINGHAM GENERAL HOSPITAL—Resident Surgeon-Apothecary. Salary, £150 per annum, with furnished apartments and board.  
ROTHERHAM HOSPITAL and DISPENSARY—Assistant to House-Surgeon. Salary, £25 per annum, with board, lodging, and washing.  
ROYAL ALBERT HOSPITAL, Devonport—Resident Medical Officer. Salary, £200 per annum, with board and lodging. Applications to be sent in on or before the 12th instant.  
ST. GEORGE, HANOVER SQUARE, PROVIDENT DISPENSARY—Physician-Accoucheur. Applications to be sent in on or before the 5th instant.  
SOUTH MOLTON UNION—Medical Officer for the Fourth District.  
UNIVERSITY COLLEGE, London—Professorship of Anatomy. Applications to be made on or before the 12th instant.  
WESTHAMPTON UNION—Medical Officer for the Singleton District.  
WESTERN GENERAL DISPENSARY—Honorary Physician. Applications to be sent in on or before the 14th instant.  
WOODRIDGE UNION—Medical Officer for the Sixth District.

## MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BOWER, Ernest D., M.R.C.S. Eng., appointed House-Surgeon to the Gloucester County Infirmary, *vice* H. M. Sampson, L.R.C.P. Ed., resigned.  
PRIDEAUX, E., L.S.A., appointed House-Surgeon and Secretary to the Scarborough Dispensary and Accident Hospital, *vice* H. R. Oswald, M.B., resigned.

## BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

### DEATH.

DEANE.—On March 10th, 1877, at the residence of her nephew, Dr. James Ellis, The Sanatorium, Anaheim, Los Angeles County, California, of angina pectoris, Ann Deane, aged 73, widow of the late George Deane, Esq., of the Royal Hospital, Greenwich.



## OPERATION DAYS AT THE HOSPITALS.

- MONDAY.....** Metropolitan Free, 2 P.M.—St. Mark's, 2 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 30 P.M.
- TUESDAY.....** Guy's, 1 30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
- WEDNESDAY..** St. Bartholomew's, 1 30 P.M.—St. Mary's, 1 30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2 30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1 30 P.M.—St. Thomas's, 1 30 P.M.
- THURSDAY....** St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1 30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—Charing Cross, 2 P.M.
- FRIDAY.....** Royal Westminster Ophthalmic, 1 30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1 30 P.M.
- SATURDAY....** St. Bartholomew's, 1 30 P.M.—King's College, 1 30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1 30 P.M.—St. Thomas's, 1 30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- TUESDAY.**—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Pearson Irvine, "The Clinical Conditions of the Heart and Vessels in Chlorosis"; Mr. Clement Lucas, "Extraction of a broken Silver Tracheotomy Tube from the Left Bronchus"; Mr. Knowsley Thornton, "Twenty five Cases of Ovariectomy, with remarks on the Fever following the Operation".
- WEDNESDAY.**—Epidemiological Society, 8.30 P.M. Dr. Mouat, "On Medical Statistics of Epidemic Disease".
- THURSDAY.**—Harveian Society, 8 P.M. Mr. George Field, "On the Graver Aspects of Otorrhoea"; Dr. Fothergill will exhibit Portraits of Caroline, *alias* Carl, Hoffman.
- FRIDAY.**—Clinical Society of London, 8.30 P.M. Mr. Furneaux Jordan, "A Case of Excision of the Os Calcis and the Astragalus, in which the Second Row of Tarsal Bones was drawn down under the Malleolus"; Dr. Dowse, "A Fatal Case of Syphilis contracted from the Congenital Form of the Disease"; Dr. Pearson Irvine, "A Case of Empyema and Abscess of the Liver in which Paracentesis was performed"; Mr. Mac Cormac, "A Case of Talionic Rhinoplasty (a living subject)".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

**AUTHORS** desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

**PUBLIC HEALTH DEPARTMENT.**—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

**CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

**WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.**

**COMMUNICATIONS** respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## MEDICAL ETIQUETTE.

WITH reference to the case stated by "Associate" at page 537 of last week's *JOURNAL*, we think that X. ought, as a matter of courtesy, to have informed Y. of his wish to consult another practitioner on the case in hand, and to have invited him to meet Z.

THE following case—which we will assume to be a hypothetical one, divested of all individuality—has been referred to us for opinion. A. is junior partner in a large practice, and is responsible medical officer to a cottage hospital. B. is assistant in the same practice, and assumes A.'s hospital duties during his absence. A patient residing in a distant town is admitted into the hospital suffering from a severe accident, and is operated on by B. during A.'s absence. The after-treatment devolves on A., and the general result is very good. B. soon afterwards removes to near the town in which the patient resides. On the patient being discharged, A. writes to B. and asks him to keep an eye on the patient, who is requested to report himself at the hospital in a month's time. The next that A. hears of the patient is, that B. is going to exhibit him, in his own name, at a meeting of a medical society in the town in which he resides. Is B. justified in so exhibiting the patient without A.'s consent? Is A. wrong in mildly remonstrating with B. for so doing?

\*. 1. On the grounds both of courtesy and of justice, B. ought to inform A. of his wish to exhibit the patient at the meeting.—2. A. is justified in remonstrating with B. on his conduct.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT the recent examination of candidates for the Diploma of Member, the following questions in Surgical Anatomy and the Principles and Practice of Surgery were proposed on April 20th. Candidates were required to answer at least four (including one of the first two) out of the six questions; three hours being allowed.

1. Name the structures divided by a circular-saw passing completely through the hand across the centre of the palm.
2. Describe the crural arch, enumerate in order the structures which pass through it; and give the steps of the operation for strangulated femoral hernia.
3. Of what value is the careful observation of the temperature of patients after surgical operations? State the range of temperature, and briefly relate any case you may have watched in illustration of the subject.
4. Mention the changes which the urinary organs may undergo in a fatal termination of a case of organic stricture of the urethra.
5. Describe the signs of fracture of the surgical neck of the humerus; explain these on anatomical grounds, and give the treatment of this injury.
6. Describe the characteristics of scleritis; under what circumstances may it occur? and how would you treat it?

The following questions on the Principles and Practice of Medicine were proposed on April 21st; one hour and a half being allowed.

1. Describe the contracted granular kidney. What are the organic changes which attend it, or to which it gives rise, in the heart and blood-vessels? Discuss the more important symptoms of the disease, including the chemical and microscopical characters of the urine.
2. Describe the symptoms of acute rheumatism. How would you distinguish pathologically and clinically between rheumatism and gout?
3. What medicinal plants belong to the order cinchonaceae? and what are their several therapeutical properties? Enumerate their more important official preparations, and name their ordinary doses.

OWING to great pressure of correspondence, we are compelled to postpone the publication of letters from Dr. Clouston (Edinburgh), Dr. Childs, and many other correspondents.

## THE EXAMINATION FOR THE M.D. DEGREE AT ST. ANDREW'S.

SIR,—The examination for the M.D. Degree of the above University being just over, it may be as well to draw the attention of the medical public to it, or perhaps I should say the attention of those members of the profession who intend to present themselves for examination in coming years.

First, then, it is an examination eminently just, but searching and severe, requiring a more than fair amount of knowledge of all the subjects of examination, and an aptitude of quickly coming to a conclusion, for the time is *too* short and the questions are *too* many to permit of much dallying. Be it remembered that only ten degrees can be granted yearly, and, as frequently one or two of intending candidates are prevented from attending, the Council think it right to admit three or more than that number.

It follows, then, that the ten gentlemen who have been selected for examination find themselves confronted by three or four more, and so the examination becomes a competitive one, and the worst of the lot must go to the wall.

This is fair enough, and no one would possibly complain were it only intimated to the candidates that the examination would be competitive.

While throwing out this suggestion to the Council, allow me also to recommend that, either fewer questions be given in the written examination, or more time allowed for the answering. It is simply impossible to get through them satisfactorily in the time allowed.

To come back to the object I had in view in writing to you, let intending candidates be assured that it is useless to present themselves on the chance of *scrambling* through; that there are always more than enough candidates for the number of degrees that can be conferred; that the examiners are men specially well able to discriminate, and that to obtain the degree requires much study and preparation.

—I enclose my card, and am, sir, your obedient servant,  
G. T. H.  
April 22nd, 1877.

A MEMBER would probably be able to obtain the books to which he refers from Mr. H. K. Lewis, 136, Gower Street, or Mr. Kimpton, Holborn.

## VITAL STATISTICS.

A PAPER, entitled "Births, Deaths, and Marriages, and the Comparative Progress of Population in some of the Principal Countries of Europe", by Mr. Frederick Martin, author of the *Statesman's Year Book*, was read on April 17th, before the Statistical Society. Mr. Martin, taking as the basis of his paper the vital statistics published in the last annual report of the Registrar-General, gives the birth, death, and marriage-rates of nine countries, divided into three groups, the first comprising England, France, and Prussia; the second Austria, Italy, and Spain; and the third Denmark, the Netherlands, and Sweden. For all these States, except two, Italy and Spain, the calculation of averages per 1,000 of population spreads over twenty-two years; while for Italy they comprise twelve, and for Spain ten years. Mr. Martin showed in his tables, illustrated by diagrams, the striking differences that exist between the nine countries in the average rates of births, deaths, and marriages. While in England and Wales the average annual birth rate per 1,000 of the population was as high as 39.9 in the twenty-two years from 1853 to 1874, in France it was, during the same period, as low as 26.1, France standing, as regards births, far below any other country. The death-rate again varies enormously in the different States; while it was as low as 20.2 per 1,000 of the population in Denmark, it was as high as 32.2 in Austria. England filling a place only less favourable than Denmark and Sweden, the average rate having been 22.2 per 1,000 during the period. The marriage-rate, as may be expected, is subject to great fluctuations, springing from trade prosperity or stagnation, and good or bad harvests. The average annual marriage rate during the twenty-two years was highest in Prussia, namely 17.1 per 1,000 of the population, and lowest in Sweden, 14.1 per 1,000. Among the tables given by Mr. Martin, perhaps the most suggestive was one giving the surplus of the average annual birth-rate over the death-rate, denoting the increase of population. It was 12.7 per 1,000 of the population in England and Wales; 11.0 in Sweden; 11.4 in Denmark; 10.7 in Prussia; 9.0 in the Netherlands; 7.7 in Austria; 7.5 in Spain; 6.9 in Italy; and 1.9 per 1,000 in France. It will be seen that England was the most progressive, and France the least, of all the nine countries, the population being almost stagnant. Mr. Martin thinks "France is the middle of Europe".



**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

**THE MEDICAL INSPECTION OF SHIPS AND EMIGRANTS.**

SIR,—In your *JOURNAL* of the 11th November, 1876, this subject is treated of. As I have had experience in both American and Australian emigration, I venture to send you these few lines in reference to these services. When emigration to America was at its height, I have seen 1,000 people medically inspected in two hours; and I have known small-pox of a virulent type to be present in six cases before we were half way across the North Atlantic. Of course, such an inspection is a complete "farce." Very few Australian emigrant ships carry more than 500 (the average is about 300); but still it is impossible for this number to be properly examined in the space of time devoted to that end. The "inspection" is, as Dr. Cochrane states, a passing of the people in their families before the officials and health-officer on the deck, where they are congregated *en masse*. If a spot be seen on an exposed part of the body, it is looked at; but no searching examination is made, and few, if any, questions are asked. At the same time, considering the place of the examination, and the time in which the departmental officer is supposed to do the work, I think it is impossible for a rigid scrutiny to take place. I quite agree with Dr. Cochrane when he states that a proper official should be appointed to examine the outfits. In the present state of affairs, the ship's surgeon-superintendent is supposed to examine the outfits; but with his many duties and anxieties, it is really impossible for him to do this—indeed, this individual's responsibility has no limit whatever. As emigration is now carried on by the different colonial legislatures, it really behoves each of them to have a *dépôt*. New Zealand had one, but not sufficient to accommodate the numbers decently. I am not aware what the accommodation may be now, but I know that Queensland had none. In the last trip that I made to Brisbane, the emigrants, before sailing, had possession of the New Zealand *dépôt* for a couple of days; but then it was wanted for a batch of emigrants of their own, and ours were turned out to shift for themselves. Some were lodged here and there in the neighbourhood of the docks, some slept in sheds, others on board the ship. It was in December; the snow was lying three feet deep in places, and a pitiless cold wind was shivering the poor wretches, as we wet with snow, they trudged about. One child died from exposure then and there, and many suffered in the early part of the voyage in consequence. I have instanced this in order to show the necessity for proper buildings fitted expressly for emigrants before sailing. Here should be the "inspection"; here the examination of outfits by an official, together with proper and sufficient attendants; and last, not least, the bath, which should be compulsory, except in the case of delicate ones.

Ships are often got ready so hurriedly for sea, that the contract work for the emigrants' department is often very miserably executed. The plumbing is frequently very bad; leaky pipes are a cause of frequent complaints; and condensers, which break down shortly after leaving, are a source of much dissatisfaction and many growls. Good water is a most inestimable boon at sea. The store water is generally put in tanks, from which it almost always issues good and wholesome, though sometimes necessarily tinged with iron rust. It should never be stored in casks. The bathing on board is limited, as regards room accommodation. The single females are supplied with one bathroom, and the rest of the passengers are left without. Other fixtures, such as the baker's oven, ought to be used on board before leaving, as I recollect having to stow away one oven as useless. It is impossible, in the hurry of the last hour or two (and very often these fixtures are not placed until the last moment), for the surgeon to prove these things himself. I remember the typhoid outbreak on board the two ships to which Dr. Cochrane refers, as I believe I was in charge of one following close in their wake. The first ship was in quarantine for nearly three months; she had a large number of deaths both before and after going into quarantine. The second ship fared better. Typhoid appeared amongst us when about four weeks from our journey's end, or eight weeks after leaving London. We had two cases; one (a child) died at the anchorage; the other case (this child's mother) recovered at the quarantine station, Moreton Bay. The woman had washed a dress of a patient who had died on the voyage from puerperal fever. She showed typhoid symptoms shortly afterwards. Whether these were connected with the puerperal case was not clear, as the scuppers about the infected part of the ship had always been a trouble and a source of anxiety to me, from the fact that the young children used to make a convenience of them at all hours, their dirty parents never checking them. It was only by repeated stoppages of food that any attention to cleanliness was induced. I may add, that no other cases appeared, and our four hundred suspected but healthy people were placed on an island reeking with the dejections of typhoid patients, placed under calico-tents, in an almost tropical climate. Through proper representation I obtained their freedom in two or three days, especially as the same disease was then rife in Brisbane. The regulations on board the Queensland ships regarding morals, discipline, and dietary, are almost perfect, and leave very little room for improvement. Dr. Cochrane makes a concise summary of the requirements: 1. Proper *dépôts*, provided with sufficient attendants; 2. Baths there, with obligatory rules for using them; 3. A portion of the building set apart for the separation of the suspected; 4. An official there, whose duty it should be to examine all outfits; 5. Thorough physical examination. In this building this latter should take place, the people not being allowed to leave afterwards till embarking. All the ship's fixtures should be thoroughly proved before leaving, and a bath should be provided for each section of the ship. These fittings should not be left to the last moment, as they frequently are. A clergyman ought to accompany every ship: he also could act as schoolmaster, and be paid in the same way as the surgeon. Morality and cleanliness—therefore health—go frequently hand in hand. And I am sure that a clergyman's presence on board every ship carrying emigrants would be a great improvement indeed.

Unless the Imperial Government take these matters up they will never be attended to, as the necessary outlay would never be voted by the legislatures of young and struggling countries.—I am, etc.,

FRANCIS M. HARRISON, L.R.C.P.L., L.R.C.S.I.,  
Government Medical Officer.

Corowa, New South Wales, Australia, January 18th, 1877.

**KAPPA.**—Apply to the Secretary of the Convict Prisons' Department, Home Office, London, S.W.

**ERRATUM.**—In the notice of Messrs. Salt and Son's *Speculum*, in last week's *JOURNAL*, for "ani" read "auris".

**NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL**, should arrive at the Office not later than 10 A.M. on Thursday.

**A WANT IN THE PROFESSION.**

SIR,—Can you kindly inform me if there be any school for the daughters of medical men, especially where a sound education, at a reasonable rate, could be obtained? Other schools are far from select, unless you can pay a high sum *per annum*.—I am, yours very truly,  
T. S. HUTCHINSON, L.R.C.P., M.R.C.S.  
Newington, Sittingbourne, Kent, April 30th, 1876.

\*.\* As far as we know, there is no school of the kind to which our correspondent refers.

CLASSICAL.—The words "Londini donum" may, by any who prefer them, be used instead of "in dulce domum", in line three of the verse following my anagram on the late Sir W. Fergusson, contributed to a recent number of the *JOURNAL*.—E.L.

THE remainder of the coloured drawings to illustrate the paper of Dr. Braidwood and Mr. Vacher on the Life-History of Contagium will shortly appear.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Scarborough Daily Post; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Warrington Express; The Croydon Chronicle; The Northampton Herald; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Dudley Herald; The Shrewsbury Chronicle; The West Surrey Gazette; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; The Hull Criterion; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The High Peak News; The Metropolitan; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Middlesex Advertiser; The Rock; The St. Andrew's Gazette; The West Cork Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Richmond and Twickenham Times; The Western Morning News; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; The Manchester Free Lance; The Belfast News Letter; The Malvern News; etc.

\*.\* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. Wilks, London; Mr. Hubbard, York; Dr. Wm. Rutherford, Edinburgh; Dr. George Johnson, London; Dr. Fairlie Clarke, Southborough; Mr. Bolas, Birkenhead; Mr. T. M. Stone, London; Mr. J. Hyde Houghton, Dudley; An Associate; Messrs. Hillard and Sons, Portsmouth; Dr. Davidson, Upton; Murex; Dr. James Russell, Birmingham; The Registrar of the Royal College of Physicians; Dr. Sheen, Cardiff; Mr. J. L. Green, Tisbury; Mr. Richard Barwell, London; Dr. R. W. Batten, Gloucester; Dr. Archibald, St. Andrew's; Mr. Balmanno Squire, London; Mr. R. Davy, London; Dr. Campbell, Nottingham; Dr. Childs, Edinburgh; Mr. George Brown, London; Mr. T. H. Morley, Belper; Dr. W. Bayes, London; Mr. C. Kingzett, London; The Registrar-General of England; Dr. Edis, London; Mr. C. F. Maunder, London; Mr. Spencer Wells, London; W.; The President of the Pharmaceutical Society; Mr. P. H. Holland, London; Mr. T. P. Lucas, London; Mr. Eastes, London; Mr. Jonathan Hutchinson, London; Mr. Robinson, Preston; The Registrar-General of Ireland; Dr. J. Milner Foehrigill, London; Dr. Cobbold, London; Mr. Hutchinson, Sittingbourne; Dr. Thomas Drapes, Ennisworthy; Dr. Ashburton Thompson, London; Dr. Parsons, Dover; Mr. Arthur S. Cole, Liverpool; Mr. S. M. Bradley, Manchester; The Secretary of Apothecaries' Hall; Dr. MacLagan, Dundee; Kappa; Mr. James Crocker, Bingley; The Secretary of the Royal Medical and Chirurgical Society; Dr. C. O. Baylis, Tunbridge Wells; Dr. J. W. Moore, Dublin; Dr. Armstrong, Newcastle-on-Tyne; Dr. Collier, Malta; Dr. Clouston, Edinburgh; Mr. Allen, Belper; Mr. G. Thompson, Stapleton; Dr. C. Thorp, Todmorden; Our Dublin Correspondent; Our Edinburgh Correspondent; Pater; Rusticus; Mr. Humphreys, London; Dr. Tripe, London; Mr. T. J. Ollerhead, Minehead; Mr. Davies, Cymer; Dr. W. Squire, London; Mr. Eaton, London; Mr. Bartlett, Birmingham; Dr. Carpenter, London; Dr. Fisher, London; Dr. Clement Godson, London; Dr. Philipson, Newcastle-on-Tyne; Mr. Burdett, Greenwich; Mr. E. Stevens, London; Justice; Mr. A. P. H. Bond, West Bromwich; Dr. Renton, Glasgow; Dr. Warner, London; Mr. J. Nusworth, Liverpool; Dr. Gordon, Dublin; Dr. Finny, Dublin; Mr. E. Prideaux, Scarborough; Dr. Parsons, Dover; Dr. W. M. Banks, Liverpool; Dr. Ivor Murray, Scarborough; Mr. G. C. Steet, London; etc.

**BOOKS, ETC., RECEIVED.**

Sciatio, Lumbago, and Brachialgia. Second Edition. By Henry Lawson. London: J. and A. Churchill. 1877.  
Sir William Fergusson, Bart: A Pictorial Sketch. By Henry Smith. London: J. and A. Churchill. 1877.  
Sanitas Sanitatum et Omnia Sanitas. By Richard Metcalfe, F.S.S. London: Co-operative Printing Company.



## AN ADDRESS

ON

OPHTHALMOLOGY IN ITS RELATION TO  
GENERAL MEDICINE.*The Annual Oration delivered before the Medical Society of London.\**

By J. HUGHLINGS JACKSON, M.D., F.R.C.P.,

Physician to the London Hospital, and to the Hospital for the Epileptic and Paralysed; etc.

I CANNOT find appropriate words to express how much I feel the honour of being asked to give the annual Oration before the Medical Society of London. I think, after all, the best return I can make is not to waste your time in a fruitless endeavour, but to begin my real task at once.

The subject I have taken up for this address is one which interests me more deeply than any other whatever. It is on the bearing of a very special department of medicine on general medicine. I wish to show how we have profited and may profit by what ophthalmic surgeons have done in their special field of work. I think it the luckiest thing in my medical life, that I began the scientific study of my profession at an ophthalmic hospital.

As scientific medical research goes on, there is greater specialisation of investigation, just as, in the development of society, there is that continually increasing specialisation, called division of labour. This being so, all the more need is there that there should be greater integration, just as along with division of labour there is need for co-operation of labourers. I do not think there is any class of men in our profession to whom the term "specialist", in its bad sense, can be less justly applied than to ophthalmic surgeons; for it is plain enough that their department potentially includes the whole range of medicine and surgery. The ophthalmic surgeon operates for cataract; he treats palsies of ocular muscles and studies anomalies of refraction; he notes local tissue-changes, which are parts of some wide pathological condition. No class of men in the profession have done more for the methodical investigation of disease than ophthalmic surgeons. There is no harm in studying a special subject; the harm is in doing any kind of work with a narrow aim and with a narrow mind. Differentiation of medical investigation has led to results of inestimable value. If, in the smallest degree, I succeed in furthering the integration which should quickly follow this necessary differentiation, I shall feel that my address will be of some little value.

The direct utilitarian value of ophthalmological knowledge needs no comment. But the value of such knowledge for general medicine, although recognised, is not even yet thoroughly appreciated. Physicians have not fully applied the facts and principles which ophthalmic surgeons have discovered for them. It is not too much to say that, without an extensive knowledge of ophthalmology, a methodical investigation of diseases of the nervous system is not merely difficult, but impossible. It is plain at first glance. The nerve of the most special of all the special senses goes to the eye, and the end of it can be seen by the ophthalmoscope. The muscles of the eyeball are supplied by three nerves, each coming from a different part of the encephalon; the cornea is supplied by the fifth nerve; the orbicularis palpebrarum is supplied by the portio dura. There are, then, nine cranial nerves, and six of them supply the eyeball and ocular apparatus. By the ophthalmoscope, not only can we see a nerve-ending, but also an artery, a vein, and a nerve-expansion. We can see the effects of an embolus; we can watch arterial pulsation in disease of the aortic valves; we can see tubercle in the choroid, and diagnose syphilis and Bright's disease. Further, the commonest ophthalmoscopic appearances occurring in physicians' practice point to the general nature of intracranial disease; optic neuritis supplies, not decisive, but yet the best evidence there is to be had for the diagnosis of organic (gross) brain-disease.

I do not think that a student can learn what he requires to know in ophthalmology as preparatory to a study of diseases of the nervous system, except under the direction of an ophthalmic surgeon. For example, an ordinary knowledge of paralyses of the muscles of the eye is not sufficient; there are many things about them which can only be properly taught by a skilled ophthalmic surgeon. There are some things which it may at first glance seem needless for a physician to know, such as anomalies of refraction; but I shall show that

great blunders are made from ignorance of this department of ophthalmology.

But this is not all. Ophthalmic surgeons investigate their cases very methodically and very precisely. And thus, for the sake of scientific discipline, a study of ophthalmology is most important, even if we could make the assumption that the student would never be consulted for any sort of affection of the eyes, either alone or along with other symptoms. I do not know of any kind of work better fitted for correcting loose habits of observation and careless thinking than a study of palsies of ocular motor nerves. If these disorders of movement were studied carefully before the study of such more complex disorders as locomotor ataxy and ataxy of articulation was undertaken, we should hear less of metaphysical explanations, more about movements and less about a faculty of co-ordination, and we should, I think, hear less of "loss of volition" and "loss of memory" as explanations of physical defects. I wonder what an ophthalmic surgeon would say if, as an explanation of a patient's inability to look in this or that direction, he were told that the patient had lost the memory of that ocular movement, or that paralysis of the external rectus was due to loss of volition, or that confused sight was owing to disorder of co-ordination. Would he not say that these explanations, seeming to explain everything comfortably, really explain nothing whatever? Yet just such "explanations" are given of some symptoms of nervous disease: for example, in some cases of aphasia in locomotor ataxy and disease of the cerebellum.

Being a physician, I am desirous of saying as little as possible on the purely ophthalmological side of the matters to be considered. I wish to point out the wide value of certain ophthalmological facts, and especially their bearing on the methodical investigation of nervous diseases. Sometimes particular facts from ophthalmology are used merely as illustrations, merely to introduce some general medical question which ophthalmological evidence helps to elucidate. The subject even thus narrowed, however, is still so very extensive, that I can only speak fragmentarily and very briefly.

Before I do this, let me mention one case, and it is a type of many other medical cases, which shows that varied ophthalmological knowledge is necessary to the physician. A patient had epileptiform seizures, beginning in his left great toe; he had paralysis of the right third nerve; there was slight double optic neuritis; there was old choroidal disease in the left fundus; there was also an old nebula on the left cornea, and some astigmatism. We found *post mortem* syphilitic tumour of the right cerebral hemisphere and a syphilitic neuroma of the right third nerve. Without ophthalmic knowledge, we might have had a very confused notion of the relation of the disease of the cerebral hemisphere to the patient's defect of sight.

Before entering into the consideration of particular topics, I must remark that Dr. John Ogle was the first physician in this country to use the ophthalmoscope in medical cases. There is another physician who has done work of inestimable value in medical ophthalmology. Dr. Clifford Allbutt's work, *The Ophthalmoscope in Nervous and Mental Diseases*, has done more than any other work towards what I would call the integration of ophthalmology with general medicine.

I can say very little of affections of the superficial parts of the eyes. The most important to physicians is interstitial keratitis. This affection is, Mr. Hutchinson has shown, a certain proof of congenital syphilis. It usually goes along with a dental malformation, which, as he has shown too, is evidence equally certain. This important double discovery could scarcely have been made except at an ophthalmic hospital, since the cases are rare and are only met with in numbers at a large ophthalmic hospital. Here is a great debt we owe to one whom I would call an ophthalmic surgeon, were he not distinguished by having done good work in other departments of surgery. Having in the corneal and dental peculiarities a certain warrant for the diagnosis of syphilis, we can study the doings of congenital syphilis in other organs. In investigations of diseases of the nervous system, I have profited very largely in the diagnosis and therapeutics of non-ocular diseases from these tests of inherited syphilitic taint.

Passing over numerous other important organic affections, I will speak of anomalies of refraction. It is exceedingly important that the physician should study anomalies of refraction and their indirect effects. I do not mean that it is necessary for him to have that familiar knowledge which the ophthalmic surgeon must have, but, for general medical purposes, he should be able to diagnose them. It is not necessary that the physician should be able to cut for stone, but it is useful that he should be able to diagnose or to suspect vesical calculus, or he will subject his patient to a long course of inefficient treatment. A knowledge of the indirect effects of anomalies of refraction would, doubtless, save us from serious misinterpretations of symptoms. Mr. Brudenell Carter records the case of a patient who came complaining of "peri-

\* This report contains many paragraphs omitted in the delivery of the address.



odical confusion of vision". He worked at an office commanding a view of a large clock on the other side of a court-yard; he "could see the hands of the clock when they were approximately vertical, but lost them when they were approximately horizontal". Such a case would be inexplicable without ophthalmological knowledge. Mr. Carter diagnosed astigmatism and found it.

We should learn how to estimate degrees of hypermetropia by the ophthalmoscope; because, when a patient is too ill to permit testing the state of his refraction in the ordinary way, the ophthalmoscope may be the only means of deciding. I could relate a striking case in which the discovery of a high degree of hypermetropia by the ophthalmoscope in the hands of Mr. Couper was of inestimable value in unravelling a complex case in which there were partial aphasia, defect of sight, and right-sided convulsion, due to cerebral tumour.

We have learned from an ophthalmic surgeon that the common kind of strabismus is not really of nervous origin, as, before Donders's researches, it was universally supposed to be. It is indirectly owing to congenital shortness of the eyeball, to hypermetropia. This is an enormous gain both for diagnosis and for therapeutics. It is now so well known, that we are scarcely conscious of the serious blunders from which Donders has saved us. Strabismus indirectly owing to hypermetropia being taken to be of nervous origin, has, no doubt, often introduced sad confusion into the report of a case of brain-disease, and led to erroneous prognosis and misdirected treatment.

In some cases of abnormal refraction, there is a simulation of brain-disease, or, at any rate, patients who only want appropriate glasses are occasionally treated by physicians for brain-disease. I have been speaking of hypermetropia, but the remark applies to other abnormalities of refraction.

Mr. Brudenell Carter has reported a remarkable case of myopia simulating brain-disease in the eighth volume of the Clinical Society's *Transactions*. This report should be carefully studied by physicians. The patient, for supposed brain-trouble, took a voyage to Australia, but was no better for it. He was told that "he must abandon the idea of carrying on the family business, or of taking any active part in life". This patient was immediately thoroughly and permanently cured by the adaptation of appropriate glasses. The possibility of an anomaly of refraction or any eye-defect being at the bottom of that patient's troubles seems not to have occurred either to himself or to his doctors. He did not consult Mr. Carter for any defect of sight, but because he had heard that ophthalmic surgeons had an instrument useful in the investigation of disease of the brain. I could relate several cases of hypermetropia in which the diagnosis of brain-disease had been made by physicians and refuted by ophthalmic surgeons. Here is one. A medical student, twenty-one years of age, had been obliged to give up his work because reading brought on attacks of vomiting and frontal headache. The vision of each eye for near and distant objects seemed good to ordinary examination, and there were no ophthalmoscopic changes, except some dilatation of retinal veins. To cut a long story short, after travelling about two years, doing nothing towards his career, Mr. Tweedy, in May last, fitted him with a pair of spectacles, remedying hypermetropia and astigmatism. The patient has been well ever since; has returned to his medical career, and has graduated at the University of London. Without some knowledge of anomalies of refraction, the physician would never suspect the real nature of such a case as that of this medical student. Mr. Carter writes, in his paper referred to, that his advice was received by the patient and his father with polite incredulity, although fortunately it was acted on. I find that patients whose symptoms appear to them to depend entirely on something wrong in the head or in the liver receive with something more than incredulity the statement that they require glasses, and I fail now and then to make them consult an ophthalmic surgeon. Yet it is very ludicrous to give "nervous" and other remedies for a state of things which requires only a scientifically adapted mechanical aid.

There is another thing in connection with hypermetropia which deserves the attention of physicians. Mr. Couper has found that in some cases of hypermetropia the optic discs, in consequence of over-use of the eyes, become reddened and even swollen. The redness and swelling may, he tells me, be so marked that this comparatively unimportant condition, remediable by spectacles, is occasionally mistaken for and treated as slight neuritis depending on cerebral disease. The true explanation of these cases was given by Mr. Couper in a paper read before the Hunterian Society in 1870. In hypermetropia, the strain on accommodation is great; and thus there is not only congestion of the disc, but oedema also. Mr. Couper says that the button-like prominence thus given to the disc is easily recognised in the indirect image by the exaggerated parallax when the object-lens is moved. Its amount may be approximately expressed by the lens answering to the difference in the hypermetropia for the disc and the adjoining retina

respectively, as ascertained by the ophthalmoscope. Mr. Couper has found the oedema and swelling most marked in young subjects; the redness most marked in older persons who have never used adequate spectacles, and especially in those who have also taxed their eyes severely. In the former, perfect visual acuteness is usually obtained either immediately or in a few weeks by the use of proper glasses. In the latter, this perfect result is not always attained. The prolonged oedema and loss of vascular tonus seems to impair the acuteness of the retina. Occasionally the redness is so intense as to conceal the choroidal boundary of the disc in great part. Besides its very obvious direct interest, this fact has an important indirect bearing. The congestion and oedema from overwork of the hypermetropic eye seem to me to throw light on cases in which functional abuse leads to paralysis—on cases of writers' cramp, for example. In such cases, there is not a single fact as to their morbid anatomy; hence all our so-called pathological knowledge of them can only be hypothetical. In ophthalmic practice, is a case where we can see the effects of overwork in producing a morbid state, not, it is true, of a nerve-centre, but of a nerve-periphery. The facts stated seem to me important also as bearing on one way in which congestion of the brain results. As overwork of the eye causes congestion and oedema of the optic disc, so overwork of the brain causes congestion and even possibly oedema of the brain. I believe it produces arterial fatigue, and thus loss of arterial tonus. We cannot afford to overlook even indirect evidence bearing on so obscure a subject as cerebral congestion. Congestion of the brain, although frequently spoken of, is very difficult to prove even *post mortem*. Wilks and Moxon say that "*post mortem* fulness of the vessels of the brain and its membranes is of no pathological value whatever as showing brain-disease, as asphyxia produces it". They do not deny the existence of congestion of the brain as a fatal disease. It interests me very much to find that the conclusion that overwork of brain produces cerebral congestion by arterial fatigue has been reached by Niemeyer.

The nature of hypermetropia is a matter of great interest to physicians in one very important direction. The eyeball is incompletely developed; it is small; all its axes are short, especially the visual axis. More significant, there is a slighter optic nerve and a less retinal expansion; the nervous system of the eyeball is less developed. There is, if I may use such an expression, an exaggeration of the normal astigmatism. When the abnormal refraction is corrected by glasses, there remains usually a diminished acuteness of retinal vision—further evidence that the nervous system of the eyeball is less developed. It is noteworthy that objects appear to be smaller even when proper convex glasses are used. Hence the hypermetropic eyeball is an imperfect or ill-developed one. Moreover, hypermetropia, according to Donders and others, often goes along with an imperfect development, or, at any rate, a peculiar appearance, of the face; and, if one eye be hypermetropic, the face on that side alone is abnormal.

It seems to me that we have here a good illustration of what I believe to be the nature of the inheritance in one class of cases of insanity. No one inherits "asthenopia"; he inherits hypermetropia. I believe, similarly, that insanity is not transmitted in the sense of disease of the brain. In those who inherit a tendency to insanity, a congenitally imperfect brain has been transmitted; in those who inherit a tendency to asthenopia, a congenitally imperfect eye. There is not transmitted an insane neurosis, nor a tendency to any kind of disease of the higher divisions of the nervous system. There is transmitted a healthy brain, but one of which the highest nervous arrangements are few. Such a person is easily rendered insane by any kind of ill health, or by mental overwork or worry—by causes which would not affect those whose highest nervous arrangements are well developed. Holding this opinion, which is neither practically nor theoretically equivalent to the current doctrine, I do not believe that insanity is, as is commonly assumed, interchangeable in inheritance with such neuroses as epilepsy, chorea, neuralgia, etc.; any more than I believe that "asthenopia" is interchangeable in inheritance with other forms of "amaurosis". That epileptics often become insane is admitted, but only because epilepsy damages the brain, as drinking and many other things do. The imperfection of the inherited brain is, I speculate, that the highest cerebral centres are imperfectly developed; the lower being, in comparison, over-developed. In other words, "the controlling centres" are little developed. To become insane is to have defect in the controlling or inhibitory centres; and this permits over-activity of the lower centres. A person with such a brain easily becomes excited by alcohol, easily delirious during an acute illness, and is more liable than other persons to have insanity after an acute illness. The reason is that, having fewer controlling processes, he can bear little interference with them. He begins his mental life with a deficit, just as "the hypermetropic individual begins his accommodation with a deficit" (Donders). There are various degrees of hyperme-



tropia; so, no doubt, to carry the illustration further, there are various degrees of congenital ill-development of the highest cerebral centres. Hypermetropia from ordinary use of the eyes becomes manifest at different ages, according to its degree (roughly speaking, one-eighth at eight years of age, one-twentieth at twenty years of age, and so on); so it is possible that insanity becomes manifest at different ages, even from ordinary wear and tear of a civilised life, according to the degree of ill development of the highest cerebral centres.

I should extend the principle to all organs. The inheritance of phthisis is, I submit, an inheritance of small lungs—of lungs easily overworked.

Leaving the consideration of anomalies of refraction, I pass to a very important disease, in which loss of accommodation is a symptom. I suppose it is to ophthalmologists that we are indebted for our knowledge of what so-called diphtherial "amaurosis" really is. It is one of the most singular forms of palsy. Diphtherial palsy altogether seems unlike any other. I believe that diphtherial amaurosis gives us a clue to its nature. Diphtherial amaurosis is that part of diphtherial paralysis which is most easily studied. The state of things can be studied with absolute precision, and therefore I suggest that, in a scientific investigation of the nature of that very complex thing diphtherial paralysis, we should begin here. Whilst urging on physicians the ophthalmological study of diphtherial paralysis, I would particularly urge on ophthalmic surgeons a careful study of the researches of Greenhow into this very singular disease.

In diphtherial amaurosis, the power of accommodation of the eyes is diminished or lost, and thus the patient (supposing him to be emmetropic) cannot read or see small objects, but can see in the distance. Obviously, the term amaurosis is improper; the deep parts of the eyes are normal. So far as I know, paralysis of the ciliary muscles on the two sides is only found in a high degree after diphtheria. After any debilitating illness in a hypermetropic person, we may have a condition which is symptomatically a minor degree of it: the patient's hypermetropia, heretofore latent, becomes manifest.

The peculiarity of diphtherial amaurosis is, that the paralysis is of parts supplied through a ganglion of the sympathetic chain. There is not paralysis nor paresis of the third nerve, but of parts of it which are supplied through the lenticular ganglion. In other regions, we see the same thing. The defective articulation is owing to paralysis of muscles of the palate supplied through Meckel's and the otic ganglia. The very slow pulse which, as Jenner and Greenhow have pointed out, is found in some cases, may be explained by affection of the cervical ganglia of the sympathetic. I grant fully that I cannot show that a similar state of things applies to the rest of diphtherial paralysis. Indeed, we could not reasonably suppose that the pathological process in diphtherial paralysis has any special malice against sympathetic ganglia as such; we can only suppose that cells of certain histological constitution easily give way, and, at the most, that those of these which first give way are most largely represented in the higher ganglia of the sympathetic.

There is one other direction of inquiry. In the case of hearing, there is evidently an accommodative apparatus analogous to that in the eye. Omitting the muscles of the pinna, which in man are rudimentary, there are, inside the tympanum, the tensor tympani and the stapedius muscles; we have to take into account also the tensor palati, because it has to do, if not with what I call the accommodation of the ear, at any rate with the functions of hearing. The otic ganglion, Troeltsch says, is of the same importance to the ear as the lenticular ganglion is to the eye. It is, then, I think, legitimate to inquire if we do not find in diphtherial palsy occasionally affection of hearing analogous to the defect of sight. One could only expect slight defect, because the muscular apparatus of the ear has not so much to do with hearing as the ciliary muscle has with sight. Besides, if the hypothesis be correct, that the otic ganglion in such a case is affected, there would be no palsy of the stapedius muscle; and, more than all, the tensor tympani and the tensor palati would not be entirely paralysed, as they receive a supply directly from the internal pterygoid branch of the fifth nerve, as well as from the otic ganglion. Moreover, the tensor tympani is the accommodator for high sounds; and thus, on the hypothesis, we should only expect loss of power to recognise high sounds. So far, then, from expecting to find "deafness" in diphtherial paralysis, I should expect only slight interference with the power of appreciating high-pitched sounds. I have met with but one case of slight affection of hearing in diphtherial paralysis. A medical man said it was not enough to impair his hearing for ordinary purposes, but, to use his expression, "enough to render music unintelligible". It was just the kind and degree of defect one would expect to find. Slight defects of hearing are not likely to be noted by unskilled persons. It is a remarkable

fact that double hearing has never been noted except in musicians (Roosa), although, of course, it may occur in anybody. It would seem to me that the investigation of the states of hearing in diphtherial paralysis could only be possible in an intelligent and also educated patient, and when the investigator is an aural surgeon. For there is the obvious difficulty, as Greenhow insists, that, if there be deafness, it may be owing to some affection of the Eustachian tube, a relic of the active diphtheritic process. In cases of Menière's disease, and in other ear-affections, the aural surgeon notes the patient's power of perceiving particular notes; and I see no reason why the state of hearing in cases of diphtherial paralysis should not be equally carefully noted.

Before leaving this subject, I would mention that the clearest account of the peculiar difficulty of articulation which occurs in paralysis of the palate is given by Donders in an appendix to his exposition of diphtheritic paralysis of the ciliary muscles; it is not an uncommon thing for paresis of the lips to be suspected when the palate is solely affected.

[To be continued.]

## THE LUMLEIAN LECTURES

### THE MUSCULAR ARTERIOLES.

THEIR STRUCTURE AND FUNCTION IN HEALTH  
AND IN CERTAIN MORBID STATES.

*Delivered at the Royal College of Physicians of London.*

By GEORGE JOHNSON, M.D., F.R.S.,

Fellow of the Royal College of Physicians; Professor of Clinical Medicine and Senior Physician to King's College Hospital; etc.

#### LECTURE III.—Concluded.

*Renal Asthma: Symptoms and Proximate Cause.—The Dry and Irritative Skin of Bright's Disease: its Proximate Cause.—Is Diuresis a Result of High Arterial Tension?—Is High Arterial Tension a Cause of Albuminuria?—Uremic Convulsions and other Nervous Symptoms: their Relation to Epilepsy: their Proximate Cause: Principles of Treatment.—Two Forms of Impaired Vision in Bright's Disease: the Proximate Cause of each.—Cholera Collapse and Puerperal Embolism compared.—Cholera Collapse and Spasmodic Asthma compared.—Conclusion.*

THERE is good reason to believe that some of the more formidable nervous symptoms which result from uræmia—in particular uræmic convulsions and a form of transient amaurosis—are directly due to cerebral anæmia consequent on sudden extreme contraction of the muscular arterioles.

There can, of course, be no question that uræmic convulsions are of an epileptic character. A large amount of evidence points to the conclusion that both the loss of consciousness and the convulsions of epilepsy are the results of sudden and extreme anæmia of the brain. In man, and in most, if not in all, warm-blooded animals, a rapid and very copious hæmorrhage usually causes convulsions. Kussmaul and Tenner state (*On the Nature and Origin of Epileptiform Convulsions caused by Profuse Bleeding*, New Sydenham Society, 1859) that in numerous cases of dogs, cats, and rabbits, they observed, without a single exception, violent and general convulsions preceding death by loss of blood. In order to produce this result, the hæmorrhage must be rapid. If it occur slowly, so that the vital powers are gradually exhausted, death then occurs with swooning, drowsiness, and delirium without convulsions.

The same experimenters found that an interruption of the supply of blood to the head of a rabbit, by ligature or compression of the arteries of the neck, produces epileptic convulsions as surely as hæmorrhage does. In about one hundred rabbits they ligatured or compressed the carotids and subclavians, from which, be it remembered, the vertebral arteries proceed; and in every case, except that of one very old lean and feeble animal, convulsions occurred.

In order to excite convulsions, they found it necessary to close all the four arteries which supply the brain. If but one carotid or one vertebral artery remained pervious, the animal was enfeebled and more or less paralysed, but not convulsed. And again, if, during the height of the convulsion, the ligature were removed from one carotid, the convulsions generally ceased immediately, and there was a sudden change from the most frightful spasm to complete relaxation of the muscles. The description of the convulsions thus artificially produced with, as it



seems to me, needless reiteration, in the lower animals, shows that they were essentially the same as epileptic convulsions in the human subject. There was the dilated pupil, the tonic spasm, quickly followed by clonic convulsion so violent as to throw the animal forward to a distance of one or two feet, and sometimes even over the shoulders of the operator. These experiments obviously could not be performed on the human subject; but Drs. Kussmaul and Tenner approached as near to this as they dared by compressing the carotids of six men. The result was that in all the face turned pale; the pupils first contracted and then dilated; the respiration became slow, deep, and sighing; then there was giddiness, staggering, and unconsciousness, and the men would have fallen if they had not been supported. They say that, "in two subjects of weak intellect and moderately anæmic, in whom, notwithstanding the above symptoms, the compression was continued, a choking sensation, attended by vomiting and general convulsions, came on, which, however, did not attain an aggravated form; for, on withholding the compression, they disappeared in a few seconds". (*Op. cit.*, page 28.) Compressing the carotids does not, of course, entirely cut off, but only greatly lessens the supply of arterial blood to the brain; but these experiments render it probable that sudden occlusion of all the arteries supplying the brain would as certainly excite epileptic convulsions in man as in the lower animals. And this conclusion is confirmed by observing the results of certain diseases and accidents in the human subject. Thus convulsions occur almost invariably as a result of sudden suffocation or acute apnoea. It has commonly been supposed that the convulsions thus occurring are caused by the noxious influence of black blood upon the brain. It is far more probable that they are caused by the sudden and extreme anæmia of the brain, consequent on the impeded flow of blood through the lungs into the systemic heart and arteries, as explained in my first lecture. The epileptiform convulsions which often result from the inhalation of nitrous oxide gas admit of the same explanation. It is quite certain that, in Kussmaul and Tenner's rabbits, with closed carotids and subclavians, no black blood could reach the brain, yet the convulsions were apparently identical with those which result from suddenly fatal apnoea, whether in the lower animals or in the human subject.

A few years since, the following case came under the observation of my friend Dr. Lavies and myself. A gentleman, about sixty years of age, had been confined to his bed for three weeks with symptoms which pointed to great feebleness of the heart, and probably to fatty degeneration of its walls. There was dyspnoea on exertion, and sometimes on awaking after a long sleep; the heart's impulse and the radial pulse were feeble; there was some oedema of the legs, and over the bases of the lungs there were moist crepitating sounds, probably the result of oedema there. He awoke in the middle of one night, told the nurse that he felt quite comfortable, asked the time, and began to repeat her reply "Oh, half-past —", when he suddenly stopped, and the nurse, turning to him immediately, saw that his face was livid and he was in strong convulsions. In a few seconds, and before any one could answer her call for assistance, the patient was dead. The body was examined, in the presence of Dr. Lavies and myself, by my friend and former colleague Dr. Kelly. The walls of the heart were thin, soft, and fat. The right ventricle was dilated, and contained firm decolorised thrombus, extending from the apex of the ventricle through the tricuspid orifice into the auricle, to the outer wall of which it had evidently been attached and moulded, but, becoming separated from the auricular wall, it had fallen over the tricuspid orifice and completely closed it. Thus, the circulation must have been completely and instantaneously arrested. The result was lividity of the face from venous fulness, and epileptiform convulsions from cerebral arterial anæmia. In this case, as in the case of the rabbits with ligatured arteries, it is evident that the convulsions were caused, not by black blood, but simply by the absence of circulating blood in the cerebral vessels.

When animals are killed by air being forcibly blown into a vein, the breathing becomes hurried, the animal suddenly falls down, and usually dies in convulsions; the contents of the bladder and rectum being frequently expelled at the time of death. Dr. John Reid states that, "in very few cases only is death from this cause not preceded by convulsions". (*Physiological, Anatomical, and Pathological Researches.*)

The immediate cause of death in these cases is the arrest of the frothy mixture of air and blood by the contraction of the pulmonary arterioles, the air seldom reaching the left side of the heart; and as a result of this arrest there is, of course, sudden extreme anæmia of the brain, and of every other organ supplied by the systemic arteries. In man, it appears that death from the accidental admission of atmospheric air into a vein during an operation, is less frequently preceded by convulsions. Probably the chief reason of the less frequent occurrence of convulsions from this cause in the human subject is, that the amount of air

accidentally admitted is less, and death consequently is less rapid than when air is forcibly blown into the vein of an animal. It would probably be found, on a careful inquiry, that the occurrence of convulsions in these cases depends upon the circulation being suddenly and completely arrested.

It has been noted, in some cases of suddenly fatal pulmonary embolism, that death has been preceded by convulsions; and Virchow observed, amongst the results of artificial embolism of the pulmonary artery in animals, convulsions and dilatation of the pupil. (*Des Embolies Pulmonaires*, par B. Bell, page 129.)

We find, then, a large amount of evidence pointing to the conclusion that sudden and extreme anæmia of the brain will cause epileptiform convulsions, and a theory of epilepsy has been framed in accordance with these facts; the theory being that the cerebral anæmia, which is the immediate cause of the convulsion, is the result of spasm of the cerebral arterioles. It may be said with truth that this is only one step towards an explanation of the phenomena, and that the cause of the arterial spasm remains to be determined. We will presently revert to this question.

It is, I think, pretty generally admitted that this theory of cerebral anæmia from arterial spasm is quite consistent with the phenomena of epilepsy. It is a matter of general observation that, at the very commencement of an epileptic fit, the face is pallid. There is obviously anæmia of the superficial vessels, and with this there is probably associated anæmia of the intracranial vessels which supply the brain itself. The pallor is in most cases soon succeeded by lividity, owing to the venous engorgement which results from impeded respiration and pulmonary circulation. It is very remarkable that, while the face is pallid, the heart is beating strongly and the carotids throbbing violently. These phenomena would be explained by extreme contraction of the muscular arterioles, resisting the escape of blood from the arterial trunks into the capillaries.

Kussmaul and Tenner endeavoured to support the theory of arterial spasm by experiment, and to some extent they succeeded. In each of two white rabbits, they ligatured the two subclavians and one carotid; the cervical sympathetic, on the other side, was then exposed and galvanised, with a view to excite contraction of the arterioles by the stimulus conveyed through the vaso-motor nerves. In two animals, no effect was produced; but in the third, the background of the eye became completely pale; the pupil dilated, so that the iris could scarcely be seen; the neck was drawn back, and violent convulsions occurred. The electrodes being removed, the spasms ceased, the pupil contracted, and the background of the eye became red; but the animal continued in a swooning condition. After some minutes, electricity applied to the sympathetic nerve produced the same effect as at first. A third attempt to excite convulsion did not succeed.

The authors suggest that these experiments deserve repetition, with a view of rendering certain what at present is probable, namely, "that epileptic convulsions can be brought about by contraction of the blood-vessels induced by the vaso-motor nerves".

According to this theory, then, epilepsy is the result of sudden anæmia of the brain; and this anæmia, when not caused by a sudden and profuse hæmorrhage, or by some impediment to the circulation outside the cranium, is due to an extreme contraction of the muscular arterioles. This arterial contraction may be determined by two main classes of causes:

1. By a purely nervous reflex influence, such as, for example, may be excited by anger or terror, by the irritation of the gums during dentition, by a calculus in the kidney, the ureter, or the gall duct, or by worms in the intestines.

2. In the second class of cases, a blood-poison is the exciting cause of the arterial spasm and the resulting epileptic convulsion. This includes all cases in which convulsions result from retained excreta, of which uræmic convulsions are a typical example.

From the preceding narrative of facts, it appears to be highly probable that uræmic convulsions are directly due to a sudden and extreme anæmia of the brain, resulting from contraction of the cerebral arterioles, and that the arterial contraction is excited by the influence of impure blood upon the vaso-motor nerves and centre.

This theory, moreover, indicates two modes in which uræmic convulsions may be prevented, namely: first, by means directed towards removing the morbid quality of the blood; and, second, by remedies which lessen the reflex excitability of the nervous centre.

Time would not permit, even if it were desirable to enter into the details of treatment; but I am anxious to direct attention to one or two points of practice. It is a well-known fact that the inhalation of chloroform or ether-vapour invariably puts a stop to uræmic convulsions, and often wards off an attack after premonitory symptoms, such as convulsive twitchings of certain muscles, have occurred. It has



sometimes been supposed that the anæsthetic acts by relaxing the cerebral arteries; but an observation of Kussmaul and Tenner points to a different explanation. These experimenters found that, if animals are etherised, no convulsions occur when they are bled to death or when their intracranial circulation is arrested by ligatures. It appears, therefore, that the anæsthetic vapours prevent or stop convulsions by lessening the reflex excitability of the nervous centre.

The undoubted influence of repeated full doses of bromide of potassium, in warding off uræmic convulsions, is also probably to be explained by its soothing sedative influence on the nervous centres. The bromide is a very useful remedy for the painful muscular cramps which are of common occurrence in the advanced stages of all forms of renal degeneration. These cramps, which are especially frequent and severe in the lower extremities and during the night, are no doubt to be classed with the results of uræmic poisoning, and in not a few cases they are the precursors of more formidable nervous disorder. They may, in some cases, be entirely prevented by a draught containing twenty grains of bromide of potassium, with five grains of carbonate of ammonia, at bed-time.

No doubt, some of the many nervous disorders that result from uræmic poisoning are due to the noxious influence of the morbidly altered blood upon the nervous tissue, while others are more probably explained by sudden partial interruption of the blood-supply to certain parts of the nervous system. This statement may be illustrated by a reference to the two forms of impaired vision, which are very frequently associated with advanced renal degeneration. In one class of cases, dimness of sight comes on more or less gradually, affecting one or both eyes, and is permanent. This form of impaired vision is found to be associated with peculiar structural changes in the retina, results of the so-called *albuminuric retinitis*. In the other class of cases, the impairment of vision may be so sudden in its onset that, in a few minutes or even seconds, there is complete blindness, which usually passes away as suddenly as it came. These attacks of sudden and transient blindness may recur again and again. That they are closely allied to epileptiform attacks, is shown by the fact that they are sometimes immediately followed by general convulsions. The most probable explanation of this sudden transient form of amaurosis is that which attributes it to sudden anæmia of the retina, or of the central origin of the optic nerves, the result of arterial contraction, excited by the morbid quality of the blood. It is, in fact, a form of circumscribed partial epilepsy, "epilepsy of the retina", as it is sometimes designated.

There are various forms of nervous disorder of uræmic origin which probably admit of a similar explanation: sudden and transient impairment of motor power or irregular spasmodic movements limited to a particular set of muscles; various disordered sensations in limited portions of the skin; sudden perversions of taste, or smell, or sight, or hearing, sudden impairment of speech, vertigo, confusion of thought, temporary mental excitement and delirium. One or more of these symptoms may occur singly or variously associated in different cases, the onset and the departure being often equally sudden. In explanation of these phenomena, Dr. Hughlings Jackson has, with much ingenuity, suggested that they may result from a sudden temporary interruption of the blood-current through one or more branches of the cerebral arteries by spasm of their muscular walls; so that the brain-tissue within a circumscribed "arterial region", having its nutritive supply arrested or limited, would suffer a suspension or impairment of its proper functions. Our increasing experience of the various forms of nervous disorder which may result from so purely mechanical a cause as embolism of cerebral vessels lends support to this theory. An arrest of the circulation through a portion of the brain involves immediate suspension of function in that part, with perhaps a disorderly action in subordinate or correlated parts. Thus, amongst other symptoms of nervous disorder, maniacal delirium, with mental illusions, and acute chorea have been found associated with, and probably have been directly caused by, mechanical plugging of minute cerebral vessels; the plugging being a result of embolic particles of fibrin detached from the so called warty vegetations on a damaged cardiac valve. In another manner, sudden and complete blindness may result from embolism of the *arteria centralis retinae*, partial and patchy blindness from embolism in one of its branches. The results of the mechanical plugging of vessels are thus seen to bear so strong a resemblance to those which are due to uræmic poisoning as to afford much support to the theory of arterial contraction as the immediate cause of some at least of the characteristic symptoms.

There is another class of cases in which the theory of obstructed circulation being the result of arterial spasm receives confirmation from the fact that very similar phenomena result from a demonstrable mechanical block of the same system of vessels. I refer now to the striking

resemblance between the symptoms of cholera-collapse and the results of embolism or thrombosis in the pulmonary artery.

It will be known to most of those whom I have now the honour to address, that for a number of years I have maintained that the impeded circulation through the lungs, which obviously exists during the collapse stage of cholera, is explicable only on the hypothesis of abnormally energetic contraction of the pulmonary arterioles. And I now desire to direct attention to the very striking resemblance between the symptoms of choleraic collapse and those which have been observed in some cases of obstruction of the pulmonary artery by fibrinous clots.

I have references to several cases of pulmonary embolism in which the symptoms bore a more or less striking resemblance to those of the collapse of cholera; but the most complete record of such a case is one which was published by Dr. Alfred Carpenter (*Lancet*, September 23rd, 1871). In that case, as Dr. Carpenter remarks, "the only symptoms wanting to make it apparently one of cholera were altered discharges and cramps of the limbs". The symptoms actually noted, and which in the choleraic cases have very commonly been supposed to result from the dehydration of the blood by the intestinal discharges, were the following: blueness of the surface; icy coldness of the uncovered parts of the body; cold clammy perspiration; coldness of the breath; sinking of the eyes; feebleness of the voice; a feeble thready pulse; with quick breathing, excessive thirst, and almost complete suppression of urine, two ounces of urine only having been passed one day, and on another day less than two ounces. After death, the right side of the heart was found fully distended with dark-coloured blood, while the left side was empty. The pulmonary artery at its origin was partially obstructed by a clot of fibrinous matter, which sent branches into the ramifications of the artery for several inches; these did not block up the passages entirely, but floated like semi-cylinders in the current. It is obvious that, if the trunk of the artery and its main branches had been completely obstructed, death must have been as instantaneous as in the case of cardiac thrombosis which I mentioned in the early part of this lecture; and it can scarcely be denied that the symptoms which resulted from this partial obstruction of the arterial trunk bear a striking resemblance to those of choleraic collapse. Such a case, therefore, may fairly be cited as evidence in support of the theory of arterial contraction being the main cause of the impeded pulmonary circulation during the collapse stage of cholera.

Again, it is not without interest to remark upon the very striking resemblance between the symptoms of choleraic collapse and a severe fit of spasmodic asthma. For the purpose of illustrating this, I will take Dr. Hyde Salter's graphic description of the asthmatic paroxysm. He says: "If the bronchial spasm is protracted and intense, the heat of the body falls; the oxygenation of the blood is so imperfectly performed, from the sparing supply of air, that it is inadequate to the maintenance of the normal temperature; the extremities especially get cold and blue and shrink. I have known the whole body deathly cold and resist all efforts to warm it for several hours. But, while the temperature is thus depressed, the perspiration produced by the violent respiratory efforts may be profuse, so that the sufferer is at the same time cold and sweating. It is this union of coldness and sweat, combined with the dusky and pallor of the skin, that gives to the asthmatic so much the appearance of a dying man. The pulse during severe asthma is always small, and small in proportion to the intensity of the dyspnoea; it is so feeble sometimes that it can hardly be felt." I scarcely need insist upon the many points of resemblance between these symptoms and those of cholera. What, then, is there in common between these two forms of collapse? Obviously not a drain of fluid from the blood, which was at one time looked upon almost universally as the main cause of choleraic collapse; not, I repeat, a drain of fluid from the blood, but a partial arrest of the pulmonary circulation. In both classes of cases, there is evidence of an impeded pulmonary circulation, the result of spasm of the muscular arterioles. In cholera, the arterial contraction is a primary result of the irritant action of the poisoned blood upon the vessels and the vaso-motor nerves; while in asthma the arterial spasm is a secondary result of a partial apnoea occasioned by primary spasm of the bronchi. Using the words asphyxia and apnoea in their strictly literal sense to express pulselessness and breathlessness, we may say that in cholera collapse there is a primary asphyxia, and a secondary apnoea consequent on the blood-stasis in the arterioles before it can reach the capillaries to be aerated. On the other hand, in asthma there is a primary apnoea caused by bronchial spasm which cuts off the air from the pulmonary vesicles, and a secondary asphyxia the result of arterial contraction.

In conclusion, Sir, I venture to express a hope that the brief survey which we have taken of some of the pathological phenomena with



which the muscular arterioles and the vaso-motor nervous system are intimately and obviously concerned has not been without interest even for this learned audience, to whom I desire to offer my cordial thanks for the attentive hearing with which they have favoured me.

### ON DR. BILLING'S VALVULAR EXPLANATION OF THE HEART-SOUNDS.

By W. J. LITTLE, M.D.,

Late Senior Physician to the London Hospital, etc.

AMONGST the controversial communications on the causes of the sounds of the heart which have recently appeared in the columns of the BRITISH MEDICAL JOURNAL is one dated September 30th, 1876, from Dr. C. J. B. Williams, in which the following statement occurs:—"I reassert that those observations" (viz., Dr. Williams's experiments on the ass stupefied by woorara) "made in February 1835, supplied the first complete knowledge of the sounds of the heart, which has given to the profession the means of distinguishing the physical signs in health and disease." In the same article, it is said: "My experiments established the view that the *first*\* sound of the heart is produced by the tightening of the ventricular walls and valves in the systole, and the *second* sound by the tightening of the arterial valves by the recoil on them of the column of blood in the arteries by the diastole"; also: "These observations seem to me sufficiently to prove that the essential cause of the first sound is in the walls of the ventricles." He further adds: "I admit that the auricular valves have their full share with the ventricular walls in producing the systolic sound, and I ascribe the *flapping* commencement of this sound especially to them."

Dr. Williams here appears to lay claim to being the first to demonstrate that the first sound is *in part* caused by the action of the auriculo-ventricular valves, and that the second sound is *wholly* caused by the action of the arterial valves. There is some difficulty in reconciling the apparent meaning of the sentences which I have quoted, when they are compared with each other and with what Dr. Williams wrote in 1835. At that period, he assigned more importance to *bruit musculaire* than he now does, as shown by the following extracts from his work on *Diseases of the Chest*, 3rd edition, 1835, page 175:—"That the first sound is not dependent on the closing of the auriculo-ventricular valves (as imagined by M. Rouanet and others) is evident from Exp. 1, Obs. 4, 6, 7, 8, 9, in which the closure of these valves was partially or completely prevented, yet the first sound still continued.....*That the first sound is produced by the muscular contraction itself*† may be considered as proved by Obs. 8 and 9 of Exp. 1, in which every other possible source of sound was excluded and the first sound still accompanied the systolic action of the ventricles." There appears also some confusion of language in one of the above extracts, where Dr. Williams speaks of tightening of the valves, and in another place of the *flapping* sound of the valves. Surely Dr. Williams would consider himself somewhat at sea, if he imagined the valves to flap in the blood in the manner that the sail of a ship which is loose at one side flaps about during a gust of wind.

I have waited until the probably approaching end of the controversy, in the hope that some of the contributors to it, and especially Dr. Williams, would have alluded to the labours of Dr. Billing, who, before the date of Dr. Williams's experiments, showed, as the result of anatomical, physiological, acoustic, and clinical research, that the first sound of the heart is produced by *tension* of the auriculo-ventricular valves, and the second sound by the *tension* of the arterial valves. Dr. Williams's experiments were made known in 1835. Dr. Billing's views and explanations were given in his lectures on the *Theory and Practice of Medicine* at the London Hospital during the period of my attendance on those lectures, and whilst I was acting as his clinical clerk in the wards previously to August 1831. I was also present as a visitor at the Hunterian Society in February 1832, when Dr. Billing read a paper on the Valvular Origin of the Sounds of the Heart. This paper was published *in extenso* in the *Lancet* of May 1832. I will remember seeing and hearing Dr. Billing illustrate the mode of production of the heart-sounds by means of a strip of paper held by one hand at each end of it and then suddenly rendering it tense. I refer those readers who desire to investigate the matter to Dr. Billing's *First Principles of Medicine*, 6th edition, 1868, page 37.

Whatever honour may spring from the discovery of the valvular origin of the sounds of the healthy heart—and, in my humble opinion,

\* The italics are mine.

† The italics in this paragraph are in the original.

this honour is considerable—is due to Dr. Billing, my old teacher, colleague, and friend. I hold that clinical study is a firmer basis of knowledge on this subject than experiments on dying animals, especially when, in addition to removal of the anterior wall of the chest and listening through the stethoscope applied to the naked heart, the operator varies his investigation by "pushing the auricles by the end of a finger into each auriculo-ventricular opening, cutting open the auricle, partially destroying the mitral valve, causing the blood to well out at each pulsation, inserting a hook into the pulmonary artery and drawing back its valves". It is not hereby meant to indicate that any of these methods of inquiry were meaningless or unjustifiable; quite the contrary. Having formerly had some experience in vivisections, knowing the difficulty of carrying them out under circumstances in any way analogous to the normal condition of things, I set a smaller value on the results of Dr. Williams's experiments, confirmatory in a great degree as they are of Dr. Billing's previously published views, than Dr. Williams very naturally places upon them. I express the conviction that Dr. Billing is alone entitled to the merit of the discovery of the sounds of the heart being dependent upon valvular tension.

It is an agreeable thing for the old pupils of Dr. Billing to know that many able later investigators have wholly or partially confirmed his views. Of these may be named Rouanet (September 1832), Bryan (January 1833), Von Kiwisch, Valentin (1850), and Halford (1852). It would seem, from the present controversy in the BRITISH MEDICAL JOURNAL, that the minds of many men are still unsettled as to the presumed existence of coexisting simultaneous causes of sound going on in the heart—movements of fluids, *bruit musculaire*, contact of heart with the walls of the chest, etc. I avoid wearying my readers, and, therefore, refer them to the full sources of information contained in Dr. Billing's book already quoted.

It was a grand merit on the part of Dr. Billing, when so many able men—Hope, Latham, Watson, Clark, Williams, and others, his contemporaries in this country—were, like himself, assiduously employing auscultation, to have alone enunciated and demonstrated the valvular origin of the sounds in 1831, at so early a period after the publication of Laennec's immortal discovery of *Auscultation and Percussion*, and at a period when the facts and explanations of Laennec were undisputed as to this matter by men so gifted as Sir John Forbes, the translator of Laennec's work, and Dr. Thomas Davies, the earliest followers, I believe, of Laennec in this country.

### THE RECENT CATASTROPHE AT TYNEWYDD COLLIERY, NEAR PONT-Y-PRIDD.

By H. N. DAVIES, L.R.C.P.L. & Ed., Surgeon to the Colliery.

THE subjoined narrative of the recent accident at Tynewydd Colliery is so remarkable in some of its features, especially those having reference to the prolongation and sustentation of life in air considerably compressed, that I have great pleasure in sending it for publication in the BRITISH MEDICAL JOURNAL.

I shall not in this report submit any opinions as to the physiological effects of compressed air on the waste of tissue, or in arresting evaporation, and thus preserving the heat of the body and maintaining the temperature of the cell in which the rescued men were entombed.

It is, perhaps, necessary to remind those of the profession who are unused to colliery operations that, when coal is to be dug, a shaft is sunk to the depth at which the mineral is to be found. From the bottom of this shaft radiate one, two, or three principal roadways; and it is on both sides of these roadways, and at right angles more or less with them, that headings are driven. On each side of these headings, openings are made into the coal, called stalls. Tramways run along the main roads and branch off into each stall. Further, it is to be remarked that, with respect to this and many other collieries in South Wales, the headings run up from the roadways, at a dip or angle more or less acute with the plane of the roadway. It can, therefore, be easily understood that, a mine being flooded, it is possible that, though all practical egress from parts of the interior is closed, the air driven into the upper headings and stalls will ultimately assert its limit of compressibility, and prevent the further advance of the water. This compression will, of course, increase with the weight of the superincumbent water above the level of the remote stalls, to which reference has already been made.

With this imperfect summary of the conditions as to the general structure of the colliery, which I think necessary before the gravity of the facts can be fairly appreciated, I at once come to the stall which en-



tomed five men, four of whom escaped, whilst one was unfortunately killed.

This stall is known as Thomas Morgan's stall, and is forty-five yards long, thirteen yards wide, and three and a half feet high (the height being the thickness of the coal.) For nine feet of the width a roadway has been cut out of the bottom rock to a depth of two feet, making a total height along it of five and a half feet. This roadway brings the tram from the heading to receive the coal from the gallery whence it is cut. The rise in Morgan's stall from the roadway is one in twelve, and its distance from the bottom of the shaft is nine hundred yards. The cubic capacity of this stall, from which the four men and the boy were rescued, equalled 7,000 feet.

Thomas Morgan, with his two sons, had left the stall, having finished their day's work, at 4 P.M. on Wednesday, April 11th. On their way out, they found a mass of water rolling and surging towards them with an indecribable roar. They succeeded in reaching another stall, where the black waters confined them, and shut out all chance of escape. Here they found two men, who had sought safety from the terrible element below them. In the meantime, four men and a lad had found refuge in the stall left by Morgan and his two sons, as described above.

About six o'clock the same evening, knockings were heard as coming from the stall in which Morgan, his sons, and the two men were immured. The block of coal intervening between the stall and the main heading was twelve yards thick. Men were at once put to work to drive through this column of coal. (It must be remembered that only a portion of the working was flooded.) The difficulty which presented itself was to effect a communication with the men without imperilling the lives of those waiting to be rescued, as well as of those working for their rescue, owing to the compressed air within the stalls. It was determined to bore through the coal. The orifice normally covered a surface two inches in diameter, and it was hoped that the escape of the compressed air through it would so relieve the pressure in the stall as to ensure the working through the block with safety.

I may remark here, that no fear was entertained that the water in the stall would rise high enough in the face to drown the men before they could be released. No sooner was a communication effected, than a tremendous rush of the confined air tore through the hole with an unearthly shriek, carrying with it and hurling in all directions pieces of coal wrenched from the edges of the hole, whilst the terrified miners working in the face were compelled to escape to some place of safety. The men inside were previously warned, through the coal acting as a medium, to keep back from the bore until the pressure was exhausted. Poor Morgan, one of the sons, a young married man with one child, disregarding the admonition in his intense anxiety to get out of his dungeon, was speedily drawn into the adit by the irresistible force of the escaping air, so that his head was as firmly fixed in it as in a vice. Death was instantaneous, and resulted from asphyxia. The skull was not fractured. Other holes were bored, and when the stall was sufficiently relieved, the work of cutting through the coal was resumed. By 10 A.M. on the 12th, the body was removed and the men were liberated.

The next important question was the whereabouts and fate of the other imprisoned colliers, who to the number of nine were known to be in the workings.

On the evening of this day, knockings, somewhat feeble in their intensity, were heard, and were supposed by the sound to have their origin in Morgan's stall, referred to above—a distance of seventy-five yards from the heading. In the then existing conditions of the workings, all hope of reaching the place had to be deferred until the superincumbent water had been substantially reduced.

Into the engineering difficulties and the magnificent skill with which they were surmounted, it is not my province to enter. When measures had so far progressed as to render it a matter of hopefulness that the poor fellows would be rescued, I deemed it necessary to make such special arrangements as to the *locale* to which the imprisoned miners should be brought as would insure the most effective supervision and vigilant attention. With this view, I engaged the large room belonging to the Tynewydd Inn closely adjoining the colliery, and had it fitted up as a hospital, with the most humane and skilful local nurses in attendance. Everything above ground being ready, I left the surface arrangements in charge of my friend Dr. E. W. S. Davies of Mountain Ash, and of my brother Mr. Idris Davies of Ystrad. It was determined, however, to utilise a shed near the pit's mouth as a temporary relief station for the rescued men, if it were found that they were too weak to be carried to the hospital.

I and my assistants, Messrs. Dukes and W. Davies, had been in the pit forty-eight hours in attendance, with a few intermissions, in consequence of the frequent and harassing rumours that our services were immediately required. My object was to be in readiness to afford the

necessary assistance, without a moment's loss of time, to men who had now been immured two hundred and fourteen hours.

On Friday, April 21st, the crisis, in so far as the rescue of the men was concerned, was over.

*Condition of Men when Released.*—1. David Hughes, the boy, was the first to be released. He was carried from the stall through the tunnel that had been made in the coal to reach it, on a stretcher. He was perfectly sensible. The general surface of the body was warm; pulse 84. He complained of a little weakness only. His voice was natural in tone; the breathing quiet, but a little hurried. Four ounces of warm milk and gruel were given, and were taken with apparent relish.

2. John Thomas was brought through the tunnel on a stretcher. He was extremely weak, and much emaciated; pulse very rapid and small. He was perfectly conscious. The feet and lower limbs were cold; his breathing was hurried. The surface of the face and trunk was warm. His voice was very weak. Six ounces of milk and gruel were administered, and appeared to be taken readily. Bottles containing hot water were applied to his feet. Having been wrapped in blankets, he was sent to the surface. On his way to the bottom of the shaft, the distance between which and the mouth of the tunnel is, as I have previously stated, nine hundred yards, another bowl of milk and gruel was given him, which he took without difficulty. Before the bottom of the shaft was reached, he had greatly revived.

3. George Jenkins, the next collier rescued, walked from the stall through the tunnel, a distance of thirty-eight yards, the height being three feet and a half. On reaching the main heading, he was found to be perfectly sensible, and talked readily; pulse 80, full, but compressible. The general surface of the body was warm; the feet and legs were wet. His voice was strong. He was unwilling to be placed on a stretcher, but readily submitted. His boots and stockings were removed, and he was carried to the bottom of the shaft.

4. Moses Powell also walked through the tunnel. He was perfectly conscious; pulse 90, small and compressible. He talked freely.

5. David Jenkins was the last to leave the stall, brought through the tunnel on a stretcher. He was quite conscious, calm, and collected. He spoke readily but feebly. The pulse was 95, small and compressible. The general surface of his body was warm. To each, the same quantity of milk and gruel was administered; and, enfolded in warm blankets, they were brought to the surface.

And here I must perforce discharge one duty. In all the underground arrangements for securing the necessary comfort and attention for the men as they were brought out, I have to express my deep sense of gratefulness to Dr. E. Lloyd of Castell, near Pont-y-pridd, Messrs. Rees Hopkins of Pont-y-pridd, Ivor Lewis of Llantrisant, T. Parry of Ferndale, as well as to my assistants, Messrs. Dukes, C. Jones, W. Davies, and P. James, for their exceedingly valuable assistance, by which my efforts were supplemented.

*Treatment on Surface.*—When the surface of the pit was reached, the men were one by one carried to the temporary shed improvised for their reception, where Dr. E. W. S. Davies and his colleague at once saw them; and they were placed as comfortably as the limited facilities of the structure would permit. More milk and gruel, with occasionally a little coffee, was given to the men, who experienced no difficulty or inconvenience whatever in taking the food offered to them. At the expiration of an hour and a half, it was deemed desirable to remove the patients to the hospital prepared for them, which they reached a few minutes later, and where they were placed in warm comfortable beds.

*General Conditions.*—Taking the cases, the following indicia applied to them as a whole. There was much emaciation, but not so extensive as might have been expected; with the exception of John Thomas, whose abdomen, in addition to being flat and tympanitic in common with those of his fellow sufferers, was hollow. The men were perfectly conscious. There was an entire absence of nervous excitement. No eagerness or avidity was manifested by any for food or drink, which, when taken, was taken readily, and attended with no inconvenience. The tongue was tremulous, coated in the middle, and red at tip; the papillae were considerably enlarged, and retained the impression of the teeth. The conjunctivæ presented a jaundiced appearance. The breathing was quiet; the breath was fetid, especially that of J. Thomas and D. Jenkins. Contact with light produced uneasiness to J. Thomas more than to the others.

*Condition in Stall prior to Rescue.*—Each was wet the first day, and all complained of chill during the whole time they were immured from their damp clothes, which never became dry. Heat was kept up by exercise, by cutting coal or wood, or by rubbing themselves. To sustain heat, they lay huddled together in a tram half filled with coal-dust;



and, through the non-conductive power of coal, they succeeded. The men had lighted candles up to within two days of their deliverance. Sleep was irregular and disturbed. Water was swallowed in large quantities.

*Tabulated Results of Detailed Observations.*

At Pit's Mouth.	Temp.	Pulse.	Resp.	Regimen, etc.
Friday, 5 P.M.				
John Thomas (a)	96.1	84	24	Coffee, beef tea, milk, and strong soup
David Hughes (b)	97.1	84	16	
Moses Powell (c)	98	96	28	
George Jenkins.	96	84	20	
D. Jenkins (d)	98	96	21	
Saturday (noon)				
J. Thomas (e)	98.4	80		Ditto. All were free from pain
D. Hughes	98.4	72		
M. Powell	98.8	80		
G. Jenkins (f)	99.1	60		
D. Jenkins	98.5	60		
Sunday, 6 A.M.				
J. Thomas	97	98		Ditto. ditto
D. Hughes	98.2	82		
M. Powell	98	72		
G. Jenkins	98.3	70		
D. Jenkins	98.1	56		
Sunday (noon).				
J. Thomas	98.2	105		Ditto. ditto
D. Hughes	98.2	72		
M. Powell	96.2	72		
G. Jenkins	98	68		
D. Jenkins	97.2	56		
Sunday, 11 P.M.				
J. Thomas	98.3	92		Beef-tea, except J. Thomas—milk and gruel
D. Hughes	97.2	74		
M. Powell	96.2	72		
G. Jenkins	98.1	66		
D. Jenkins	97	58		
Monday, 6 A.M.				
J. Thomas	97.2	82		All spent a good night. Tongues very much improved. Dinner—beef-steaks and potatoes; tea—coffee, with eggs mixed, bread and butter; supper—gruel
D. Hughes	97.3	74		
M. Powell	96.3	76		
G. Jenkins	97.3	66		
D. Jenkins	97.1	56		
Tuesday, 6 A.M.				
J. Thomas	97.4	84		Good night: all complained of pains in feet. 8 A.M., breakfast—milk & bread; 12 (noon), luncheon—beef-tea; 4 P.M., dinner—beef, potatoes, and greens; 7 P.M., tea; 9.30 P.M., supper—half-pint of gruel
D. Hughes	97.3	72		
M. Powell (g)	96.3	70		
G. Jenkins	98	62		
D. Jenkins	97.2	56		
Wednesday, 6 A.M.				
J. Thomas (h)	97.2	56		Milk and gruel diet. Half an ounce of castor-oil for each; and belladonna liniment to be rubbed well into the feet
D. Hughes (i)	96.4	76		
M. Powell	98	78		
G. Jenkins	98.2	72		
D. Jenkins	97.2	68		
Thursday, 6 A.M.				
J. Thomas	98.2	70		Bowels of all freely opened; feet scarcely so tender; tongue cleaning; appetite improving; strength increasing. Breakfast—bread and milk; lunch—beef-tea, one pint; dinner—mutton-broth, one pint; tea—tea, bread and butter, supper—gruel
D. Hughes	96.3	56		
M. Powell	97.2	70		
G. Jenkins	97	66		
D. Jenkins	96.2	62		
Friday, 6 A.M.				
J. Thomas	97.3	72		Good night; bowels free; feet better, except Powell and G. Jenkins
D. Hughes	98.1	86		
M. Powell	97.2	62		
G. Jenkins	97	88		
D. Jenkins	96.3	68		
Saturday, 6 A.M.				
J. Thomas	97.3	72		Powell and G. Jenkins very restless night, owing to pain in feet; no swelling; neuralgic pains, bowels open, except Powell. Up and dressed to breakfast on my visit at 9 A.M.—R. Lin. bellad. 5ij; lin. chlor. 5i. Fiat linimentum. To be rubbed in well.—R. Pilulæ hydrarg. gr. ii; pulv. ipecac. gr. i; pilulæ thec. co. gr. ij. Fiat pilulæ. One every night for each
D. Hughes	97.1	82		
M. Powell	97.3	68		
G. Jenkins	98.1	64		
D. Jenkins	96.4	68		

a. At 10.30 P.M., passed four ounces of urine, highly charged with lithates; no albumen. I had intended to make a more exhaustive analysis, to ascertain specific gravity, amount of urea, etc.; but unfortunately my instructions not to remove the urine were forgotten by the nurses in charge.

b. Bowels relieved; eight ounces of black and shaped fæces.

c. Passed ten ounces of urine, highly charged with lithates; no albumen. Bowels relieved; eight ounces of black and shaped fæces.

d. Passed ten ounces of urine, highly charged with lithates; no albumen.

e. Bowels acted for the first time about midnight; fæces about eight ounces, dark, not shaped.

f. Bowels acted about 1 A.M.; fæces eight ounces, dark and shaped.

g. Bowels open for the first time since liberation.

h. Bowels confined.

i. Had a very restless night.

J. Thomas, however, drank but little. The bowels of the men were relieved on Wednesday, April 11th, and only once afterwards during their incarceration. J. Thomas, however, suffered from diarrhoea. Urine was passed frequently, and in small quantities, accompanied at the latter period of their confinement with a very fetid odour, which made the spot used as an urinal very disagreeable. The feeling of thirst increased as that of hunger diminished. J. Thomas became restless and delirious, and with difficulty could be restrained. D. Jenkins also became delirious towards the end of the period. A general tendency to drowsiness appeared to seize the men. D. Jenkins was the only one who took a portion of the candle, which he did in the form of pills. The rest could not get beyond the first stage of tasting it. When the water advanced in the stall on the morning of the rescue, all except G. Jenkins and Moses Powell retreated to a small hole in the face of the workings and above the reach of the water. The necessity of communicating with the rescuers compelled these two men, as the strongest, to stand or rather bend in the water, which had risen to their knees. All suffered more or less from neuralgic pains in their feet, especially the two mentioned. It should be remembered that these men were cooped up in a cavern only three feet and a half high, and with a floor damp from constant water-droppings. In the case of Jenkins and Powell, who so generously and heroically allowed their companions to retreat to a place of comparative safety, each was bending in this cave of Stygian darkness with nine inches of water around them, which they believed to be gradually rising only to drown them inch by inch before effective help could save them. In this view, the pains in the feet are explicable.

Notwithstanding the imminence of death, each was hopeful that he would be permitted to see the light and feel the air of Heaven again. Considering the adverse conditions, which are almost too painfully horrible in their ghastly grimness to be realised, it is extraordinary that the poor fellows, who are now on the fair road to convalescence, could have battled with their fears, with deprivation of food, and with constant chill in an atmosphere of 25 lbs. to the inch above the normal pressure, for two hundred and fourteen hours so successfully as they appear to have done.

*Particulars as to Condition of Health previously to Accident.*—On the morning of the accident, each took for breakfast bread, butter, and tea; and with him, for luncheon, half a pound of bread with cheese.

Moses Powell, aged 30, single, lives with his mother. His height is 5 feet 6¼ inches; weight, 140 lbs. He is dark, of a phlegmatic temperament; has always enjoyed good health; does not remember having had a day's illness. He is intemperate.

George Jenkins, aged 32, widower; height, 5 feet 5¼ inches; weight, 160 lbs. He is light, of a quick temperament. His health has been good, except that about eleven years ago he was subject to fits, which lasted for three years. He is very temperate.

David Jenkins, aged 40, married; height, 5 feet 4¾ inches; weight, 130 lbs. He is dark, of a rather nervous temperament. He has had a dry troublesome cough for about three years. His health has been generally good. He is very temperate.

John Thomas, aged 26, single; height, 5 feet 8 inches. He is fair, of a decidedly sanguineous temperament. He has had no serious illness. He is the son of scrofulous parents, is very deaf, and has an impediment in his speech. He is quiet and steady.

David Hughes, aged 16; height, 5 feet 1¾ inches; very slight. He has had scarlet fever and measles. He is a delicate boy, subject to cough and shortness of breath. He was in his usual health on the morning of the accident.

The men are now able to get about and dress, and are rapidly becoming convalescent. The pains in the feet are much relieved, though still a source of inconvenience to Powell and Jenkins. There is no indication of cough, or difficulty of breathing, or pain in the chest, in any of the invalids.

All have gone to their respective homes.

# A FORM OF BURSAL ENLARGEMENT.\*

By A. W. MAYO ROBSON, L.R.C.P.Lond., M.R.C.S.,  
Demonstrator of Anatomy at Leeds School of Medicine.

THE cases concerning which I purpose making a few remarks are one of subacute and another of acute inflammation of the bursa situated beneath the ligamentum patellæ. That they are of great rarity I do not for a moment consider, since within a few weeks two such cases have come under my personal observation; but, as I cannot find an account of any similar ones in the ordinary surgical works, I con-

\* Read before the Leeds and West Riding Medico-Chirurgical Society.



sidered I should perhaps not be presuming too much on your time to bring them before your notice.

The subacute case occurred in a clergyman aged 30, who, being of a weakly constitution and being threatened with phthisis, had resided abroad for a short time, after which his health had been moderately good up to a week before consulting me, when he began to have pain in front of the right knee on kneeling and slight stiffness on walking. When I saw him, there were slight heat and fulness beneath the right patella, and pain on pressure over the tibial tubercle or immediately above that prominence. I acupuncture the painful region, with the effect of giving great relief. He resumed his duties, but consulted me again a week afterwards, saying the symptoms had returned and the inconvenience in walking was even worse than before. I found marked swelling between the patella and tibial tubercle, on each side of the ligamentum patellæ, which structure seemed so to constrict the enlargement as to produce two distinct sacs. Fluctuation could, however, be distinctly felt from one to the other. The tenderness remained as before. There was no swelling above or in front of the patella. On walking, the leg was kept extended, flexion producing great pain. I ordered absolute rest in bed, and blistered the front of the swelling. After the blisters had healed, iodine was applied every night. After a fortnight, he was able to walk, and was well in a month.

The acute case occurred in a miner aged 15, who had been jammed against the pit-side by a small iron truck, a sharp angle of which had hit him beneath the left patella. He had great difficulty in limping home, a distance of a mile. On my seeing him, I found a swelling presenting the same characters as the former case, with pain on movement and tenderness beneath the patella; but in addition there were heat and redness over the swelling. I ordered absolute rest, leeches, and warm fomentations for the first day, and afterwards evaporating lotion. He made a rapid recovery and was well in ten days.

The points to which I would draw your attention are: 1. The fact of the cause being mechanical in both cases; in the subacute one being due to the act of kneeling, and in the acute to the effect of a direct blow. 2. As regards the diagnosis, there was no difficulty, since the absence of swelling above or at the sides of the patella proved there was no joint-effusion, and the absence of enlargement superficially to the patella proved that it was not due to swelling of the ordinary bursa patellæ. These negative symptoms, combined with the presence of a constricted fluctuating swelling situated between the lower end of the patella and tubercle of the tibia, could be, I think, set down to nothing else than effusion into and enlargement of the bursa situated beneath the ligamentum patellæ.

## CLINICAL MEMORANDA.

### FOREIGN BODIES IN THE RECTUM.

THE recent publication in the JOURNAL of some cases of foreign body in the rectum induces me to mention two of this class which occurred within a fortnight in my own practice. In October last, a medical friend sent for me, saying that he had been suffering great agony all day from some sharp body—he thought a fish-bone—which was just within reach of his finger in the rectum. He was easier when walking than sitting. On inserting my finger into the bowel, I could distinctly feel the cause of his suffering half-buried in the mucous membrane; but, owing to the intense spasm of the sphincter, I was unable to remove it without the speculum, on the introduction of which the glittering head of a pin shot into the split. I readily removed it with a forceps.

Within a fortnight afterwards, I was sent for by a gentleman living at some distance in the country, saying that he had a bad attack of piles and was suffering severe pain, especially after the bowels were moved and on motion. On seeing him, from the fact of the pain being so severe, agonising in fact at times, and having the other case fresh in my memory, I had my doubts about the piles, mentioned to him the pin-case, and said I would not be surprised if his case were a similar one. My surmise proved correct. On introducing my finger, I felt a polygonal flat body, which, on removal with the aid of the speculum, proved to be a small portion of the breast-bone of a snipe, having very sharp angles and edges, which easily accounted for the intense pain. The mucous membrane in both cases was in a state of vivid vascularity.

It is curious that during five years' practice I had not a single case of the kind, and that these two occurred within so short a space of time; but I believe most medical men have not unfrequently an analogous experience.

THOMAS DRAPES, Enniscorthy, Ireland.

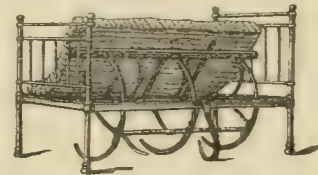
## REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

### SACCHARATED IODIDE OF IRON.

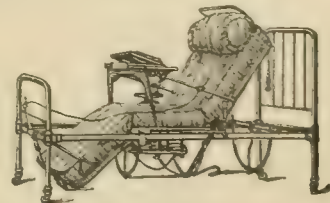
UNDER this title, Messrs. Ferris, Boorne, and Co., of Bristol, have introduced an elegant preparation of this useful salt, which can be prescribed in powders, and, when mixed with water, will be readily taken by delicate children and others, by whom it would appear to be easily assimilated; thus, a medical friend informs us that he has exhibited it in a case of leucocythæmia, and in one of extensive scrofula—where other tonics had been rejected—with marked benefit. It has also been found a valuable adjunct in the successful rearing of infants by the bottle.

### THE SAMARITAN'S INVALID BEDSTEAD.

THE manufacturers have brought under our notice a very ingenious form of invalid bed, which seems to have a great many advantages for the use of patients suffering from acute disease, as well as for chronic and bedridden patients. One speciality of this bedstead is that the in-



valid may readily be placed in a comfortable position, and for the most part the adjustment of the position is under his own control with a very slight exertion. Thus, by pulling a strap on the other side of the bed, two-thirds of the bed is raised naturally, leaving one-third unaltered, but slightly tilting the patient on one side or the other, and forming a sort of comfortable sofa. This movement also enables the bed-clothing to be changed without moving the patient. The head part of the bed is easily raised to any angle by the patient turning a wheel within reach. By a similar arrangement, the bed is converted into a sort of bed-chair at various angles; and an excellent commode movement completes the



necessary arrangements for bedridden patients with greater ease and accuracy than any other bedstead with which we are acquainted. Ingenious provision is made for providing table, reading-desk, and foot-rest, the whole of these conveniences being attached to the bed in such a manner that they may be readily brought forward or pushed back. On the whole, this bedstead is a very luxurious and complete contrivance, and it is less costly than such arrangements of similar completeness and perfection usually are. It is made by the Invalid Patent Bed Company, Limited, Angler's Lane, Kentish Town, London.

### THE NORWICH SLOW COMBUSTION-GRATES.

SOME time ago, Mr. J. J. Mechi, of Tiptree Hall, and "A Country Parson", suggested in the *Times* a reform in fire-grates, and described a grate which effects a great economy in the use of coal, at the same time that it effectually heats the air of the room and assists in ventilating. Although differing a good deal in respect to the construction of the grate from ordinary fireplaces, it does not necessitate any change in the stove itself in respect to outward ornamentation. The fire rests on fire-brick level with the floor, and is enclosed in a trough with firebrick sides and back 16 inches deep and 14 inches wide;  $4\frac{1}{2}$  inches from back to front at bottom, and  $5\frac{1}{2}$  inches at top. It gives thus a thin



vertical fire in which the air can circulate freely, presenting a frontage of fire 16 inches long by 14 inches wide. These fire-grates are manufactured by the well-known firm of Barnard, Bishop, and Barnard, of the Norfolk Iron Works, Norwich. They are now made in a variety of patterns, very tastefully designed in respect of ornamentation, and at a very moderate price. Their advantages are that they are slow in combustion, that they give out considerable heat, that they emit no gaseous smells, and that, when used with a blower, they form a certain cure for a smoky chimney. These combustion-stoves constitute a very decided advance in household fireplaces.

## REPORTS OF SOCIETIES.

### MANCHESTER MEDICAL SOCIETY.

MARCH 7TH, 1877.

ARTHUR RANSOME, M.D., President, in the Chair.

*Thoracic Aneurism.*—Dr. SIMPSON read notes, and showed preparations of two cases of thoracic aneurism, both of which had been treated electrolytically.

*Papilloma of the Larynx.*—Dr. SIMPSON showed a soldier with a papillomatous growth in the larynx. The position of the mass was demonstrated by the laryngoscope. Portions of the growth had been removed by means of a laryngeal forceps.

*Genu Valgum.*—Mr. JONES exhibited a girl aged 6, with extreme genua valgum combined with rachitic outward bending of both legs. The distortion of the knees had advanced to such a degree as to make walking extremely difficult. It was proposed to correct the deformity if possible by mechanical means and rest. That failing, to adopt some operative method to straighten the limbs.

*Malformation of Hands and Feet.*—Mr. EWART exhibited a child, aged three months, with malformed hands and feet. The fingers and thumbs of both hands were webbed up to the tips of the nails. The metacarpal bones of each thumb were double, those of the left hand having separate joints and separate nails, those of the right hand a single joint and nail. There was a rudimentary finger, consisting of the end phalanx and nail, growing from each little finger. Both feet were webbed up to the tips of the nails. The right foot had eight nails, the left seven. There were double bones in the foot. Mr. Ewart proposed to separate the fingers by the elastic ligature; but the feet he intended to leave alone.

*Pocket-Inhaler.*—Dr. HODGKINSON showed a pocket-inhaler, designed to allow the treatment of diseases of the respiratory passages by the very frequent inhalation of remedies volatile at ordinary temperatures. The objects subserved by its special construction were: 1. To provide within a small compass an extended surface from which volatile agents may evaporate; 2. To cause the air or vapour inhaled to pass over the whole of this surface; and, lastly, 3. By rendering the apparatus air-tight, to prevent any unpleasant odour when not in use. The instrument consists of a small lozenge-shaped metal box, constructed in two parts, fitting air-tight the one in the other. When the two parts are adapted, the cavity of the inhaler is divided by partitions attached alternately to each part into numerous compartments communicating by openings at alternate ends, so as to form a tortuous passage for the current of air. Passing over the free extremities of these partitions and through each compartment is an endless tape band for the reception of the remedies used. To use the instrument, the vulcanite plug is removed from each end and inspirations taken through the mouth-piece, when the air or vapour admitted at the other extremity passes over the whole length of both surfaces of the tape band and then becomes thoroughly impregnated with the remedy used. The apparatus, whether charged with stimulant, sedative, or antiseptic remedies, is specially designed by its portability to allow their frequent application to the respiratory surfaces, a mode of use which, Dr. Hodgkinson believes, is destined to supplement all, and supersede most, plans of treatment of diseases of the respiratory passages.

*Exploration of the Female Bladder, etc.*—Dr. LLOYD ROBERTS showed and explained the use of Simon's urethral dilators for exploring the female bladder. Dr. Roberts also showed Simon's sounds for exploring the ureter, and his forceps for removing vascular growths from the interior of the bladder and urethra.

*Physiology of Digestion.*—Dr. GAMGEE gave a very interesting account of the researches of Heidenhain and Kuhne on the physiology of digestion. A cordial vote of thanks to Dr. Gamgee closed the meeting.

### ABERDEEN, BANFF, AND KINCARDINE BRANCH.

WEDNESDAY, MARCH 7TH, 1877.

A. J. MANSON, M.D., President, in the Chair.

*Replantation of Teeth.*—Mr. DE LESSERT brought two cases of this before the Society, stating that the operation was not new, but a revival of one which had been practised by John Hunter. The first case was that of a boy who had had a tooth extracted to allow an incision to be made into a cyst of the jaw. The second bicuspid was removed, the cyst opened, and the tooth replaced. The morning after the operation, there was pain in the tooth, but this gradually disappeared and the tooth was now firm and useful. In the other case, the central incisors overlapped, and an abscess had formed above. There was a supernumerary tooth in the palate. The right incisor was extracted, while the supernumerary tooth, which was also extracted, was put in the place of the incisor. Casts of this case were exhibited.—Dr. JACKSON had himself drawn a tooth and put it back. There was great pain for twenty-four hours. He thought the second case very remarkable.—Dr. MANSON had also taken out teeth and replaced them. One case had failed, and he had not tried after that; but on several occasions he had started teeth, and they became fixed afterwards.—Dr. A. OGSTON asked whether teeth were actually living after having been replaced. Might they not be mechanically held, as a piece of ivory? No one had as yet shown continuity of the vessels of the periosteum of the socket and those of the tooth itself.—Mr. DE LESSERT stated that, in the second case, when the supernumerary tooth was put in, it was at first by no means firm.—Dr. OGSTON asked if these teeth were as sensitive to grit as usual.—Mr. DE LESSERT said that, in the boy, this was so.—Dr. WIGHT mentioned a case where a young man had almost knocked out a central incisor. It was replaced, and remained fixed. Within a year, however, it became black, and was now a shade darker than the other teeth, and the patient did not like to bite with it. It had remained fixed for seventeen years.—Dr. F. OGSTON had a case similar to the last mentioned, in which the right central and lateral incisors had been driven backwards. These were replaced, and in four days were firm; and three months after this the man could chew with them. They were rather dark however.

*Toothache of Pregnancy.*—Mr. DE LESSERT read a paper on this subject. The subject was not without interest to the medical or dental practitioner, as both were frequently called on to treat such cases; and works on obstetrics and dental surgery were generally silent on its causes, symptoms, or cure. He believed the "toothache of pregnancy" to be of two kinds, the one a purely neuralgic condition affecting previously healthy teeth, the other accompanied by disease of the hard structure of the teeth. Dr. Tyler Smith, in his *Manual of Obstetrics*, had said, after stating the frequency of neuralgic toothache from reflex uterine irritation under such circumstances: "In many subjects, acute caries of the teeth occurs, and in some child-bearing women a tooth or two is lost in each pregnancy." The author, however, thought that, if the cause were only reflex uterine irritation, it would be singular; as reflex irritation might be produced in the dental branches from other causes, and yet no attempt had been made to attribute dental caries to previously healthy teeth to such causes. Mr. Salter, in his work on *Dental Pathology and Surgery*, considered that there was evidence that maladies, especially those deranging the digestion and primary assimilation, were potent immediate causes of tooth decay, and this especially during pregnancy. Mr. Salter had defined this disease as a softening and disintegration of the tooth's surface generally, penetrating gradually towards its centre. Mr. De Lessert then quoted Mr. Oakley Coles, who described the enamel as having either disappeared or become so softened in texture as to allow of a sharp excavator easily passing through it; the teeth being often very sensitive, and conscious of every thermal change. Sometimes, a general softening occurred without any actual decay, the tooth becoming very sensitive, loosened from its socket, and a source of so much irritation that, even within a few weeks of accouchement, extraction was required. On removing the tooth, the periosteum was found scanty and anæmic, the tooth could be cut through without difficulty, and, on examining the pulp, it could be seen to be in a fatty condition, unmistakably distinguishable from the ordinary healthy or inflamed pulp, the cut portion of the tooth having a soft greasy surface, and presenting such an appearance as might be called "fatty degeneration". Mr. De Lessert said he had endeavoured to show that the toothache of pregnancy was of two kinds: the one neuralgic, and the other, without being actual caries, producing a condition ultimately in many cases rendering extraction the only means of removing the irritation. He considered this second condition to be frequently the result of the state of the dental nerves during pregnancy, for these might be irritated in a variety of ways, as from the altered



condition of the blood in the pregnant state, or from the acidity of the stomach, or the constipation of the bowels common under such circumstances. As regarded treatment, he believed that frequently the dentist was not informed that the patient was pregnant, when she applied in the early months; and later on, the patient was usually sent by her medical attendant to have the tooth extracted; so that the dentist had no option as to treatment. It had been objected to extraction, during pregnancy, that such a course was likely to cause shock; but although this risk was popularly believed to be so great that women had had the operation performed in the hope of procuring abortion, it was very probably much exaggerated. Although extraction was often the only remedy, yet in other cases the general health had rather to be improved and the nervous tone to be strengthened. There were two modes by which the object of the practitioner might be accomplished: one by relieving the present suffering as much as possible, and waiting for the termination of the pregnancy; the other by attempting to cure the general disease on which the tooth affection seemed to depend. Caries once established or pulp exposed, the dentist had to take the local treatment in hand; and carbolic acid or morphia would be found useful, to be followed as soon as possible by permanently filling the cavity with gold or amalgam. Alkalies, such as carbonate of soda, were useful in acid oral secretions.—Dr. JACKSON asked if Mr. De Lessert had actually seen those softened teeth of which he had spoken.—Dr. WILLIAMSON thought that the toothache of pregnancy was due to ordinary caries occurring under unfavourable circumstances. Dr. Richardson had referred the toothache of pregnancy to hysteria, and had found it alleviated by a narcotic, such as chloroform. As regards treatment, Dr. Williamson thought carbolic acid, or destruction of the pulp with arsenic, would be effectual. He saw no reason why extraction should not be had recourse to, if necessary.—Dr. STEPHENSON asked if any of the members had ever seen a case of abortion produced by extraction of a tooth.—Dr. WILLIAMSON had seen a case where a sort of fit had been produced.—Dr. A. OGSTON had never seen any bad results from extraction of teeth during pregnancy. As regarded disease of teeth in pregnancy, he had dissected pregnant women and found the tissues peculiar. The fatty tissues appeared white and succulent, and, in fact, in a state of inflammation. The kidneys also were in a similar state. One could easily understand that the pulps of the teeth might be similarly affected. His impression was that pregnancy would tend to produce caries in a previously healthy tooth.—Mr. DE LESSERT had never seen such cases as those referred to by Dr. Jackson. In regard to Dr. Williamson's remark that there was no disease but caries, he held that there was fatty alteration of the pulp, and that this caused the pain. He had never seen extraction cause abortion.

*Digital Dilatation of the Os Uteri.*—Dr. STEPHENSON read a paper on this subject, and exhibited models illustrating the paper.—The PRESIDENT thought it was improper to dilate when there was heat of the os with pulsation of the blood-vessels.—Dr. REID had used dilatation by the finger, as recommended by Dr. Stephenson, for five years, and was quite satisfied that great benefit was to be derived from it.—Dr. SMITH-SHAND had also found it of great use in some cases. In others, chloroform was much more speedy.—Dr. JACKSON had also followed the practice. He had stopped giving chloroform, as he had been very unfortunate in the last five cases. In regard to dry labours, he did not think that adhesions between the membranes and os the correct theory, or by any means universal in these cases. In some, however, he had found adhesions a cause of delay.—Dr. ANGUS FRASER had also practised digital dilatation. He would, however, rather call it "pushing the lip up".—Dr. MOIR thought the benefit was got from pains being produced by reflex irritation caused by the finger.—Dr. GARDEN had always practised it.—Dr. STEPHENSON replied. He was pleased that the practice was so thoroughly known and appreciated by the members.

#### HARVEIAN SOCIETY OF LONDON.

THURSDAY, APRIL 19TH, 1877.

T. CARR JACKSON, F.R.C.S., President, in the Chair.

*Lesions of the Ulnar Nerve.*—Mr. W. B. OWEN made a communication on lesions of this nerve. In one case, a female, who was injured by being thrown out of a cart, there was much pain and numbness, followed by atrophy of the ulnar side of the forearm. Galvanism did little good. A second case was shown, where numerous incisions had been made for a large abscess. There was loss of power, but not of sensation. There was some wasting, so that the metacarpal bones looked unwontedly large. The treatment consisted of the use of some form of electric fluid.—Dr. VIVIAN POORE said the treatment in these

cases consisted of encouraging the regeneration of the injured nerve, and improving the nutrition below the seat of injury by the application of warmth locally and by the use of the electric current. Besides this, it was well to try to "force the passage" by artificial stimuli and by the power of the will. Sometimes the latter was tried too persistently.—Mr. H. PAGE, Mr. SEWILL, Mr. HENRY CASSON, Dr. MAHOMED, and the PRESIDENT took part in the discussion.

*The Causes of Gravel.*—Dr. DEBOUT D'ESTRÉES read a paper on the causes of gravel, as studied at Contrexéville, a mineral water station of the Vosges, of which he is the medical inspector. The causes, he said, were hereditary tendency, disorderly digestion, excess of food, want of exercise, and violent moral emotions. In one case, the cause was an injury to the loins. He objected to the eating of asparagus, sorrel, tomatoes, and green beans by the sufferers from uric acid gravel. He then described phosphatic gravel and its relations. Afterwards, he gave some account of the action of Contrexéville water.—Drs. SQUIRE, FOTHERGILL, FITZPATRICK, and VIVIAN POORE spoke on the subject; after which Dr. DEBOUT replied, saying that there was no albuminuria in uric acid gravel, and that the trace of lithia was not the chief point of Contrexéville water.

*The Thermometer and Clinical Precision.*—Mr. HERBERT PAGE read a paper on the thermometer and clinical precision. He first pointed out many important matters revealed by the thermometer alone. He said the term "fever" covered too much. Pyrexia was often due to localised causes. The instrument was not so much used by surgeons as by physicians, and yet it was equally useful to them. Fever might be occasioned by the blocking up of the duct of an abscess, and this rise of temperature detected by the thermometer was the first indication of the state of matters. Salicylic acid did not affect simple pyrexia. He then referred to the relations existing betwixt the nervous system and high temperature. High temperatures often arose from slight causes.—Mr. W. B. OWEN said pent-up discharges often sent the temperature up.—Dr. FERRIER said that Mr. Page had raised the whole question of the causes of body-heat. No doubt, there were nervous causes of pyrexia, but there could be no heat without combustion. The degeneration of cut nerves went in the direction of their functional activity—afferent towards the brain, efferent towards the periphery.—Dr. MAHOMED mentioned the case of a child, whose temperature went up at bedtime from terror. It had been frightened by stories from its nurse.—Dr. FITZPATRICK alluded to hysteria as a cause of high temperature.—Dr. POORE spoke of the mobile temperatures of children.—Dr. SQUIRE had seen an effusion in pleurisy followed by a fall in the temperature.—Mr. PAGE replied; and the meeting adjourned.

#### BIRMINGHAM AND MIDLAND COUNTIES BRANCH: MICROSCOPICAL SECTION.

APRIL 27TH, 1877.

LAWSON TAIT, F.R.C.S., in the Chair.

*Pulmonary Epithelium.*—Dr. RAPER read a communication on pulmonary epithelium, and exhibited sections with a view to demonstrate its existence in the pulmonary alveoli. In most of the representations of pulmonary epithelium, Dr. Raper had been able to see little more than what might be considered as merely diagrammatic. In sections of foetal lung, rings of epithelial cells surrounding the cut edges of the alveoli were ready seen, and a nearly continuous lining of similar cells appeared to exist over the whole surface and on that of the infundibuliform expansions of the bronchioles. When sections in animals which had lived and breathed were made, the appearances were not so well seen.

*Syphilitic Arteritis.*—Dr. SAUNDBY, by the kindness of Dr. Davidson of Liverpool, showed a section of syphilitic artery, which was exhibited on the occasion of the recent debate at the Pathological Society of London. Dr. Saundby explained Dr. Davidson's views, and showed wherein they differed from those of Heubner.

*Histology of Tubercle.*—Dr. SAUNDBY read a paper on the histology of tubercle, and showed preparations illustrating the nature of the growth and the manner in which the vessels are obliterated.

*The Utero-Placental Vessels.*—Mr. LAWSON TAIT showed a doubly injected section through the uterine wall and placenta, to demonstrate the vascular relation between them.

*Colloid Cancer.*—Dr. CARTER exhibited a specimen of colloid cancer; and, in doing so, reviewed the general opinion relating to the genesis of such growths.



## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, MAY 12TH, 1877.

### SMALL-POX AND VACCINATION STATISTICS.

It has been constantly asserted, and is being frequently reasserted, that small-pox has become more prevalent and fatal since vaccination was made compulsory. Such an assertion is so readily accepted by anti-vaccinationists, by whom indeed it is put forward, and is so thoroughly ridiculed by believers in vaccination, that there is some danger of the assertion not being seriously contradicted. It cannot, therefore, be unimportant at the present time carefully to examine the grounds upon which such an assertion is based, and to ascertain what are the trustworthy facts available for estimating the increase or decrease in the fatality of small-pox in England during the past forty years.

Disregarding the rabid and reckless emanations of the Anti-compulsory Vaccination League, we may allude to two recent notable attempts to prove that small-pox is more fatal than formerly, and to connect this increased fatality with the extension of vaccination. A paper was read before the Manchester Literary and Philosophical Society by Mr. Joseph Baxendell, towards the end of December last, "On the Changes of Rates of Mortality from different Diseases during the Twenty Years 1854-73". In this paper, it was stated that the fatality of small-pox had in recent years increased at such a rate as to suggest "the idea that special means must have been taken to encourage its development"; further, that the death-rate from small-pox has "increased at all ages without exception"; and, finally, Mr. Baxendell suggests the desirability of an authoritative inquiry to ascertain "the true cause of the great increase of small-pox during the last fifteen or twenty years". More recently, Mr. Charles T. Pearce, a member of the Royal College of Surgeons, has published, in the form of a letter to the President of the Local Government Board, some "Vital Statistics showing the Increase of Small-pox, Erysipelas, etc., in connection with the Extension of Vaccination". In this letter, it is stated that "the country is agitated and alarmed at the increase of small-pox"; and we are told that it may "be seen by a glance at the table of figures" (published with the letter) "that, so far from small-pox having diminished in mortality since the Act of 1853, when vaccination was made compulsory, it has increased". In proof of this, it is urged that the deaths from small-pox were 14,244 in 1857-8-9, increased to 20,059 in 1863-4-5, and further rose to 44,840 in 1870-1-2. It is also stated that, during the decade 1854-63, only 33,515 deaths from small-pox occurred; whereas, in the succeeding decade 1864-73, the number increased to 70,458. These "telling" facts have been broadly distributed by means of the halfpenny post-cards among persons who have no means of verifying them, and are, therefore, the more likely to be deceived by their specious plausibility. We propose, therefore, seriously and dispassionately to inquire whether small-pox has really become a more fatal disease since vaccination was made compulsory in 1853.

A trustworthy basis for the consideration of mortality statistics in England and Wales was first provided by the Births and Deaths Registration Act of 1837. All estimates of the rate of mortality from all causes, or from any special disease, during any period prior to that date, must be little better than guesses, varying only in their degrees of improbability. With regard to the fatality of small-pox in Eng-

land in pre-registration times, the most extravagant estimates have been put forward both by pro-vaccination and by anti-vaccination advocates. We prefer to confine our attention to the facts actually recorded in the National Death-Register, and published from time to time in the various reports of the Registrar-General. The first annual report of the Registrar-General relates to the year 1838, and the quarterly returns for 1876 afford much valuable material relating to the mortality statistics of last year. Civil registration has been in operation for thirty-nine years, a period sufficiently long to afford trustworthy means for judging whether the fatality of small-pox is increasing or decreasing. This period embraces fifteen years previous to the first Compulsory Vaccination Act of 1853, and twenty-four years during which compulsory vaccination has been more or less thoroughly carried out.

Unfortunately, the causes of death in England and Wales were never abstracted for the four years 1843-6, so that our knowledge of the fatality of small-pox during the fifteen years 1838-52 is confined to eleven of those years—the five years 1838-42 and the six years 1847-52. During those eleven years, the recorded deaths from small-pox in England and Wales were 79,672, and were equal to an average annual rate of 442 per million persons living in those years. The annual death-rate from this disease in the several years ranged from 1064 per million in 1838, to 168 per million in 1842. With reference to the prevalence of small-pox in England and Wales during the four years 1843-6, nothing reliable is known beyond the fact that the disease was epidemic in London in 1844, and then caused a death-rate of 900 per million. There is, therefore, little cause to doubt that the annual death-rate from small-pox in England and Wales during the fifteen years 1838-52, prior to the passing of the Act of 1853, averaged 442 per million persons living.

Let us now turn to consider the official return of deaths from small-pox during the twenty-four years since compulsory vaccination was enacted. The deaths from small-pox registered in England and Wales during these twenty-four years were 112,654, and were equal to an average annual rate of 222 per million persons living in that period, just half the rate which prevailed during the eleven years preceding the first Compulsory Vaccination Act. The epidemic of 1871-2 was, it is true, the most fatal that had occurred in England since 1838, and shows a large increase when compared by Mr. Pearce with the fatality which prevailed at the two preceding slightly epidemic periods of 1858 and 1864. But the fact that the average annual death-rate from small-pox during the twenty-four years of compulsory vaccination, including all these three epidemic periods mentioned by Mr. Pearce, declined to half the average rate which prevailed in the fifteen years preceding the passing of the Compulsory Act, is a full and sufficient answer to the now frequent assertion, especially urged by Mr. Baxendell and Mr. Pearce, that small-pox has become more fatal since compulsory vaccination became law. It is very deceptive to judge of the beneficial results of vaccination from the fatality of small-pox in epidemic years alone, as is done by anti-vaccinationists. Facts conclusively show that, since vaccination was made compulsory, the death-rate from small-pox during non-epidemic years has been most remarkably reduced. Previously to 1853, the lowest death-rates from small-pox in England and Wales were 168 and 246 per million in 1842 and 1847, while the rate averaged 442 per million in the fifteen years 1838 to 1852. Since 1853, the rate during the twenty-four years ending 1876 averaged only 222 per million, and in six of those years was below 100 per million; the lowest rates were 66 in 1861, 72 in 1869, and 40 per million in 1875. It is evident, therefore, that the effect of vaccination on small-pox cannot fairly be judged from the mortality from this disease in epidemic years alone, but from the average mortality during a long period of years, including both epidemic and non-epidemic years. This comparison shows that, since 1853, the average mortality from small-pox has been less by one-half than that which prevailed during the fifteen years preceding compulsory vaccination. The charge that small-pox has become more fatal since the enactment of compulsory vaccination is thus most conclusively disposed of.



It is a fact, however, that the rate of mortality *during* the epidemic of 1871-2 exceeded that which had prevailed in any epidemic year since 1838. It should be remembered that, in the four preceding years, the death-rate from small-pox had steadily declined from 144 to 72 per million. During these four years, the numbers of unvaccinated in the population were accumulating, as, under the present system, more than five per cent. of the children born in England remain unvaccinated, and, when small-pox is so slightly prevalent as it was in 1866-9, but comparatively few unvaccinated people are protected, by suffering from small-pox, from subsequent attacks. Again, the more completely vaccination is carried out, the more does the proportion of fatal cases of small-pox among children decline, and the larger is the proportion occurring among unvaccinated or imperfectly vaccinated adults. Now, the proportional mortality from small-pox increases with the age of the patients, which, to some extent, explains the greater fatality from small-pox in recent epidemic years; it also throws light upon the apparently increasing mortality among hospital cases compared with those treated during previous epidemics. The discussion, however, of that branch of vaccination statistics which deals with the increasing proportion of adult fatal cases of small-pox must be postponed to a future occasion. It appears evident, however, that, when *all* infants born are *successfully* vaccinated, the deaths from small-pox occurring among children will be reduced to a minimum, and the proportion of fatal cases occurring among adults will be still further increased, unless efficient revaccination (which is conclusively proved to confer immunity from small-pox upon the nurses and attendants in our small-pox hospitals) concurrently become more generally adopted.

#### THE PLAGUE.

THERE is no longer any doubt that plague has broken out at Resht, and that, practically, the disease may be said to be on the European frontier; for Resht, the principal centre of commerce between European Russia and Persia, or the Caspian, is, through its port of Suzelli, in direct communication, by steam navigation, with Astracan. Moreover, Resht, through its port, is equally in communication with the Transcaucasian port of Baku (to say nothing of the landward communications with the province just referred to); and thus, in effect, the formidable malady is in the rear of the Russian army operating in Asia Minor within the Armenian border and touching, if not partly occupying, a district which, less than twenty years ago, was the scene of a local development of plague. In the Russo-Turkish campaign of 1828-29, the Russian army campaigning in the localities referred to and engaged in the investment of Kars suffered from plague.

As we surmised last week, the news of the appearance of plague at Resht, the accuracy of which we were disposed at first to doubt, would not be suffered to remain in question one moment longer than was necessary for the purpose of competent judges reaching the locality from Teheran. Immediately on the rumour reaching the capital, a medical commission was despatched to the spot, which included among its members the Shah's distinguished European physician Dr. Tholozan. As yet we have solely the information as to the general result of the investigation of this commission, namely, the confirmation of the views that plague had broken out in Resht. We shall look for the detailed report of the commission with an interest heightened by the fact that it will probably emanate from Dr. Tholozan's pen. This learned physician has within the past four years made the history of the prevalence of bubonic plague in Persia a subject of special study. In the monograph which he has devoted to the subject, he has discussed the several outbreaks of plague which have occurred in that kingdom, from the earliest period to the circumscribed development which occurred in Persian Kurdistan in 1871. As the result of his researches, he has come to certain conclusions of considerable scientific interest in relation to the present existence of plague in Resht. He states first that plague has never existed endemically in any part of Persia, and that the several epidemics of the disease which have prevailed in the country have never

been general throughout its whole extent. These epidemics, he holds, have always appeared to begin in the cold mountainous district of north-western Persia (Persian Kurdistan), where the local outbreak of 1871 happened; and they have followed each other at intervals varying from ten to sixty years. He has failed to discover a single fact which would indicate that plague, originating in Persia, has ever spread thence into the Turkish dominions in Asia.

Dr. Tholozan does not seem to have been aware of the outbreak of plague in the district of Maku, lying in the extreme north-west of the mountainous district of Persian Kurdistan, in 1863. The omission of any reference to this outbreak in his monograph is a significant illustration of the imperfection of the Persian records on this subject. The question which first arises out of the outbreak at Resht, and of which we shall anticipate a solution in the report of the Persian Commission, relates to the origin of the disease. Is this a new development similar to the developments observed in the district of Maku in 1863, and in the more southerly parts of Persian Kurdistan in 1871? or has the disease in Resht been derived from the previously existing diffusion of the malady in Mesopotamia, the intermediate links in the spread northwards to the Caspian not having yet come to light? Whatever the answer may be, it will not diminish the gravity of the fact that plague is now separated from Europe only by the quickly traversed waters of the Caspian.

THE *Levant Herald* of April 28th states that small-pox continues its ravages in an increasing degree in Salonica.

It is alleged that it has been ascertained that very small doses of apomorphia taken in water are a cure for sea-sickness; but we do not see it stated where, when, and by whom that experience has been obtained.

A COURSE of lectures, organised by the National Health Society, was opened on the 9th instant, when an address upon the value of open spaces as contributing to the health of the people was delivered by Miss Octavia Hill. Princess Louise was amongst the audience.

IN reply to very numerous offers of assistance in the medical department of the Russian army from German, French, and Italian doctors, the Minister of War, while expressing his thanks, states that he is unable at present to utilise their services. The Minister, however, reserves the liberty of availing himself of their offers should occasion hereafter arise.

DR. BREWER, Chairman of the Metropolitan Asylums Board, in presiding over the meeting of that body on Saturday, laid before it an able summary of its proceedings during the year. In this, it was stated that the small-pox epidemic in London is now on the decline. The return of small-pox patients in the hospitals under the control of the Board showed a decrease of 68 under treatment, as compared with the number that day fortnight.

CAPTAIN BURNABY has reported to the Stafford House Committee that, during his journey in Asia Minor, he saw great suffering amongst the Turkish sick and wounded from the want of proper medicine and appliances. He adds that the Turkish hospitals are destitute of chloroform, and supplied with worn-out and blunted surgical instruments. It was resolved to spend £1,000 on fever-medicine, chloroform, and surgical instruments, which will immediately be sent out; and to make an urgent appeal to the public for further funds to mitigate the sufferings of the men.

#### ST. GEORGE'S HOSPITAL.

WE see it announced that a quarterly general court of the governors of this Institution will be held on Friday next to discuss, amongst other matters, the question of admitting ladies as governors of the hospital, enabling them thereby to take part in its management, a duty heretofore confided to the opposite sex.



## THE HASTINGS MEDAL OF 1876.

THE Hastings Medal of 1876 has not been awarded, the adjudicators not having found sufficiently original research in any one of the nine essays upon Diphtheria sent in for competition, although several were of considerable merit. The essay written by Dr. J. Holmes Joy of Tamworth, and bearing the motto "Tu ne cede malis", was the first in order.

## THE LIBRARY OF THE ROYAL COLLEGE OF SURGEONS.

A CORRESPONDENT recently has called our attention to a subject which has more than once been mooted. He makes a suggestion that the College of Surgeons' Library should, if possible, be open in the evening. No doubt it would be a great boon to all who are occupied throughout the day, and who are in consequence prevented from making use of the library. On the other hand, there are obvious difficulties and inconveniences to the College officials, and especially to the Librarian, who is already more than sufficiently occupied, and may, indeed, be said to be so much overworked by the necessary routine of the library as to be incapable of giving the valuable results of a lifetime of experience for the benefit of the College and his successors. It would, of course, be necessary to give Mr. Chatto an assistant; but that is, indeed, already most desirable. Then there are the expenses of lights and fires, the trouble of keeping the College open, the risk run in respect to the safety of the books from fire, and the doubt whether more than a small proportion of persons would avail themselves of the privilege of using the library in the evening. There is, no doubt, a good deal to be said on the subject, and we should be glad to see it very thoroughly discussed; for, if any strong feeling be manifested, and if it seem likely that the opening of the library will be a considerable boon to any large section of the profession, the authorities of the College of Surgeons are the most likely people we know to stretch a point for the convenience of the profession generally, even at some cost of trouble and expense to themselves.

## MIDWIVES.

ON May 4th, a large and influential body of the Fellows of the Obstetrical Society of London assembled at the Privy Council Office to urge upon the Lord President the necessity of ameliorating the present condition of midwives. Dr. Charles West, the President of the Society, explained the proposed regulations; and further remarks were made by Drs. Priestley, Barnes, and Aveling. The suggestions offered were: that the registration of midwives should be compulsory; that midwives now in practice should be able to register on production of certificates of moral character and competence; that examinations of midwives should be held every half-year in all assize towns; and that the duties of midwives shall consist in the attendance on women in natural labour, and in the care of them and of their infants during the first week after child-birth.—In answer to the deputation, the Lord President promised to send a copy of the proposed regulations to the General Medical Council, and ask its advice as to the best method of carrying out the wishes of the Society. He fully acknowledged the necessity there was for legislation, but doubted whether anything could be done during the present session.

## THE ROYAL ACADEMY.

THE Exhibition of the Royal Academy this year contains comparatively few pictures of medical interest, although the artistic quality of some of those shown is of the highest order, and many will be specially interested in them as fine examples of anatomical drawing and modelling. Prominent among these are Mr. Long's splendid picture of the "Egyptian Feast" and Mr. Leighton's exquisite study entitled "A Music Lesson"; the modelling and drawing of the feet and legs in this picture are beyond praise, as is also the quality of the flesh. Sir Henry Thompson is represented by a capital study in oils, "Court of the Mosque Palace of the Alhambra"; and Mr. Evershed by a series of etchings near Shoeburyness and Kingston Bridge, of a very high order of merit indeed. Mr. Probert has an

etching, a sea-piece, the grand old hulk, entitled "A Bulwark of the Past", which will compare favourably with the works of the best masters and indicates great artistic power. Sir Francis Grant shows a portrait of Sir William Gull, which is a life-like likeness and in the best manner of this accomplished artist, and shows to great advantage the fine Napoleonic head of this eminent physician. There is also an excellent and delicately modelled bust of Mr. Prescott Hewett in terra-cotta by Boehm. Mr. S. Ruddick shows an interesting relief of the Good Samaritan, executed for the lodge of the Consumption Hospital at Brighton; and Mr. Weekes a portrait in marble of the Archbishop of Canterbury, presented by Sir Moses Montefiore to St. Peter's Orphanage and Convalescent Home; while Mr. Woolner shows a very characteristic marble medallion of Dr. Tyndall; and Mr. Howard Thomas, a portrait of Dr. W. B. Carpenter.

## THE LATE MR. COULSON.

WE regret to have to record the death of Mr. William Coulson, at the age of 74. Mr. Coulson was, during a long professional career, well known as a highly successful practitioner, and, on the subject of lithotripsy especially, may be said to have been one of the most skilful operators of the English school. He practised M. Civiale's method before it was generally introduced here, and achieved great reputation by his excellent results. Mr. Coulson was for many years Senior Surgeon of St. Mary's Hospital. He enjoyed during a long life a large and lucrative practice, which he cultivated with great diligence and industry. Endowed with great determination of character and much kindness of heart, he achieved an unusual success and came near attaining the highest positions in the profession. He began life poor, friendless, and struggling; by dint of persevering labour, he speedily attained eminence and wealth.

## DEATH FROM CHLORAL.

AN inquest was held by Mr. Carter at Balham on May 4th touching the death of Mr. Frederick Macfarlane Leveson, a gentleman who died on Saturday morning last at an establishment for the cure of the intemperate kept by Mr. Holthouse at Balham. It appeared from the evidence that the deceased had called on Mr. Holthouse, at George Street, Hanover Square, and said he was suffering from intemperance, which he could not control at home, and he wished to place himself under proper care. He was accordingly taken to Mr. Holthouse's establishment at Balham Hill House on April 11th, where Mr. Holthouse prescribed for him fifty grains of chloral, to be given to him every night; and, if that had no effect, a double dose was to be administered. He had fifty grains regularly given him till April 27th, when he complained that the medicine was stronger than he had had it before, and that it made him feel sick. He soon afterwards died, and it was stated that he had taken one hundred grains of the chloral. The jury returned a verdict, "That the deceased's death was accidental, through the administration of a sedative medicine in water incautiously, but not recklessly or intentionally given to cause death".

## YELLOW FEVER.

A FEW days ago, a German sailor was landed at Salcombe, Devon, from the schooner *St. Lucia*, from the West Indies, suffering from illness. He was taken to the workhouse infirmary at Kingsbridge. Unmistakable symptoms of yellow fever having manifested themselves, all the other inmates have been removed from the hospital, and the Board of Trade has been communicated with.

## THE PRICE OF QUININE.

DURING the last five months, the retail price of quinine has been rising from 8s. 6d. to 18s. 6d. per ounce; and at the latter price it has stood for the past three or four weeks. The increased dearness of this most valuable drug is attributed generally to a deficiency of cinchona bark; but doubtless the requirements of the Ottoman and Russian armies now confronting one another in the valley of the Danube have tended to increase the value of quinine. The price, too, did not rise slowly and



gradually, but went up by bounds, as if a war panic had been instrumental thereto. Doubtless, the present high price of this inestimable antipyretic remedy will stimulate pharmaceutical chemists and medical practitioners in their search for a low-priced substitute. Should this, at length, be really discovered, it will be an immense boon to mankind in general.

#### H.R.H. PRINCESS CHRISTIAN.

THE recent accouchement of H.R.H. Princess Christian was attended with circumstances of much difficulty, so that Dr. Priestley was telegraphed for, to meet Drs. Ellison and Fairbank at Windsor. The infant was, much to the grief of the Princess, and as was a former infant, still-born. We believe Her Majesty the Queen has been very anxious about her daughter's condition, but that everything now promises to go well with the royal patient.

#### SCURVY AMONG THE TURKISH TROOPS.

ONE of our correspondents in Bosnia, Dr. Joshua Williams, at present in charge of the Central Military Hospital at Sienitz, writes: "Of 300 Turkish patients now in hospital, including fifty of the old wounded cases, a large number are becoming affected with scurvy, just as happened to the Turkish troops in the Crimean war, in consequence of the deficiency of vegetables in their diet. I have in one ward, which was fitted up two days ago, twenty-three patients out of thirty suffering from scurvy, three from dysentery, and three from diarrhoea. Out of sixty out-patients whom I saw this morning, left here by battalions on the march, nearly all were bad cases of scurvy, ague, and dysentery. I have frequently and urgently asked for a more liberal element of vegetables in the diet, including onions and potatoes. The loss to the service of patients suffering from scorbutic diseases must be immense, and there is really no excuse for it in a large hospital situated like this, for any quantity of vegetables could be procured from Salonica or even in the town here. Now that we have had a small sum of money from the English people to purchase extras, I employ it in procuring lemons, which I give to every patient every day. It may interest the anti-vaccinators at home to know that I have been able to protect every patient under my charge from small-pox, although it has been twice introduced into our wards, by taking care that all the patients and the attendants were well vaccinated. Small-pox is very prevalent here, and scarcely a Bosnian of any age is to be seen without its seams and scars. It is very difficult to get one's representations properly attended to. 'Yuash yuash' is the Turkish expression for by-and-bye, and they are very fond of using it. I shall have something to say presently about the cocoa, tea, blankets, and warm underclothing which we have received from English sources."

#### PEAS COLOURED BY COPPER.

AT the last meeting of the Academy of Sciences in Paris, M. Galippe gave the results of his examination of peas made artificially green by means of copper, of which we have lately heard much both in France and in this country. After careful chemical analysis performed on twelve tins of peas of different brands, he came to the conclusion that, presuming a tin of preserved peas would be consumed by four persons, each of these would ingest rather more than fourteen milligrammes (about a quarter of a grain) of a compound of copper. He observes that such a quantity even of sulphate of copper could not be injurious, but that, in these preserved peas, sulphate of copper does not retain its usual characteristics; it has no unpleasant flavour, is very slightly soluble, and in fact is an inert body. If the nature of the copper-compound be not yet quite determined, the conditions under which it is produced are well known. To produce it, it is necessary that the peas should be thrown into the mixture intended to preserve their natural colour in the freshest possible state. A sudden change of temperature or a storm may prevent the fixing of the colouring matter, so that the very greenness of the preserved peas is in some sort a guarantee of their good quality. M. Galippe has experimented on his own person by consuming these peas

daily for ten days, without having experienced any other inconvenience from them than the monotony of seeing the same dish make its appearance so frequently. He also says that he is acquainted with many scientific persons who habitually use these preserved peas as an article of diet without experiencing any ill effects from so doing. He also says that in the manufactories where these peas are put up, when a tin is badly soldered, it is given to the workmen, so that some of them make their entire meals of these vegetables without suffering in the least. M. Galippe is, therefore, of opinion that these preserved peas contain too small a quantity of copper to be injurious to the public health. He is further convinced that this quantity might be further diminished if the manufacturers were to come to a mutual understanding as to the quantity of copper strictly necessary to give the peas the requisite green colour, without varying from it either to a greater or a less extent.

#### ST. LAWRENCE-ON-SEA.

THERE has grown up recently at St. Lawrence-on-Sea, near Ramsgate, a marine sanatorium which places an abode at the disposal of those who seek health and comfort at the seaside which has no equal in this country. Everything which architectural skill, sanitary science, good taste, and wealth can suggest, has been done to render the Granville Hotel a model of its kind. In situation it is admirable. It is placed under the shelter of the cliffs, and looking over the Ramsgate Sands, with which it is connected by a sloping road recently constructed by the proprietors of the hotel at a great outlay. It has a system of baths which excel in extent, beauty, and completeness any which we have ever seen. Its Turkish bath is the ideal of what such a bath should be—clean, richly appointed, well lighted, well ventilated, having cooling room open to the sun; and a noble sea-water bath, through which the water steadily runs, and which is maintained at a temperature of 64 to 74 deg. Every variety of sitz, douche, and medicated bath is provided; and all the arrangements are of the luxurious kind which, on a more limited scale, is sometimes seen in the house of a wealthy private individual. Attached to the hotel are reading-rooms, a theatre, a ball-room, croquet-lawns, a skating-rink, and all the means to healthy in-door and out-door recreation. Express trains bring the hotel within an hour and a half from London; and the Granville furnishes, therefore, to medical men who desire a holiday for themselves, or who have to recommend temporary seaside residence for their patients, more advantages than any other place of the sort with which we are acquainted.

#### EXPERIMENTS ON ANIMALS.

PROFESSOR RUTHERFORD justly takes Mr. McLaren, the member for Edinburgh, sharply to task in a letter in the *Scotsman* of May 4th, for having most untruly alleged in the House of Commons that he had boasted at a meeting of the Royal Society of Edinburgh on March 6th, that his last series of experiments on "the action of therapeutical agents on the production of bile" were performed without chloroform. Dr. Rutherford remarks that the use of such a word with such a connection involves "a paltry and insolent slander"; and it is also, he says truly, a typical example of misrepresentation to which he and other physiologists have during the past three years been subjected. What he stated to the Royal Society was, that there had been two sets of experiments on the action of medicines on the liver performed in Edinburgh. In the first set, performed ten years ago, before those persons who are now so conspicuously disgracing themselves by misrepresentations on this subject had undertaken their campaign, Dr. Rutherford had administered anæsthetics in every case, as he and all other British physiologists have always been in the habit of doing when the nature of the investigation permitted their use. In the latter set of experiments, anæsthetics were administered in two cases only, because it was found that they so seriously affected the secretion of bile that it became impossible afterwards to test the action of the drugs. He complains justly also, as we think, of the action of



Sir William Thomson on a recent occasion, when, as President of the Royal Society of Edinburgh, he wrote to the public newspapers to express opinions hostile to Dr. Rutherford's, having been silent on the subject while in the chair of the Society. Dr. Rutherford is rather bitterly sarcastic concerning the President's biological ignorance, and concludes by remarking that the only pity is that his greatness as a mathematician leads an ignorant person to imagine that his opinions on medical questions must also be worthy of attention. Sir William Thomson committed on that occasion more than an indiscretion; he perpetrated a very cruel injustice, for which he can never offer any adequate reparation, and has shaken the confidence of those who most respected him in his propriety and soundness of judgment, by a course which it does not become a man of science to take when he differs in opinion from his colleagues in a learned society.

#### THE MANCHESTER MEETING: SANITARY EXHIBITION.

A FEW weeks ago, we stated that the Manchester and Salford Sanitary Association proposed to hold an exhibition of sanitary appliances at the time of the meeting of the British Medical Association in August. The arrangements for the exhibition are now complete, and it is evident that a most interesting and valuable collection will be brought together. The Council of Owens College has granted the Sanitary Association the use of some vacant land adjacent to the Medical School, and on this one or more wooden tents will be built to receive the collection. The articles exhibited will be arranged in the following classes. 1. Drainage and disposal of refuse. 2. Sanitary architecture, including plans and models of dwelling-houses, hospitals, etc. 3. Water-supply; ventilation; disinfection; heating and lighting. 4. Smoke-consuming apparatus; methods for the purification of water. 5. Food, clothing, and personal conveniences, including specimens of pure and adulterated food. 6. Disposal of the dead by burial and cremation. The North-Western and Yorkshire Associations of Officers of Health have promised to aid the Sanitary Association in every way they can; and there is every prospect that the exhibition will be a success. We believe that it is intended to open the exhibition to the public during the week following the visit of the Association to Manchester.

#### CINCHONA IN INDIA.

IN a communication to the public papers, Messrs. Jenkin and Phillips of Lime Street give the following particulars of the yield of the cinchona plantations in India.

Some fourteen or fifteen years ago, the Government of India planted on the Neilgherry Hills a number of trees, which have flourished, and are now producing valuable bark used for making quinine. The yield has been steadily increasing year by year. Last year, 60,000 lbs. weight was imported, and met with a ready sale in this market. This year, 80,000 lbs. has been received; and has been sold at extreme prices, in consequence of the short supply of quinine barks from Colombia and Ecuador, where revolutions have been going on for some months. There are two sorts of Indian bark: the *officinalis* or Crown, and the other *succruba* or red. The Crown contains the largest quantity of quinine, and is much sought after; it has fetched lately 11s. to 15s. 6d. per lb., and the other 3s. 6d. to 9s. per lb. During the last few years, private individuals have undertaken the cultivation of these trees, but, as yet, have not been so successful as the Government in their gardens at Ootacamund.

#### ECLECTIC PHYSICIANS.

THE Exchequer Division (says the *Pall Mall Gazette*) gave judgment the other day upon a point of some interest under the Medical Act. The question was whether a gentleman who is not registered under this Act, or "recognised by law as a physician or surgeon, or licentiate in medicine or surgery, or a practitioner in medicine or apothecary", is guilty of an offence against the Act by prefixing "Dr." to his name, while affixing to it the words "eclectic physician". It was argued on behalf of the appellant, who had been convicted by the magistrates at Bolton, that there was no "wilful and false pretence" in what he had done, and that the words "eclectic physician" were sufficient to correct

any mistake which might otherwise have arisen from his assumption of the title of "Dr." The court, however, without calling on the other side, gave judgment, dismissing the appeal. It was, they said, a question of fact for the magistrates whether the act in question was done wilfully and falsely or not. They held that he had assumed the title of "Dr." wilfully and falsely, and then the question was whether the addition of the words "eclectic physician" made any difference. And as to this the judges—Baron Pollock and Baron Huddleston—were much exercised to decide on the meaning of the phrase. "Eclectic" might mean, Baron Pollock observed, a physician of a "very special and enlightened class". Baron Huddleston remarked that "he did not know precisely what it meant, but, coming from two Greek words, he supposed it meant chosen". In Johnson's *Dictionary*, he added, it is given as "selected, choosing at will", and it is said "Cicero was a member of the sect"; all which, as the Baron truly said, was not much assistance. We should suggest that an eclectic physician, like an eclectic philosopher, meant one who has constructed a system for himself by selection from among the tenets of other schools. In any case, however, the court held that the addition of this title was no defence, and we think they were right. It affords no security that the person assuming it would be "eclectic" in the point of real importance—namely, the selection of drugs.

#### OPEN SPACES.

WE deeply regret to see that, notwithstanding the urgent remonstrances of a large number of the most enlightened members of their body, as well as the pathetic appeals by the friends of the people represented by Miss Octavia Hill, the Quakers' Committee are steadily continuing the work of desecrating the old Bunhill Fields Burial Ground, and carting away the bones of their ancestors, and building on an open space which would have been a most precious possession for London, and one of constantly increasing value to the whole neighbourhood. There has been in this matter a mixture of hardness and perversity of a small Committee who have carried on this operation, which is not a little painful to many of the governors of a community so highly respected as the Society of Friends.

#### SUPERSTITIONS REGARDING HYDROPHOBIA.

DR. SHINKWIN of Cork writes:—As an addendum to the paragraph in your paper of April 14th, perhaps you would be kind enough to publish the following extract from my Lectures on Hydrophobia, its History, Pathology, and Treatment, which were delivered some time since at the North Charitable Infirmary and City of Cork General Hospital. At page 58, Lecture IV, the following history of St. Hubertus is given.

"The name of St. Hubertus appears to have been the great scarecrow of the evil spirit who caused this disease in both man and dog; and not only was this power possessed by the saint *in propria persona*, but his son's grandson, his keys, and even his stool, possessed similar properties. But to begin, the saint, who, a hunter by profession, led a not too strictly moral life, was first converted by a miracle, and received direct from heaven a key that was all-powerful to heal persons who were bitten by rabid animals. After Hubertus's death, the title of saint was prefixed to his name; and, as generally occurs in such cases, immediately after his decease his virtues became so suddenly known and generally appreciated, that a cloister was erected and his body interred there, as on this latter act appears to depend the worldly prosperity of such institutions. Here lay St. Hubertus, and his key found itself in the keeping of those who call him their patron, and was used in the following manner. The person who had been bitten first confessed and received absolution, after which the following prayer was said. 'Oremus. Omnipotens sempiternus Deus, qui beati et gloriosi Confessoris tui et Pontificis Huberti meritis, sæpe diversos morbos et languores curasti, concede perpetuò ut cuncti, qui ejus implorant auxilium ab infestatione demonum et subitanæ morte et omni rabie, morbo, et periculo corporis et animæ jugiter ejus intercessionem liberati sint; per Christum Dominum nostrum. Amen.' After the repetition of this prayer, the key was heated in a fire; and, whilst it was heating, the patient repeated the following. 'O Deus, qui beatum Hubertum Confessorem tuum atque Pontificem ad viam veritatis



mirabiliter conversisti, et plurimos demoniacos mente raptos et rabie infectos, ab ipsis periculis restituisti; tribue, quæsumus, ut ejusdem patricinio hæc famula læsa ab omni inoculatione ac demoniorum incurcione liberata sit, et sanā tibi mente et corpore famuletur; per Dominum nostrum Jesum Christum. Amen.' The bitten part was then cauterised with the key; and, if it was considered desirable to increase the security against the consequences of the present as well as all future injuries, the man or animal (for it could be used to either) was burnt *under the tongue* and on the forehead with the round or handle part of the key. Thus the merit of having originated sublingual cauterisation does not belong to Marochetti, having been used in the name and with the key of Hubertus long before Marochetti was born. Such is the historical account of St. Hubertus."

#### EDUCATION AND CARE OF IDIOTS.

WE are informed that on Thursday, the 17th instant, at 2 P.M., at Whitehall, the President of the Local Government Board and the Chairman of the Commissioners in Lunacy will receive a deputation to present the Report of the Special Committee convened by the Charity Organisation Society on the Education and Care of Idiots, Imbeciles, and Harmless Lunatics. The report recommends that persons of this unfortunate class should be treated separately from acute cases of lunacy, and should all be suitably trained in childhood and youth, whereby the larger number may be made wholly or partly self-supporting, and the cases permanently placed in asylums may be confined to those requiring constant medical care.

#### SUBSTITUTE FOR CORONERS.

THE *Pall Mall Gazette* says that there are no coroners in France. Persons who die suddenly are buried twenty-four hours after death on the mere certificate of a doctor; it is only when the death is sufficiently mysterious to excite suspicion that the procureur is sent for and orders a *post mortem* examination. Now, a person can be disposed of by poison without his death seeming particularly mysterious to a medical man, who is told that the patient has been ailing for some time past. Especially in country districts, where doctors are few and overworked, and, having to ride long distances to see their patients, cannot visit them more than once or twice a week, the progress of a malady is difficult to watch with an attentive eye. A peasant is ill one week and dead the next; his family say that he committed the imprudence of insisting upon going to work contrary to the doctor's orders, and the latter thinks this piece of folly enough to account for everything. He gives a hurried look at the body, signs the certificate, and a few hours later the corpse is laid underground. It is remarkable that, in every case of poisoning that has been brought to light during the last twenty years, the victim had already been interred by virtue of a certificate alleging death from natural causes. Persons have been poisoned by arsenic and phosphorus without the doctor's suspicions being aroused. What is more, the excuses which these negligent practitioners put forward are generally accepted without censure. A medical man was once proved to have signed a certificate of death without dismounting from his horse, and escaped with no more than a mild remark from the judge that he ought to have known better; another remarked, not unreasonably, that it was unfair to throw the task of verifying sudden deaths upon ordinary practitioners; for, if a doctor were to put impertinent questions to the relatives of a deceased person, he would soon lose all his patients. This is really the pith of the whole matter. A French country practitioner who preferred a charge of poisoning against a peasant would lose the custom of all the other peasants in the district. It would be said that he had played the *mouchard*; that he was a suspicious, prying fellow, who liked getting people into trouble. These French peasants, though landowners, are generally utterly ignorant and wrong-headed, and hate judicial proceedings bitterly. It must be remembered also that the public spirit which impels most Englishmen to act on the principle that every man has an interest in bringing a criminal to punishment is almost unknown in France, where the detection and prosecution of offenders is considered to be the business of policemen and *procureurs*; so that, under cover of this prejudicial state of things, a sort of professional etiquette has gradually sprung up which assim-

lates doctors to confessors. Two or three years ago, a man who had been wounded in a poaching affray came to a country doctor to have his wounds dressed; this man being subsequently apprehended on a charge of murder, the physician was asked why he had not in the first instance communicated with the authorities; but he indignantly denied that it was his duty to betray a patient who came to him for medical assistance, and his defence was upheld by the entire profession. Had he done his duty to society by informing against the poacher, he would probably have been hounded away from his practice by public animosity. To return to poisoners, however, it is only fair to mention that French people are growing so learned in toxicology that they have begun to discard the irritant metallic poisons in honour among their fathers, and dabble more and more in those vegetable drugs which leave little or no trace, and in asphyxiating vapours whose pernicious effects may be attributable to accident.

## SCOTLAND.

THE Glasgow Town Council has given a subscription of £5,000 to the funds of the University of that city.

MR. W. IVISON MACADAM has passed the necessary examination before a joint board of the Royal Colleges of Physicians and Surgeons of Edinburgh, and has been admitted as a lecturer on chemistry, whose lectures shall count as part of the curriculum for their diploma.

ANOTHER Scottish borough is likely to get into conflict with the Board of Supervision. The Selkirk Town Council have resolved, by a majority, to adopt the plan for the drainage of the borough by simply improving and extending the present system, to which the Board of Supervision have already objected as involving a contravention of the Rivers Pollution Act.

THE statue of the late Sir James Simpson, Bart., the pedestal of which has just been erected at the west end of Princes Street Gardens, Edinburgh, is expected to be unveiled on Saturday, the 26th instant, so as to give those attending the General Assemblies, which take place at that time, an opportunity of being present at the ceremony. The statue, which stands completed in the studio of the sculptor, Mr. Brodie, will be mounted on its pedestal in a few days.

THE Glasgow detectives recently made a raid upon a number of quack doctors who carry on a thriving business there. On the completion of their inquiries, they presented a report to the Procurator-Fiscal, with the view of having the pseudo-physicians taken into court. It has been intimated, however, by that gentleman that, owing to the opposition excited by the "spy" system, he does not intend to proceed with such prosecutions except at the instance of an unofficial informer.

#### THE WEATHER IN SCOTLAND.

THE weather has been unusually cold in many parts of Scotland since the beginning of the present month. At the end of last week, in the Crieff district, for several mornings in succession there was keen frost, the thermometer indicating more than once 17 deg. of frost. Pasture is as bare as in December and January. In the Orkneys, there were severe snowstorms. Even as far south as Dumfries, in the middle of last week, there were registered by a protected thermometer 6½ deg. of frost, and several snow showers fell. Vegetation is everywhere very backward.

#### UNIVERSITY OF EDINBURGH: THE CHAIR OF MATERIA MEDICA.

AN order of Her Majesty in Council has been received containing Her Majesty's approval of a report of the Edinburgh University Court, recommending that Sir Robert Christison should be permitted to retire from the professorship of materia medica in the University on a retiring allowance, as provided by the Universities (Scotland) Act, 1858, and the relative ordinances of the Commissioners for the purposes of



that Act. In connection with the vacancy thus created, we may state that there are several candidates in the field: Dr. T. R. Fraser, a former assistant of Sir R. Christison, and well known for his researches on the Calabar Bean, and the Connection between the Chemical Constitution and Physiological Action of Drugs; Dr. W. Craig and Dr. F. W. Moinet, Lecturers on Materia Medica in the Extramural School of Edinburgh; and Dr. A. Henry, at present assistant to the Professor of Materia Medica.

#### DEATH OF A MEDICAL PRACTITIONER FROM BLOOD-POISONING.

WE regret to notice the death of a practitioner in Greenock from blood-poisoning, the result of a *post mortem* examination. About three weeks ago, a young woman named Macdougall, who was pregnant, died suddenly; and, there being a suspicion that death was caused by poison, Drs. Dougall and Robertson, on Friday, April 27th, made a *post mortem* examination of the body, but failed, it is said, to find any appearances indicating death by poison: the intestines and stomach were, however, sealed up and sent to Edinburgh for examination by Professor MacLagan. On the Monday following, Dr. Dougall became unwell, but there was nothing to indicate the cause of his illness except a small cut on one of his fingers which he had made in the course of the *post mortem* examination; he became rapidly worse, and died on Friday last, just a week after the infliction of the injury. Dr. Dougall had practised for some years in Greenock, and was a highly respected member of the profession.

#### PUBLIC BATHS IN DUNFERMLINE.

SOME time ago, Mr. Andrew Craigie of New York gave to the town of Dunfermline, his native place, the sum of £5,000 for the erection of public baths. These have now been built, and are nearly ready for opening. The building externally is highly ornamental, and it is well fitted up within. There are two swimming-baths, one 70 feet long by 30, and varying from 6 feet to 2½ feet in depth. The other is 25 feet by 17. The water is to be heated by steam, and arrangements have been made for Turkish, sitz, vapour, and plunge baths. The baths are to be maintained by the Corporation.

#### THE SUMMER SESSION.

THE summer session of the Edinburgh Medical School began in the extramural on the 1st and in the University on the 2nd of the month. The classes are largely attended. In opening his thirty-second course of Botany, Dr. Balfour pointed out the importance of the study of this science, as a training to the student in habits of accurate observation and diagnosis before commencing his more strictly professional work; and drew especial attention to the fact that, a medical degree is not only a qualification for practice, but also an university honour; and that the public would naturally expect that their doctors of medicine should be men of higher education than those who merely held diplomas from colleges. In conclusion, he warned his hearers against the materialism of the present day; at the same time deprecating the idea that he, and those who shared his views, were to be looked upon as obstructing the advance of science. There could not be too much searching into its depths, and the more these were fathomed the more would the truth of revelation and the facts of true science be found to harmonise. What he condemned was rash speculation and hypothesis, science falsely so-called, crude theories formed on imperfect data; he complained, in fact, of generalisations based on incomplete foundations.

#### UNIVERSITY OF GLASGOW.

THE winter session of the University of Glasgow closed on Tuesday, May 1st, when the prizes were given to the successful students. The honorary degrees were conferred at the same time; among others, the degree of LL.D. was given to Dr. Allen Thomson and Dr. Andrews of Belfast. Principal Caird, in the course of his closing address, expressed the gratitude of the University to those benefactors who had, by bursaries, scholarships, and similar donations, shown their interest in

its welfare. There were several large sums mentioned as given to provide bursaries in the Faculty of Arts; and in the Faculty of Medicine Mr. H. Muirhead had given £2,500, the annual proceeds of which were to be devoted to the payment of a practical demonstrator to assist in the laboratory of Dr. McKendrick, the Professor of Physiology. He spoke of the very great regret felt by all connected with the University at the contemplated retirement of one of the professors (who is understood to be Dr. Allen Thomson). This will truly be one of the greatest losses the University has sustained for many years.

#### A CHILDREN'S HOSPITAL IN ABERDEEN.

THE rapidly increasing popularity of children's hospitals in this country is proved by the fact that, since the success of Dr. West's experiment in Great Ormond Street twenty-five years ago, every large city has become provided with an institution of the kind. Edinburgh, Birmingham, Manchester, and Glasgow, among others, have gained praiseworthy pre-eminence for the liberality of their endowments; and our readers can hardly have forgotten the enormous sums collected recently by bazaars for this purpose in the two last named great commercial centres. Aberdeen, not to be outdone in good deeds, has set to work under the able guidance of Professor Stephenson, and a large and influential public meeting assembled on April 30th to inaugurate the foundation of the first children's hospital there. Resolutions expressive of good wishes for the undertaking, and descriptive of its aims and extent, were proposed and seconded by the Lord Provost, Dr. Farquharson, Sir John Clark, Sheriff Dane Wilson, and others; and the Treasurer was enabled to announce a subscription-list of upwards of £500. In the interests of the Aberdeen School of Medicine, no less than for the sake of the suffering children of the poor, we trust that liberal support may place this much needed charity on a sound financial basis, and that the skill and experience of Professor Stephenson and his colleagues may be amply utilised for the advancement of science and the spread of sanitary knowledge.

#### IRELAND.

DR. JAMES McMUNN has been elected Assistant Resident Physician to the Sligo and Leitrim Hospital for the Insane.

IT is announced that the Lord Lieutenant will open the new Combe Hospital this day (Saturday). The new building is mainly erected by the munificence of Sir Arthur Guinness, Bart., M.P.

#### BEQUESTS TO MEDICAL CHARITIES.

SEVERAL of the medical charities of Dublin have participated to a considerable extent in the large amount of money bequeathed by the will of the late Mrs. George Roe for charitable and religious purposes. The Meath Hospital, the Hospital for Incurables, and the Convalescent Home, have got £600 each; the Adelaide, the City of Dublin, and the Cork Street Fever Hospitals, and the Stewart Institution for Idiotic and Imbecile Children, £300 each; Mercer's Hospital and the Rotunda and Combe Lying-in Hospital, £200 each; and the Cripples' Home, £100.

#### TRAFFIC IN DISEASED MEAT.

WE regret to hear that the prosecution of the Valuer of the North Dublin Union for selling the carcase of a deceased cow for human food has, owing to a difference of opinion of the magistrates who presided at the resumed hearing of the case, fallen through. Notwithstanding the importance of the subject, but two magistrates attended at the Petty Sessions Court. The veterinary surgeon, who acts as inspector for the guardians, deposed that he acted under the authority of the Act of Parliament as the Board's officer; that he had examined the cow, and was still of opinion (although the animal was suffering from pleuropneumonia) that its flesh was fit for food. Dr. Cameron, the medical officer of health, held a different view, and by his orders the carcase



was seized and condemned to be destroyed as unwholesome. Dr. Cameron's competency to give an authoritative opinion on such a subject cannot be questioned. The inspector, however, under whose orders the valuer acted, had the assurance to affirm that he, being a veterinary surgeon, ought to be a better judge of the effect diseased meat would have on the human system than a medical expert. One of the magistrates was of opinion that the full penalty—a fine of £20, or imprisonment for three months—should be inflicted. The other magistrate, however, held that the defendant was bound to sell the cow when authorised by the inspector. Owing to this difference of opinion on the bench, the case was unfortunately dismissed.

#### LADY DOCTORS.

At the King and Queen's College of Physicians, Dublin, this week, three ladies, viz., Louisa Atkins, M.D. Univ. Zürich, Mary Edith Pechey, M.D. Univ. Bern, and Sophia Jex-Blake, M.D. Univ. Bern, presented themselves this week at the examinations for the Licence to practise Medicine, and also for the Licence to practise Midwifery. There were also ten other candidates. The candidates of both sexes for the Licence in Medicine were examined clinically in the wards of the Adelaide Hospital, as well as by paper and *viva voce*. All the lady candidates were successful.

#### THE GENERAL EDUCATION OF MEDICAL STUDENTS.

The following letter, addressed by the Rev. S. Haughton, M.D., Medical Registrar of Trinity College, Dublin, to the Registrar of the General Medical Council, appeared in the Dublin papers last week.

Trinity College, Dublin, March 14th.

Sir,—I am instructed by the Provost and Senior Fellows of Trinity College, Dublin, to send the following reply to the resolution of the General Medical Council, of June 19th, 1876, viz.: "The Council desire to direct the attention of the Licensing Bodies to the important fact that, from some of the reports of the Visitations, it appears that many candidates still enter upon their professional studies who are very deficient in preliminary education." It is the opinion of the Provost and Senior Fellows of Trinity College that students of medicine should be required to follow a prescribed curriculum in Arts as well as in Medicine; and that the defects in preliminary education referred to in the resolution of the General Medical Council will continue to exist so long as preliminary education is tested by a single examination, subject to considerable fluctuation of standard. It is the practice of the University of Dublin to require a curriculum of two years in Arts, involving five examinations, from all candidates for licences in Medicine, Surgery, or Midwifery. And it is the practice of the University to require a curriculum of four years in Arts, involving nine examinations, from all candidates for degrees in Medicine, Surgery, or Midwifery. During the five years ending December 31st, 1876, the following numbers matriculated in Medicine in Trinity College: Arts, students, 325; extern students, 49; total, 374. The 325 Arts students, on matriculating, had completed from one to four years in the curriculum in Arts, and their names were returned to the General Medical Council at the close of each year, classified according to their Arts standing, viz.: 1. Junior Freshmen, first year; 2. Senior Freshmen, second year; 3. Junior Sophisters, third year; 4. Senior Sophisters, fourth year; 5. Graduates in Arts, fifth year and upwards. The 40 extern students, without exception, had all passed some one or other of the Preliminary Arts Examinations recognised by the General Medical Council; but, in consequence of their not having completed the University curriculum in Arts, they are not entitled to present themselves for examination for the University licences or degrees, and are obliged to seek qualifications to practise from other corporations. Until some such course as is pursued in the University is followed by the general body of Licensing Corporations, the Provost and Senior Fellows of Trinity College are of opinion that defective general education will continue to be a characteristic of the medical profession.

#### COMBINED EXAMINATION: ROYAL COLLEGE OF SURGEONS AND COLLEGE OF PHYSICIANS.

The Committee, appointed by the Colleges of Surgeons and Physicians to consider and report on the subject of a combined examination for the two diplomas, constituted by six delegates from each corporation, met on March 22nd, March 27th, and April 10th. The President of the College of Surgeons (Dr. Kidd) opened the proceedings by explaining

that the delegates had no powers further than to consider the subjects brought under their notice, and to report to their several Colleges, which having been concurred by the President of the College of Physicians; after mature deliberation, the following resolutions were unanimously adopted:—

1. "That it is desirable that a combined examination should be held by the Colleges of Physicians and Surgeons, for the granting of their licences."
2. "That any arrangement which may be come to for a combined examination shall not preclude either College from granting its licence independently to such candidates as may present themselves to either College."
3. "That the fee for the combined diploma shall be £31: 10, which sum shall be divided between the Colleges of Physicians and Surgeons, in the proportion of three-eighths to the College of Physicians and five-eighths to the College of Surgeons."
4. "That every candidate seeking admission to the combined examination shall complete such curriculum as each College requires."
5. "That the Colleges be recommended (in case the combined examination scheme be approved by them) to appoint a committee of four (two elected by each College) to report to the College on the details of the combined examination."

A meeting of the Council of the College of Surgeons is to be held this week, when the matter will be discussed clause by clause; but it must not be forgotten, as pointed out by Dr. Kidd, that the action of the delegates is simply to report to their respective Colleges, and that any definite steps must be a question of after consideration to their respective Colleges. In addition to this, we may add that whatever determination the Council of the College of Surgeons may arrive at, must be ratified by the consent of the Fellows of the College before the matter can be decided. It has been stated that an objection may be made by the College of Physicians, that three-eighths of the cost of the combined diploma would not be a sufficient division; but, as regards this matter, we do not think that any difficulty will occur.

#### ADULTERATION IN BELFAST.

DURING the March quarter, an unusually large number of articles of food were submitted for analysis to Dr. Hodges, borough analyst, viz., sixty-five samples; of the articles received, twenty were found to be adulterated or impure: thirteen samples of buttermilk, two of sweet milk, two of precipitated sulphur, one of water, and two of soda water. The precipitated sulphur contained a large amount of sulphate of lime, and the specimens of soda-water contained lead.

#### ROYAL COLLEGE OF SURGEONS.

THE election for President, Vice-President, Council, and Secretary, for the ensuing year, will take place early in June. Dr. Robert McDonnell, surgeon to Steevens's Hospital, will, we understand, be the new President, and Mr. Philip Crampton Smyly of the Meath Hospital Vice-President. As regards the Council, little if any alteration may be expected; but, as competing for places, we may mention as probable candidates Messrs. McDowell, Corley, Bennett, and Stokes.

#### ROTUNDA LYING-IN HOSPITAL.

As President of the Board of Governors, the Lord-Lieutenant of Ireland visited, in his official capacity, this institution last Monday, which has lately undergone several alterations and improvements. An appeal was made by the Governors to the public last year for subscriptions to carry out the necessary repairs; and for this purpose £2,446 has been recently expended in repairing and altering the chronic wards, repairing roof, which was in a most dilapidated condition, enlarging wards, ventilating, etc. His Grace examined the various portions of the building, and spoke most favourably of the way in which the hospital was conducted, especially as regarded cleanliness and ventilation.

BEQUESTS.—Mr. Richard Nation, late of Orchard Street, Portman Square, and of Hayes, who died on March 21st, bequeaths to St. Mary's Hospital, the Royal Free Hospital, the Orthopaedic Hospital, Oxford Street, and the Samaritan Hospital, £500 each, free of duty.



## THE GENERAL MEDICAL COUNCIL.

THE Session of the General Medical Council commenced on Thursday last, May 10th, at 2 P.M.; Dr. ACLAND, President, in the Chair.

The official notice of appointment of Sir James Paget as representative of the Royal College of Surgeons of England being then read, he was introduced and took his seat.

### PRESIDENT'S ADDRESS.

The PRESIDENT delivered the following address.

The twenty-fourth session of the Medical Council will find it engaged with subjects of no less interest, and with problems no less complex, than those presented at the first session of its existence in 1858. To enable the public to distinguish between educated and uneducated practitioners; to be responsible for the teaching and examination provided by nineteen licensing bodies; to further, in harmony with the Government, such measures as may promote these ends; and to watch the progress of events which affect personal or public health, in consequence of the development of our own empire, the demands of civilisation and international intercourse; these are the chief aims which bring members of the Council at this season of the year from important duties in their several Universities, or from their responsible private occupations. Every member of the profession of medicine is now more or less intimately concerned with great questions of science and sociology.

A statement is occasionally made, though only by the uninformed, that the Council has no objects adequate for its existence. Those better informed know that it has become impossible to discharge the duties expected of it by the legislature, without great economy of its time and its finances. Entirely impossible it would be, if it were not for the loyal manner in which the Universities and Corporations, in their respective spheres, co-operate with the combined endeavours of their representatives in the Council, and aid the Executive by willing correspondence in the interval between the sittings of the whole body.

At the close of the last session of the Council, a Report on the subject of Education was received. The nature of that Report, which was, in fact, a summary of a multitude of facts and of much and various experience, induced the Council to decide that the subject-matter of that document should this year take precedence of all other questions. Although, no doubt, the decision of one session cannot absolutely bind the action of a succeeding one, it is not probable that in this instance the general feeling of the Council would be favourable to the reversal of their recorded opinion.

Before, however, entering on what is expected to be the chief business of the Council in this present year, it may be well to pass in review several circumstances to which the attention of your Executive has been drawn since the last meeting, as helping us to a general survey of the duties we have before us in the immediate future.

Two important Acts, affecting especially the medical profession, have passed since we separated in June of last year, each of them samples of the changes which quietly and almost insensibly steal over the fabric of English life. After a discussion, marked by the usual extremes of statement on one side and on the other, the Vivisection Act became law. The moderate form which it assumed by reason of the judicial firmness of Mr. Secretary Cross, influenced, I have no doubt, to a considerable extent by the memorial presented to the Government by the Council, has placed biological inquirers under the protection of the Government, as the best means, on the one hand, of securing them against fanatical interference, and, on the other, of insuring to the feeblar portion of the animal creation that tenderness and justice which the cultivated sense of society unmistakably demanded. The division of 222 to 83 in the House of Commons on May 2nd against reopening this question, shows unmistakably the determination of the country not to permit vexatious interference with the just liberty and conscience of honest scientific inquirers. The other Act has stilled the loud clamour which called for the admission of women to equal rights with men as medical and surgical practitioners. Women can now enter the medical profession through the College of Physicians in Ireland. But signs are not wanting that there are yet rocks ahead. Among other difficulties is one hardly yet realised. The Act took no steps towards solving the problem whether it would be just to women and to the country to enable them to acquire a complete education for practice among their own sex, without undergoing the torture which it would be to some of making dissections, and being examined in operations, on the male sex, which, in after-life, they would never perform. At present, no such exemption is possible. Yet, it is probable that the general sense of society would be wholly against any Examining Board which enforced

on a woman, as it now must, the performance of operations on the male, against her protest that she had no intention to practise in that direction. The advice of the Council may yet be sought on this difficult question. A third Act amending the Medical Act was passed to enable legally qualified medical practitioners to hold certain public appointments. These three Acts, however, being law, need not further occupy the time of the Council.

As regards the future it may be noted, first, that circumstances connected with the conduct of the *Medical Register* must engage our immediate attention. This document is almost the *raison d'être* of the Council. It is that by which the Council professes to enable the world to judge between practitioners legally qualified and unqualified to practise in England, and to know what are their legal qualifications. Not only is it of chief importance that all improper persons should be excluded, but that all proper persons should be included in it, and that their designations and qualifications should be entered with precision. The conditions under which any name is on the *Register* or kept off it ought to be rigorously just and strictly observed. At present the printed *Register* is open to several exceptions, some of more, some of less importance. They may be briefly stated in order.

1. A question has arisen whether degrees conferred *honoris causa* can legally be entered.

Accordingly the late Registrar of the Council, pending the decision of the Council, felt compelled to refuse the registration of a degree in Medicine from the Queen's University in Ireland, conferred *honoris causa* on a surgeon not possessed of a medical qualification. A case was drawn up by the solicitor, Mr. Ouvry, and by him submitted to counsel. An opinion being given against registering honorary degrees, no alternative remained for the Registrar but to suspend action till the Council should meet. He could not properly, against legal advice, establish a precedent by which any University could claim to confer an honorary *medical* title on a surgeon, or a *surgical* title on a physician, which could take its place in the column of qualifications in the *Register* before the Council met. A few honorary degrees have indeed in former times been registered. These ought not, however, to form a precedent if their registration was impolitic or illegal. In order to destroy any valid argument from precedent (though their cases do not really constitute one), the late and the present Presidents have jointly lodged an application to the Council to remove, pending the discussion of the whole question, the degrees with which they had been honoured by Trinity College, Dublin, in 1869. These degrees were placed in the *Register* because the document forwarded to the Registrar did not describe them as other than ordinary diplomas, and did not tender them as honorary degrees. Various papers bearing on this question will be laid before the Council.

Again, a complaint has arisen in Canada as to the action of the Board of Trade with respect to practitioners licensed in the Dominion and arriving in England in charge of ships. Application being made on the subject to the Medical Council Office, the President directed the Registrar to inform the Board of Trade that the subject of Colonial Degrees had not escaped the notice of the General Council, and to intimate that it was part of a large question; viz., that of degrees in general considered internationally.

As far back as July 4th, 1861, and again in the years 1863, 1864, 1867, 1868, and other times up to 1876, the Council had occasion to consider the question of colonial diplomas. It agreed to a clause in reference to them in the Marquis of Ripon's Bill in the year 1870. If only for this reason, it was a misfortune that Mr. Forster was obliged to withdraw this Bill after it passed the House of Lords.

The time cannot be far distant when the relation of colonial and foreign graduates and licentiates to legal practitioners in England will be defined. It is hardly just either to them or the nation that their position should be so long a subject of discussion. A committee of the Medical Council declared eight years ago, in its report on the amendment of the Medical Acts, that "the Secretaries of State in successive Governments have pressed upon the Council the necessity of dispensing with or greatly relaxing its regulations in favour of persons holding foreign or colonial diplomas or degrees"; and they added that this condition appeared to be a *sine quâ non* to the consent of the Government to introduce any Bill for amending the Medical Acts (*Report*, July 12th, 1869).

Since the communication from the Board of Trade above referred to, correspondence has taken place between the various departments of the Government: the Colonial, Foreign, and Home Offices, the Board of Trade, Local Government Board, and Privy Council. The subject being now ripe for the consideration of the Council, this correspondence was forwarded by desire of the Lord President on April 23rd for your consideration; and his Grace awaits your reply. The supposed exclusion of Canadian practitioners from practising in England has caused



as much feeling in Canada as the discussion concerning the compelling English practitioners to undergo a new examination in France, though I am informed that English practitioners are re-examined in Canada prior to their legal registration in the Dominion. To the case of France, your attention must now be drawn.

The public were surprised to find in the course of last winter that a Bill was to be brought into the French Chamber of Deputies to restrict the privileges which had been accorded hitherto by the French Government to various English practitioners settled in France. Before this Bill had attracted public attention in England, the Secretary of State for Foreign Affairs had been already warned by H.M. Ambassador in France of the effect of the Bill should it be passed. The correspondence on the Bill between Lord Derby and Lord Lyons was forwarded through the Privy Council to the President of the Medical Council, with a question as to the state of the law and the practice in England with regard to foreign practitioners. The answer to this question being urgently needed, it was drawn up the following day by the President and Mr. Ouvry, and put in the hands of members of the Council without delay. The history of the matter was succinctly related in a short memorandum—and, it was added, in the spirit of the Council's long-continued endeavours to deal with justice and courtesy towards their brethren abroad, that a conference might readily decide the terms of an international or reciprocal law and usage on a matter of much importance to the invalids of the respective countries. The French Government have expressed their disapproval of the Bill. The prompt action of Lord Lyons and the courteous confidence of the Government demand the gratitude of the Council. Since this correspondence took place, the English College of Physicians has discussed a scheme by which foreign practitioners may be legalised in England. The following by-law has been passed.

"Any candidate for the College Licence who shall have obtained a Degree in Medicine or Surgery at a British, Colonial, or Foreign University recognised by the College, after a course of study and an examination satisfactory to the College, shall be exempt from re-examination on such subjects as shall in each case be considered unnecessary."

By means of this by-law, foreign practitioners can, on the judgment of the College, join the English College of Physicians, and so find entrance to the *Register*. It may be proper here to observe that the Medical Council will still retain the duty of accepting the conditions for admission to the *Register* of foreign graduates, or of representing the matter to the Privy Council. Considering the fact that the Board of Trade, the Foreign, Home, and Colonial Offices and the Privy Council have all been appealed to in this important question from independent sources, it is hoped the Council will not grudge the time given to the brief summary thus laid before them. A proposal will be made to refer the whole subject without delay to a committee.

The Executive Committee will lay before the Council a short report on a point of law regarding the *restoration* of names. A person whose name by his own fault had been omitted (under clause xiv) applied for restoration. Circumstances arose which made the Committee hesitate to replace the name without reference to the Council thereon, and they have prepared a case and obtained Counsel's opinion on a point which has for the first time arisen.

The Council is often indebted to their solicitor, Mr. Ouvry, for the promptness with which he advises the Executive Committee and the President in the absence of the Council. Yet experience would seem to show that the Medical Act does not clearly define to what extent the Council can delegate its functions to the Executive Committee, and a point in law may arise, but in which the Executive Committee is hardly justified, according to precedent, in acting. It may be worthy of consideration whether the experience of the Council during nearly twenty years, with regard to its functions as a judicial body, can suggest any improved machinery for the discharge of their duty in this respect. The experience gained, for instance, through the various correspondence with the Registrar-General is valuable; for it may end in the prosecution of one class of offences being undertaken by the Home Office. But even so a by-law to regulate the initiative in a way conformable to the wishes of the Council, would strengthen the hands of the Executive when occasions arise suddenly and the Council is not sitting.

Lastly, as regards the *Register*, on account of the fact that the printed *Register* appears but annually, steps have been taken to furnish the Registrar-General periodically with copies of the additions made to the Manuscript Register in the office; and the Council may perhaps consider whether this principle may not be advantageously extended to other public offices without additional expense to the Council.

On the subject of Legislation some important points have to be considered. They may be provisionally stated to-day in a general manner. There is no evidence to show that the Council has materially modified

its views, as expressed in their report of 1870, in relation to Lord Ripon's Bill. The Council then put forward several principles of legislation—e.g., that the examinations of licensing bodies should be reduced by combination under clause 19 of the Act, if not voluntarily, then by contingent and collateral coercion; that colonial and foreign degrees should be accepted under conditions; that public health diplomas should be recognised. Thus they clearly established that at the proper time a new and comprehensive act had sooner or later to be prepared.

The Medical Defence Association is urgent that one alleged incompleteness of the Medical Act should at once be remedied. They have therefore prepared a Bill on that point alone—viz., the prosecution of offenders.

The Obstetrical Society sees the great need for better instruction of midwives, and prepares a Bill advocated and supported by their President, Dr. West. Their Bill proposes to place the control of the education and examination of midwives under the Medical Council. The Society having laid their views before the Lord President of the Privy Council, he has referred their proposals to the consideration of the Medical Council. The document will be laid before you. There may be a difference of opinion as to the machinery; there can be none as to the want. No one engaged in practice but knows well the difficulty that there is in obtaining adequately educated and trustworthy midwives, and nurses for the sick. It may or may not be desirable for the Medical Council to supervise their education. But the training and certificate are certainly needed. The very existence of such institutions as Miss Nightingale's at St. Thomas's, as Dr. Sinclair's in Dublin, and as the Duke of Westminster's in Bloomsbury, prove the want and indicate ways of meeting it. It has been said that trained medical women of various qualifications are much needed in India. Sir Salar Jung, when in England, stated his views on this matter. His opinion was that it would be a great benefit to India—a benefit which could not be exaggerated—if English medical women completely educated in England could settle in the chief towns, to act as teachers as well as practitioners. He said that in the rural districts a class of ordinary female practitioners, not of the stamp of teachers, would be very acceptable to the vast native populations. He was of opinion that both classes would obtain a suitable and honourable professional maintenance. And though it would be impossible to give any precise estimate of the required numbers, 250 of the first class, and 1,000 of the second might be safely named. If the attempt were successful, these numbers would probably prove wholly insufficient. An English lady, who has lately had the opportunity of examining many Zenanas under exceptionally favourable circumstances, confirms these statements in an emphatic manner. They are strongly supported by no less experienced a person than Dr. Macdougall, Bishop of Labuan. They, therefore, deserve the serious consideration of the Women of England. Never since England has had duties towards India have these duties to the native peoples, to which reference is now made, been so manifest as now. It may be as well here to remark, that Sir Joseph Fayer has forwarded a communication regarding the recognition of Medical Education in the Universities of India.

Whenever, therefore, the Bill affecting the training of Midwives is brought before the Medical Council, it will demand consideration under various aspects.

A third Bill has been announced to me, like the other two to be brought forward as a private Bill, requiring that no one shall be registered unless he have a qualification both in medicine and in surgery. The same Bill calls on the Medical Council to appoint an Examining Board for the purpose of constituting a new class of medical officers, who will be entitled to append to their names in the *Register* the letters C.M.B. (Civil Medical Board). All medical officers, either in the military or naval services, or attached to public medical institutions in general, will by this Bill be required to pass the Civil Board. It was once said that the Medical Council has nothing to do with the medical wants of the empire, outside the four corners of the original Act, which Act had reference to the then existing nineteen independent Licensing Bodies. When we consider the state of feeling and knowledge as regards medical legislation in 1877, that view can hardly be maintained. The wants of the future are as present to us as the traditions of the past.

A scheme for a Combined Board of Examiners for England will be communicated to the Council. It has been prepared with the concurrence of every licensing body in England. Should the Council sanction the union of these bodies for the purpose of conducting one Combined Pass Examination for all England, a long series of negotiations will be concluded, which, but for the withdrawal of Lord Ripon's Bill, might have been unnecessary as far back as 1872. This scheme affects only licences obtained in England, leaving untouched the Examining Boards in Ireland and Scotland.

The Government last year decided to give an annual grant of £5,000



for the promotion of physical science, and placed it in the hands of the Royal Society, on the condition that heads of several bodies interested in physical science should be upon a Committee for the administration of £4,000 thereof. Among these bodies was the Medical Council. The Presidents of the Colleges of Physicians and Surgeons, who are both on the Committee, together with Sir William Gull and Sir James Paget, met at the Medical Council Office to consider in what way the interests of biological and specially medical science could be best promoted by the Government grant; and your President attended the General and the Biological Committees to support the common view entertained by that Conference. The applications for the grant far exceeded its amount. Only a small portion was appropriated to subjects directly connected with Medicine.

The Council having to lament the retirement of their valued Registrar, Dr. Francis Hawkins, instructed the Executive Committee to elect his successor. They have secured the services of Mr. William Miller. Mr. Miller is well known in the scientific world as the mathematical editor of the *Educational Times*, and as one long engaged in the practical work of general education. It cannot be doubted that his extensive acquaintance with scientific men in various nations, and his educational experience, will greatly aid the Medical Council in their revision of the educational arrangements connected with medicine through the kingdom.

Mr. Quain having resigned the duties which he had so zealously performed here, the College of Surgeons have added to the Council Sir James Paget.

Dr. Stokes, the Crown nominee for Ireland ever since the formation of the Council, has from ill health resigned his seat. It were hard to say whether, as we part, genius and culture, or endearing personal nature, will be most deeply impressed on our memories.

There remains then the great subject of the education of the student of medicine. Whether the Council is ripe for any special settlement of that question it would be presumptuous to say. Nor is this the occasion to inquire. No discussion within the Council, no criticism without, will or can alter the fact that in harmonising in their due proportion, the general, the scientific, the moral and the physical training of the student consists the best education. So it has been from Plato and Hippocrates to the time of Milton and Locke, so it must remain. Do the methods change? Are the requirements of a youth altered? Have the schools, the hospitals, and the universities kept pace with *pædagogic* knowledge? This is greatly to be doubted. The German educator would answer unequivocally that the arrangements for teaching in England are imperfect, or at least unsystematic. The Englishman would reply that at all events they have been made the subject of discussion, of inquiry and report till the shelves groan beneath the load of the result. Are we in our department satisfied? Even in the metropolis is no revision required?

It is not for your President to answer these questions. A fund of knowledge and opinion is in our hands, whether derived from various Royal Commissions on general and on scientific training, or from the reports and answers given to this Council by universities, medical corporations, medical and scientific experts, and the Medical Teachers' Association of the metropolis.

The latest conclusions suggested for your consideration are to be found in a report by Professor Humphry about to be laid on the table and prepared by your desire. It is not likely that the report will contradict an oft-expressed opinion that the foundation of the "*Mens Medica*" is laid in a Liberal education; or that the corollary drawn by the Council from that conviction will be overthrown, viz., that the great educational bodies are the fittest judges of the course and standard of liberal culture. On this topic one of our most honoured Presidents, Joseph Henry Green, wrote thirty years ago:—"I hold it as little less than indisputable that the rightful claim of the profession to its due estimation by society at large can be dependent only upon science, and upon its cultivation in union with the liberal arts and sciences—therefore entitled 'Liberal', because they are cultivated without hire or compulsion on the score of their own worth and dignifying influences. It is herein that we find the ground of a liberal education common to the professions and the gentry of a country—of an education fitted to maintain the continued succession of a class of *Viri Liberales*, of gentlemen, of men imbued with the Liberal sciences, of professional men, who in the full possession of a Liberal science apply it to the needs and benefit of their fellow-citizens. Nor can it be deemed of slight importance that those destined for our profession should partake of that education, which is required for the liberal professions, as an integral part of the gentry of the country, with the sense and habits of a joint training in their duties moral and religious, in their obligations as citizens, and in their sentiments of honour as gentlemen."

A caution, however, is given by a not less illustrious President, Sir Benjamin Brodie. Writing with the consummate knowledge of a life of observation and exertion, he says:—"In accordance with your view of the matter, Sir Walter Scott has somewhere observed, that 'the best part of every man's education is that which he gives himself'; and I willingly admit that, among those whose intellect is of the higher order, there are many who would ultimately accomplish greater things if in earlier life they were left more to their own meditations and inventions than is the case among the more highly educated classes of the community. Still, I do not mean to deny that there may be some defects in the prevailing systems of education. It would be marvellous if it were otherwise, considering how imperfect all other human institutions are. I do not profess to point out what these defects may be, nor have I, indeed, that practical knowledge of the subject which would make me competent to do so. I may, however, venture to suggest whether, as regards the higher kind of education, too much is not attempted to be done, and whether it would not be better if the students were left to accomplish more for themselves. But even as to this there can be no general rule; there being some who are incapable of learning anything except what they are actually taught, while there are others whose natural disposition it is to teach themselves and think for themselves. Unfortunately we have no means of distinguishing beforehand these two classes from each other; and even if we could do so, there would be a difficulty in varying our mode of proceeding so as to adapt it to each individual case."

If these suggestive utterances had their warning and significance thirty years ago, how much more now when competition is sharper, distractions more numerous, and labour and self-command requisite for success greater than then. The examinations, which we are bound by the Medical Act to supervise, are, no doubt, the ultimate test of the attainments of students. But they are no less an expression of the slowly maturing convictions of the nation as to what is "the best and noblest way" of discipline, culture, and knowledge in preparation for our noble profession.

It was resolved, that the President's Address be entered on the minutes.

The Business and Finance Committees were appointed.

Documents relating to the Foreign and Colonial Degrees, etc., were referred to a special committee, which was appointed to consider Amendments in the Medical Acts; and other business was transacted.

A report of the day's proceedings will appear in next week's JOURNAL.

## THE CONJOINT EXAMINING BOARD FOR ENGLAND.

THE following are the proposals in an amended scheme for an Examining Board for England, as accepted by the conference of the representatives of all the medical authorities in England, and submitted to the consideration of those authorities.

I. A Board of Examiners is to be appointed in this division of the United Kingdom by the co-operation of all the medical authorities in England—that is to say, the Royal College of Physicians of London, the Royal College of Surgeons of England, the Society of Apothecaries of London, and the Universities of Oxford, Cambridge, Durham, and London—it being understood that, liberty being left to such co-operating medical authorities to confer, as they think proper, their honorary distinctions and degrees, each of them will abstain, so far as allowed by law, from the exercise of its independent privilege of giving admission to the *Medical Register*.\*

II. The Board is to be constituted of examiners, *nominated* by a committee called herein "The Committee of Reference", and *appointed* by the Royal College of Physicians of London, the Royal College of Surgeons of England, and the Society of Apothecaries, in such manner as they shall severally think fit.

III. Examiners are to be appointed to conduct examinations on the following subjects:—1. Anatomy; 2. Physiology; 3. Chemistry; 4. *Materia Medica*; 5. Medical Botany; 6. Pharmacy; 7. Medicine; 8. Surgery; 9. Midwifery; 10. Forensic Medicine; or on such subjects as may be hereafter required.

(Questions on Forensic Medicine are to be included among those asked by the Examiners on Chemistry, Medicine, Surgery, and Midwifery.)

\* Hereby it is intended to secure that none of the qualifications granted by any of the co-operating authorities shall be conferred on any person who shall not have been examined and approved by this Board.



V. The appointment of examiners is to be apportioned according to a plan to be agreed upon by the three hereinbefore named medical authorities.

V. The examiners are to be nominated and appointed annually, that no examiner hold office for more than five successive years; no examiner who has continued in office for that period is to be eligible for re-election until after the expiration of one year; and no member of the Committee of Reference is to be eligible for nomination as an examiner.

VI. The Committee of Reference is to consist of two representatives from each of the universities and medical corporations of England.

VII. One-fourth of the Committee of Reference is to go out of office annually; but the retiring members are to be eligible for reappointment; and the proportionate number of members appointed severally by the co-operating medical authorities is to be always maintained.

VIII. The duties of the Committee of Reference are to be generally as follows:—1. To nominate the examiners for appointment by the three hereinbefore named medical authorities; 2. To nominate on each occasion double the number of persons required to be appointed as examiners; 3. To arrange and superintend all matters relating to the examinations, in accordance with regulations approved by the co-operating medical authorities, or the majority of them; 4. To consider such questions in relation to the examinations as they may think fit, or such as shall be referred to them by any of the co-operating medical authorities, and to report their proceedings to all the said authorities.

IX. Except as hereinafter provided, there are to be two or more examinations on professional subjects, and the fees of candidates are to be not less than thirty guineas, to be paid in two or more payments.

X. Every candidate who shall have passed the final examination conducted by the Board shall, subject to the by-laws of each licensing body and to the provisions hereinafter contained, be entitled to receive the Licence of the Royal College of Physicians of London, the Diploma of Member of the Royal College of Surgeons of England, and the Licence of the Society of Apothecaries.

XI. Every member of an English University who shall have passed such an examination or examinations at his University as shall comprise the subjects of the primary examination or examinations conducted by the Board, and who shall have completed not less than four years of medical study, according to the regulations required by his University, is to be eligible for admission to the final examination; every candidate so admitted to examination is to be required to pay a fee of five guineas; and every such candidate who shall have passed such final examination shall, on the further payment of not less than twenty-five guineas, and subject to the by-laws of each licensing body, be entitled to receive the Licence of the Royal College of Physicians of London, the Diploma of Member of the Royal College of Surgeons of England, and the Licence of the Society of Apothecaries.\*

XII. Any or either of the co-operating medical authorities is to be at liberty to withdraw from this scheme, and the Joint Examining Board to be constituted hereunder, at any time after five years from the 1st day of October, 1877, upon giving to each of the other co-operating medical authorities one year's previous notice in writing, dating from the 1st day of October in that year, of their intention so to do; and, at the expiration of the time limited by such notice, the medical authority giving the same shall be released from all obligation to conform to the terms of this scheme or any rules or regulations which may hereafter be made for giving effect to it.

APPENDIX TO SCHEME.—One-half of the fees received for the examinations is to be appropriated to the payment of examiners, and other expenses incidental to the examinations, in such manner as the Committee of Reference may determine, subject to the approval of the co-operating medical authorities.

The remaining half of the fees received for the examinations is to be appropriated in the following manner:—Towards the maintenance of the Museum of the Royal College of Surgeons as an institution of national as well as professional importance; for its unendowed professorships, and other allied expenses, two-sixths; to the Royal College of Physicians in respect of qualifications to be granted, one-sixth; to the Royal College of Surgeons in respect of qualifications to be granted, two-sixths; to the Society of Apothecaries in respect of qualifications to be granted, one-sixth.

(Signed) JAMES PAGET, *Chairman of the Conference.*

\* Sections X and XI. Note *b*. Provided that if women be admitted to examination by the Conjoint Board they shall not, on passing, be entitled to become licentiates or members of any of the co-operating authorities without the special permission of such authority.

## HOME HOSPITALS.

ON Monday last, a deputation of citizens, headed by Mr. Joseph Moore (Chairman of the Seamen's Hospital Society), Mr. Alderman Finnis (Deputy Chairman of the Industrial Dwellings Association), Mr. Albert G. Sandeman (Director of the Bank of England), Mr. F. Cleeve, C.B., and Mr. Ernest Hart (of the British Medical Association), waited upon the Lord Mayor at the Mansion House to consider the expediency and necessity of establishing a hospital or hospitals in the metropolis for the reception of patients who can afford to pay for their treatment, which necessity, it is said, has been long felt. Mr. Henry C. Burdett, who has had ten years' experience as a hospital-superintendent, had drawn up a scheme with the object of meeting this want. He proposes, in a memorial to the Lord Mayor, to establish a Home Hospital Association on the model of the Improved Industrial Dwellings Company (Limited), inaugurated in 1866, and which, under the guidance of Sir Sydney Waterlow, M.P., has proved so great a success. The objects for which the Home Hospital Association will be established are the providing hospital treatment, skilled nursing, a convalescent institution, and other accommodation for the benefit of all classes when attacked by illness, and for the assistance of the medical profession generally; the acquiring of land and the building of hospitals; the providing, furnishing, maintaining, and regulating such buildings with fittings and conveniences for the benefit and the comfort of the patients and others; the co-operation with the managers of the present hospitals supported by private charity with the object of preventing the abuse of hospitals supported by private charity by people who can afford to pay for their treatment; the providing for the assistance of the medical profession, and for the benefit of the public, a well regulated hospital, to which the former can send with confidence private patients who can afford to pay adequately for the accommodation which they require, and in which the patients will have the advantage of being treated, if they prefer it, by their own doctor; and the doing all such other things as are, in the opinion of the Association, incidental or conducive to the attainment of those objects. The promoters of the present movement say it cannot be doubted that there is a decided impulse in the public mind towards the establishment of hospitals for the better classes under proper regulation, to which admission shall be by payment, and by payment alone; but it is said that, to be successful, such a scheme requires to be organised on a basis which will place the movement above suspicion. Believing that the above scheme can be based upon sound principles, and that it will be the means of meeting a great public want, or, in other words, that, while rendering great public service, it may be made a fairly remunerative and safe investment, the deputation asked the Lord Mayor to grant the use of the Mansion House for a public meeting on the subject, at which it was hoped he might be pleased to preside, and at which the objects of this movement could be more fully explained.—Mr. Ernest Hart, Mr. A. Sandeman, and Mr. Moore addressed the Lord Mayor on the subject.—The Lord Mayor, in the result, appointed the 27th of June, at 2.30, for the proposed meeting.—*The Times.*

The following declaration of opinion on the subject is being signed by members of the medical profession, and further names may be sent to Mr. Henry C. Burdett, Seamen's Hospital, Greenwich, S.E.

We, the undersigned, have been informed that the Right Hon. the Lord Mayor has fixed Wednesday, June 27th next, for a public meeting at the Mansion House, at which he has consented to preside, to consider the advisability of establishing an association for the following purposes:

1. To provide hospital treatment, skilled nursing, a convalescent institution, and other accommodation for the benefit of all classes when attacked by illness who can afford to pay, and for the assistance of the medical profession generally.

2. To provide, furnish, maintain, and regulate such buildings with fittings and conveniences for the benefit and comfort of patients and others.

3. To co-operate with the managers of the present hospitals supported by private charity, with the object of preventing the abuse of hospitals by people who can afford to pay for their treatment.

4. To provide for the assistance of the medical profession, and for the benefit of the public, a well regulated hospital, to which the former can send, with confidence, private patients who can afford to pay adequately for the accommodation which they require, and in which the patients will have the advantage of being treated by their own doctor.

We beg to express the opinion that the above scheme, if under proper regulation, will be the means of meeting a serious public want; that it



will be of great service to the profession in treating a numerous class of cases in respect to which great difficulties at present often arise in the course of medical practice; and that it deserves to meet with the general support of the public and the profession.

(Signed)—James Paget, Bart., F.R.C.S., LL.D., F.R.S., Sergeant-Surgeon Extraordinary to H.M. the Queen, Surgeon to H.R.H. the Prince of Wales, Consulting Surgeon to St. Bartholomew's Hospital; James Risdon Bennett, M.D., F.R.S., President of the Royal College of Physicians, London; Prescott Hewett, F.R.C.S., F.R.S., President of the Royal College of Surgeons, London; George Busk, F.R.C.S., F.R.S., late President of the Royal College of Surgeons, London; Robert Barnes, M.D., F.R.C.P., Obstetric Physician to St. George's Hospital; Andrew Clark, M.D., F.R.C.P., Physician to the London Hospital; William Cholmeley, M.D., F.R.C.P., Physician to the Great Northern Hospital, etc.; G. W. Callender, F.R.C.S., F.R.S., Surgeon to St. Bartholomew's Hospital; Herbert Davies, M.D., F.R.C.P., Consulting Physician to the London Hospital; John Eric Erichsen, F.R.C.S., F.R.S., Senior Surgeon to University College Hospital; W. Farr, M.D., F.R.S., General Register Office, Somerset House; J. Cooper Forster, F.R.C.S., Senior Surgeon to Guy's Hospital; Robert Greenhalgh, M.D., Physician-Accoucheur to St. Bartholomew's Hospital; Jonathan Hutchinson, F.R.C.S., Senior Surgeon to the London Hospital; Ernest Hart, Editor of the *BRITISH MEDICAL JOURNAL*; George Lawson, F.R.C.S., Surgeon to the Middlesex Hospital, etc.; C. Murchison, M.D., LL.D., F.R.S., Physician to St. Thomas's Hospital; W. Mac Cormac, F.R.C.S., Surgeon to St. Thomas's Hospital; W. O. Priestley, M.D., F.R.C.P., Consulting Physician to King's College Hospital; R. Quain, M.D., F.R.S., Consulting Physician to the Hospital for Diseases of the Chest, Brompton; C. H. Ralfe, M.A., M.D. Cantab., Senior Physician to the Seamen's Hospital; John Simon, C.B., F.R.S., D.C.L., Vice-President of the Royal College of Surgeons, etc.; Samuel Wilks, M.D., F.R.S., Physician to Guy's Hospital.

#### UNIVERSITY OF LONDON.

A MEETING of Convocation was held on Tuesday evening at the University Building in Burlington Gardens, Dr. STORRAR in the chair. The report of the Annual Committee, presented by Mr. W. Shaen and Dr. C. H. Fagge, dealt with several subjects, one of these being the admission of women to degrees, with regard to which the Committee recommended Convocation to thank the Senate "for their resolution to admit women to degrees in medicine"; adding that, feeling that the time had come when the admission of women to all degrees in the University could no longer be refused, they also recommended the adoption of the following resolutions:—"That the Senate be requested to take steps to obtain a new charter empowering them to grant degrees to women in all faculties", and "That the subject of admission of women to degrees be referred to the Annual Committee, with power to confer with the Senate".

Mr. H. A. NESBITT moved the adoption of the resolution thanking the Senate for their resolution, and Mr. A. W. BENNETT seconded the motion, and alluded incidentally to the fact that two hundred and thirty medical men had presented a petition praying the Senate to rescind their decision.

Dr. BUCHANAN proposed to insert after the word "Convocation" "desiring that women should be admitted to the degrees in all faculties", and this alteration was accepted by Mr. Nesbitt as part of the original resolution.

Dr. SAVORY then moved, as an amendment on the resolution thus amended, "That this House is of opinion that it is undesirable for this University to admit women to degrees in medicine, before it shall have considered the advisability of admitting women to degrees in all faculties."

Dr. BARNES seconded the amendment, on the ground that in some subjects it was impossible for a medical man, with a proper respect for himself, to teach and examine women.

Dr. QUAIN and Sir W. JENNER supported the amendment.

After an animated discussion, on a division there were 142 votes for the amendment and 129 against it. The amendment was then put as a substantive motion, and carried amid cheers by a majority of 28, the numbers being—ayes, 144; noes, 116.

The other business on the agenda was then disposed of; and, the Annual Committee having been balloted for, the proceedings terminated with a vote of thanks to the Chairman.

THE annual presentation of degrees at the University of London took place on Wednesday, in the Theatre of the institution, which was crowded. Amongst those present were Earl Granville, the Chancellor; Sir John Lubbock, the Vice-Chancellor; Mr. Lowe, M.P. for the University; Lord Acton, Dr. Quain, Sir Philip Grey Egerton, Dr. Storrar, Chairman of Convocation, and other members of the Senate.

Dr. CARPENTER, the registrar, read a report of the examinations during the past year, and the names of the successful candidates for degrees and honours in the various faculties. Such of the undergraduates as had obtained exhibitions, prizes, and medals were then presented, and received these distinctions from the Chancellor. The graduates who had passed in the several faculties were next presented, and their diplomas delivered to them by the Chancellor.

Earl GRANVILLE and Mr. LOWE made speeches on the occasion, of which the most generally interesting topic was the pending question now so actively discussed in the University, as to the recent decision of the Senate and of Convocation on the subject of the admission of women to degrees.

Earl GRANVILLE, referring to the meeting of Convocation, which we report elsewhere, said: He was informed that it was resolved that it was inadvisable to admit women to degrees in medicine before the general question of their admission to the degrees of all faculties was considered. Of course this resolution might be differently interpreted. It might mean that those who voted for it were so anxious that women should be admitted to all degrees, that they were jealous of any one degree being first granted. But he apprehended the resolution was really directed against the grant of medical degrees to women. He was not the least surprised that a subject which touched their feelings and their sentiments should have created excitement on either side. He wished to do nothing that day to add fuel to that fire. But there was one argument to which he should like to advert, because if it had been raised, he felt sure it had been so hastily in debate, and not with a view of determining the merits of the question. It was, that there would be a pecuniary injustice to those men who had obtained medical degrees to subject them to the rivalry of the other sex. He remembered in the Staffordshire potteries, a district to which he belonged, that when women first began to paint, the men successfully struck against the women being allowed to use the rest, which was of great use to the arm. The result was that those daughters of Eve soon succeeded in painting as well and as rapidly without the rest as the men did with it. The conduct of the men did not appear to be generous or just, but after all they only took away the rest—they did not deprive the women of the brush. He felt now that that argument was not one seriously maintained; that it was repudiated, not only by such men as Sir James Paget and Sir William Gull, by such a body as the Medical Council, who were now doing and had done so much for the profession, but he felt equally sure that it would be repudiated by the generous feelings of those young men there present who had just received their medical distinctions as the reward of great and continued labour. But there was another class of arguments of a very different character and weight, namely, whether it was good or bad for the university that any women should be encouraged to engage in the peculiar training necessary to reach to the high and undiminished standard of our medical examinations—whether it was good or bad for the community to have the choice open to them of being medically advised by women, if such were to be found, of the calibre of Mrs. Anderson. On these questions he had intended to speak to them, but it had struck him that it was hardly fair that he should do so, and his doing so would not have a calming effect.

Mr. LOWE, who was also much cheered, said the question whether they should give degrees to women was much more important in the case of medicine than in any other, because the degree of medicine did not merely confer on a person an honour and a distinction, but it conferred the right to practise, and involved the question how far women were able and fit, even supposing they acquired the knowledge to enable them, to do all that was required of them in the exercise of that profession. That was a large and important question, on which he was utterly incompetent to give an opinion, but in the opinion of many persons there were many branches of the medical profession which, even supposing women were capable of practising, the common sense of mankind would soon restrict them from. He hoped that the controversy would be carried on without imputing motives to either party, and with a view also to promoting the interests of the University. Reverting to the question of granting medical degrees to women, the right hon. gentleman said he was himself opposed to any sort of examination peculiar to women; and he thought that the examinations to which they should be admitted should be the same examinations as others had to undergo. A degree once obtained gave a woman the



means of obtaining a good livelihood, if she happened to be destined to pass her life in a state of single blessedness, and he saw no objection to an institution of this kind conferring on women such a boon. He thought they should reconsider the whole of their system, and give to women the opportunity of obtaining, if they could, exactly the same distinctions as men.

The assemblage then separated.

## ASSOCIATION INTELLIGENCE.

### SOUTH WALES AND MONMOUTHSHIRE BRANCH.

THE meeting of this Branch which was to have been held at Llanelly, will be held at Swansea, on Tuesday, May 15th.

ANDREW DAVIES, M.D. } *Honorary Secretaries.*  
ALFRED SHEEN, M.D. }

May 1st, 1877.

### GLOUCESTERSHIRE BRANCH.

THE next meeting will be held, under the presidency of Dr. ROOKE, at 6 P.M. on Tuesday, May 15th, at the General Hospital, Cheltenham.

The supper (2s. 6d. to members, and 4s. to visitors) will be at the Plough Hotel at half-past Eight.

*Business.*—1. President's Address.

2. Mr. H. E. Waddy will read a paper on Surgical Manipulations and Dressings.

3. Dr. Wilson will demonstrate the mode of use and the value of the Laryngoscope.

RAYNER W. BATTEN, M.D., *Honorary Secretary.*

Gloucester, April 7th, 1877.

### SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

THE next and annual meeting of the above District will be held at the County Hospital, Canterbury, on Thursday, May 24th, 1877, at Three o'clock. The President of the Canterbury Medical Society will preside.

Dinner will be provided at the Fleur-de-Lis Hotel, at Five o'clock precisely. Charge, 6s. 6d., exclusive of wine.

Gentlemen who wish to make communications to the meeting are requested to inform me at once, in order that a notice thereof may be included in the circular convening the meeting.

EDWARD WHITEFELD THURSTON, *Honorary Secretary.*

Ashford, May 7th, 1877.

### BATH AND BRISTOL BRANCH.

THE sixth ordinary meeting of the session will be held at the York House, Bath, on Thursday, May 24th, at 7.15 P.M.: H. F. A. GOODRIDGE, M.D., President.

The evening will be devoted to a discussion on "The restraint of Hæmorrhage during and subsequent to Operations on the Limbs". The subject will be introduced by Mr. Nelson C. Dobson, F.R.C.S.

R. S. FOWLER, Bath. } *Honorary Secretaries.*  
E. C. BOARD, Clifton. }

Bath, April 24th, 1877.

### STAFFORDSHIRE BRANCH.

THE third ordinary meeting of the Session will be held at the Board Room of the Mines Drainage Office, 22, Darlington Street, Wolverhampton, on Thursday, May 24th, 1877, at 3 P.M.

VINCENT JACKSON, Wolverhampton. } *Honorary Secretaries.*  
RALPH GOODALL, Silverdale. }

Wolverhampton, May 7th, 1877.

### SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT MEETINGS.

THE next meeting of the above District will be held at the Calverly Hotel, Tunbridge Wells, on Friday, May 25th, at 3 P.M.: Dr. JOHN-SON in the Chair.

Dinner at 5 o'clock. Price, 6s., exclusive of wine.

A discussion on Rheumatism will be opened; and a case of Paracæsthis Thoracis narrated by the Chairman.

All members of the South Eastern Branch are entitled to attend these meetings.

Notice of intended communications is requested by the Secretary by Wednesday, the 16th instant, in order that they may be inserted in the regular circular.

THOMAS TROLLOPE, M.D., *Honorary Secretary.*

35, Marina, St. Leonards-on-Sea, May 8th, 1877.

### SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE next meeting is appointed to be held at Gravesend, on Friday, May 25th, at 4.30 P.M.: the President of the Branch, Dr. MONCKTON, will take the Chair.

Papers by Frederick Jessett, Esq., of Erith, viz.:—1. A case of Excision of the Knee-joint, with Pathological Specimen and a Splint for the After-treatment. 2. A case of Cleft-palate and Hare-lip in a Child aged 8 years. 3. Two cases of Mechanical Obstruction of the Bowel caused by accumulation of Fæces, reduced by large Enemata and Galvanism.

Also papers by Dr. Braxton Hicks and by the President.

Further particulars will be given next week respecting dinner, etc.

FREDERICK JAMES BROWN, M.D., *Honorary Secretary.*

Rochester, May 8th, 1877.

### SOUTH MIDLAND BRANCH.

THE annual meeting of this Branch will be held at the Town Hall, Northampton, on Thursday, May 31st, at 2 P.M.: President, H. W. SHARPIN, Esq.; President-elect, Wm. MOXON, Esq.

Gentlemen who intend to read papers, or be present at the dinner, are requested to communicate early to the Secretary.

J. M. BRYAN, M.D., *Honorary Secretary.*

Northampton, May 1st, 1877.

### PROCEEDINGS OF THE COMMITTEE OF COUNCIL.

AT a meeting of the Committee of Council, held at the office of the Association, 36, Great Queen Street, London, on Wednesday, the 18th day of April, 1877: Present—Mr. W. D. HUSBAND (Treasurer) in the Chair, Dr. M. Martin De Bartolomé (President), Dr. Eason Wilkinson (President-Elect), Dr. Clifford Allbutt, Mr. J. Wright Baker, Dr. Charles Chadwick, Dr. Alfred Carpenter, Dr. B. Chevallier, Mr. Callender, F.R.S., Dr. J. W. Eastwood, Dr. Balthazar Foster, Mr. R. S. Fowler, Dr. E. L. Fox, Mr. G. F. Hodgson, Dr. C. Holman, Mr. Arthur Jackson, Dr. D. J. Leech, Dr. Edward Morris, Mr. R. H. B. Nicholson, Dr. Procter, Dr. Charles Parsons, Dr. Sieveking, Dr. Edward Waters, Dr. W. F. Wade, and Mr. C. G. Wheelhouse.

The minutes of the last meeting were read and found correct.

Read letters of apology for non attendance from Dr. Falconer (President of Council) and Mr. Manby.

Resolved: That the one hundred and nine gentlemen whose names appear on the circular convening the meeting be, and they are hereby, elected Members of the Association.

Read Report from the Trustees of the Stewart Grant, of which the following is an abstract.

At a meeting of the Trustees of the "Stewart Grant", viz., T. B. Curling, Esq., F.R.S., W. D. Husband, Esq., and Dr. A. P. Stewart, held at 75, Grosvenor Street, on April 17th, 1875, it was agreed to make the following representation to the Committee of Council, summoned to meet in London to-morrow afternoon.

After careful consideration and full discussion, it was agreed to recommend to the Committee of Council, in accordance with the suggestions of Mr. Upton:

1. That the designation of the fund be "Stewart Trust", instead of "Stewart Grant".

2. That the fund be invested in the name of the Association, and one or other of the stocks specified by Mr. Upton; and that the interest be dealt with as he proposes.

3. That, in the event of the special objects of the fund ceasing, the fund shall be applied to the general purposes of the Association.

Signed in the name and by the authority of the Trustees,

A. P. STEWART.

To the President and Committee of Council of the British Medical Association.

Resolved: That, whilst accepting the Trust, this Council is of opinion that there should be no power to invest the fund in any other security than those which exist in the United Kingdom.

Dr. LEECH reported that the arrangements of the annual meeting were satisfactorily proceeding, and requested permission to alter the



time of the first general meeting from eight o'clock to three, in order to allow of the *Soirée*, to be given by the Mayor and Corporation, to be given on Tuesday evening, August 7th.

Resolved: That the first general meeting of members be held on Tuesday, August 7th, at three o'clock in the afternoon.

Resolved: That the report of the adjudicators of the Hastings Prize Essay be received; and that, in accordance with the recommendation, the Hastings Medal of 1876 be not awarded.

Resolved: That the discontinuance of the award of the Hastings Medal be specially reconsidered at the next meeting of the Committee of Council.

Resolved: That the minutes of the Journal and Finance Committee of this day's date be approved, and the recommendations carried into effect.

Resolved: That the financial statement for the year ending 31st day of December last be approved and adopted, and, in accordance with By-law 33, published in the JOURNAL.

Resolved: That the minutes of the Scientific Grants Committee of the 17th instant be approved, and the recommendations carried into effect.

Resolved: That the minutes of the Committee appointed to consider restrictive legislation for habitual drunkards, of the 8th of November last and the 17th instant, be approved, and the recommendations carried into effect, and that a grant of £20 be made towards the expenses of the Committee.

Resolved: That a notice be inserted in the JOURNAL of the Deputation to the Home Secretary in favour of Dr. Cameron's Bill for legislative restriction of habitual drunkards, inviting any members to join it. 36, Great Queen Street, London, W.C., May 10th, 1877.

## CORRESPONDENCE.

### THE DEATH FROM CHLORAL AT BALHAM.

SIR,—I shall feel obliged if you will allow me to make a few remarks on the unfortunate occurrence that recently took place in my establishment at Balham; but, before doing so, I must point out the errors of the reporters which have been circulating in the daily papers.

1. Neither I nor any of the witnesses at the inquest made use of the term "dipsomaniac", the reporters having substituted it for the word I actually used, which was "intemperate".

2. I said "lately senior surgeon, now consulting-surgeon, to the Westminster Hospital", and not "senior consulting-surgeon".

3. I never, as reported, prescribe a given quantity of chloral every night, but only such a dose as the condition of the patient seems to require.

4. I did not say eighty grains might be given with impunity at one time, and at another twenty might prove fatal; but I did say something equivalent to this, substituting sixty and thirty grains for eighty and twenty.

5. It did not transpire, as stated by the *Times*, that a larger dose had been given on the fatal morning than on any previous occasion.

6. I was not in the habit of giving the chloral in five ounces of water, as reported, but in three, and the last time it was made up was the only occasion on which five ounces were given.

The statement of the attendant, that the deceased had said "How very careless I was", must have had reference either to the quantity or the quality of the mixture. As regards the former, I am in the habit of giving from twenty to sixty minims of the solution of chloral (which contains one grain of the salt to one minim of water, as prepared by the General Apothecaries' Company) in an ounce and a half of water, and, therefore, in the two doses I put three ounces; but the nurse who made up that which the patient complained of, had put five ounces of water instead of three. As regards the quality, his remark might have had reference to the varying strength of the draught. On one occasion, I reduced the dose of chloral to thirty-five grains, but the patient passed a wretched night, and I was obliged to raise it again till fifty grains seemed to be the minimum quantity required to produce the desired effect. This may seem, and no doubt is a large dose, and possibly might be a poisonous one to a temperate man, as half an ounce of opium would be; but to a regular chloral taker, or opium-eater, we know it is not so. My rule is to give the least quantity that will procure sleep, and, if that do not ensue within two hours, I give another dose or half dose, according to circumstances. In the case of a confirmed brandy-drinker and morphia taker, I prescribed sixty grains of chloral, and it was not until three such doses, or one hundred and eighty grains, had been taken that sleep followed. In another case, one of delirium tremens, where the gentleman had had no sleep for

three nights and was worn out, twenty grains quickly produced the desired result, and he slept quietly for twelve hours continuously; then awoke to relieve himself and take some nourishment, and again fell asleep for nine hours, when he awoke well.

I have found that, as the alcohol is got rid of, out of the system, so the quantity of chloral required to procure sleep is less; and in the majority of cases that have come under my treatment, it has been dispensed with altogether within a week of the patient's admission. The injurious practice of giving alcohol in these cases, with the view of letting them down gently, as it is called, and its retardative effect on recovery, could not have been better illustrated than in this case, which was not worse, or even so bad, as some I have had under my care; but my treatment was counteracted from the first by the importunities and threats of the patient, and by the too yielding nature of my attendants. In cases of this description, the greatest kindness is severity.

The history of the case is briefly as follows. Mr. L. had been given to intemperance since eighteen years of age, and latterly had been also a regular chloral taker. He told me his usual dose was forty grains, with twenty grains of bromide of potassium; but how often he took this he did not say. My object and intention were to cut off both the alcohol and chloral, the former at once, the latter by degrees, as sleep was absolutely necessary. I found out that, moved by his entreaties and assurances that as he was a medical man himself he knew what was best for him, and as a lesser evil than his going out to procure drink, my attendants, against my orders, gave him from time to time small quantities of whisky. The chloral, of which I never ordered a stated dose to any one, had, on all but two occasions previously, been given by myself, the largest dose the patient had taken having been sixty grains, which was on the night of his admission. On the night in which it proved fatal I had not prescribed any, having expostulated strongly with him on the subject the day before, and told him it must be absolutely cut off. I had not, however, forbidden my attendants to give it, because on no previous occasion had it been given without my direct sanction; but they, relying on precedent and with disastrous faith in the patient's own medical knowledge, administered that last dose, which from subsequent analysis has been found to contain less than fifty grains. My invariable order to the attendant is to allow two hours to elapse before a second dose is given; but from investigations made subsequent to the inquest, it would appear that the first dose could not have been taken before half-past eleven, so that the portion of the second which was used must have been taken about an hour after it, death having ensued some time before one o'clock. Notwithstanding the mistaken kindness of my attendants in giving the deceased a little alcohol indoors to prevent his going out and getting much, he nevertheless did go out and procured both drink and chloral. It is greatly to be regretted that there is no legal power to prevent these cases of self-destruction. Could such power have been exercised, this fine man, who was beloved by all, and who possessed both physical and mental gifts which are the portion of few, might have been enabled to overcome his enemy, and been an ornament to his profession and society.—Your obedient servant, CARSTEN HOLTHOUSE.

Balham Hill House, May 9th, 1877.

### TRANSFUSION.

SIR,—I must deny Dr. Roussel's assertion in your number of April 14th, that "Aveling's original apparatus of the old pattern has since been modified in accordance with my (Dr. Roussel's) principles". I have still perfect confidence in my original instrument, and have no intention of adopting the parts of Dr. Roussel's transfuser which he claims to have invented.—I am, sir, etc., J. H. AVELING, M.D.

1, Upper Wimpole Street, W., May 8th, 1877.

DARLINGTON RURAL SANITARY AUTHORITY.—At the first meeting of the Guardians on Monday, April 30th, Dr. Eastwood, of Dinsdale Park, was unanimously appointed the Chairman of the Authority for the ensuing year. This is the fourth time Dr. Eastwood has been elected Chairman.

BEQUESTS.—Mrs. Mary Roe has bequeathed the following: Hospital for Incurables, £600; Molyneux Asylum for Blind Women, £300; Deaf and Dumb Institution, Claremont, £300; Adelaide Hospital, £300; City of Dublin Hospital, £300; Cork Street Fever Hospital, £300; Meath Hospital, £300; "Smyly" Ward, Meath Hospital, £300; Lying-in Hospital, Rotunda, £200; Coombe Lying-in Hospital, £200; Convalescent Home, Stillorgan, £600; Mercer's Hospital, £200; Cripples' Home, Kingstown, £100; The Select Dispensary, Dublin, £50; Stewart Institution for Idiotic and Imbecile Children, £300.



## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### THE NORTHAMPTONSHIRE COMBINED RURAL SANITARY AUTHORITY AND THEIR MEDICAL OFFICER.

AT a meeting of the delegates of this sanitary authority, Mr. Haviland was asked if he had a report to present, to which he replied that his report would depend on whether or not he was considered to have been their medical officer of health between April last year, when his agreement with them expired, and August, when he was reappointed, as he had not received any salary during that period, although he had acted officially when required. After hearing Mr. Haviland, who stated that he considered he was bound to them until the new appointment was made, they decided that they had no power to pay him a salary, as he was not specially employed by them, and reminded him that a district which had paid him had been surcharged. From this it appears that, if a medical officer of health continue to act after his time be expired, he has no claim for any services except those done on the special order of any one of the local authorities forming the union. This is a great hardship on the officer, as, if the appointment occupied his whole time and were valuable, as in Mr. Haviland's case, he would most probably not seek any other engagement until after the election was over; and is also objectionable as regards the combined district, as there would not be any medical officer of health during the interregnum. As we understand the matter, Mr. Haviland objects to make an annual report for the year during which he was medical officer for seven months only. Be that as it may, the result is such as to deter men of good standing from seeking after these appointments, as, however well he may do his duty, the combined sanitary authority may not be reconstituted, or, if so, may neglect to reappoint for some months, and leave the officer without salary during the whole of that period.

### REPORT OF THE HEALTH-OFFICER OF THE PORT OF LONDON.

THIS report for the half-year ending December 31st, 1876, refers to work done on the river, in the docks and school-ships, and also amongst canal population. The former is ordinarily done on four days a week by an inspector with the aid of the steam-launch, and no less than 3,370 vessels were visited and 180 orders issued for whitewashing, cleansing, etc.; 50 foul cargoes, such as rotten potatoes, etc., were found, and 59 sick seamen removed to the hospital. There were 2,912 vessels visited in the docks, of which 200 required cleansing, and 63 sick seamen were found on board. As regards the school-ships, the medical officer points out that the sick bay, however commodious, ought not to be used for anything more than a temporary refuge, and that all who are likely to have a severe illness should be sent away. There was a slight outbreak of scarlatina on board the *Cornwall*, which was stopped by sending all the infected or suspected boys to the hospital at Greenwich. Mr. Harry Leach refers at some length to the cabins of the barges occupied by the canal population, and states that the average capacity is about two hundred and eighty cubic feet, and that they are generally kept clean. He says that the population of the barges coming into the port of London is about 15,000, and that the cubic spaces and the portions allotted to these people "set all sanitary notions at defiance, and the entire conditions of existence, whether viewed in their physical, moral, or educational aspects, are a sarcasm upon civilisation".

### THE HEALTH OF TOTTENHAM.

IN consequence of the death-rate in Tottenham from all causes, and especially from zymotic diseases, having largely increased for several years before 1873, a Sanitary Association was formed in that year to bring public opinion to bear on the local sanitary authority, so as to compel the carrying out of certain recommendations which had been made by Mr. Netten Radcliffe, after an inquiry he had made respecting the causes of a severe outbreak of fever in the district. The Association states that the sewerage arrangements were very bad for want of an extension of sewers to newly built houses, and that the water-supply was at all times liable to become unfit for use by reason of land-spring water being mixed with the original supply derived from deep wells. Soon after the formation of the Association, the Board took steps to remedy these evils by drawing all the water from the chalk, so that it is now purer than that of even the West Kent, and by

covering over offensive ditches and generally improving the drainage. Since that time, the death-rate from zymotic diseases has greatly decreased, the average for the years 1871-3 having been 4.70, and for 1874-6 only 2.31 per 1,000 population; and the death-rate from "all causes", which was 19.31 in 1871-3, was reduced to 17.39 in 1874-6. It will be seen from this that the reduction in the mortality from the seven chief zymotic diseases was equal to 2.39 per 1,000 and from all causes 1.92, so that the latter had really increased in the three years. The chief diminution occurred in the deaths from scarlet fever, small-pox, fever, and diarrhoea, so that it is to be hoped that the mortality will be permanently reduced. It must not, however, be forgotten that the death-rate from zymotic diseases was unusually low in 1874-6, and that, therefore, Tottenham may have thus participated to a very considerable extent, irrespective of the benefits accruing from the sanitary works that have been carried out.

### POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

AT the meeting of the Council of the Poor-law Medical Officers' Association held at their rooms, 3, Bolt Court, Fleet Street, the question of the alleged abuse of authority by the police in transferring their supposed sick cases from the streets and from the cells to the infirmaries of the workhouses was discussed, when it was resolved that application be made to the medical officers of the metropolitan and certain provincial urban workhouses requesting them to forward to the Honorary Secretary, Mr. J. W. Barnes, any information they can supply bearing on this subject.—The annual meeting of the Association will take place at 3, Bolt Court, on Thursday, June 21st, at 3 P.M.

## UNIVERSITY INTELLIGENCE.

### UNIVERSITY OF LONDON.

**EXAMINERS.**—The following have been elected Examiners for 1877-8. *Chemistry*: Professor Roscoe, Ph.D., B.A., F.R.S., and W. J. Russell, Ph.D., F.R.S. *Botany and Vegetable Physiology*: Rev. M. J. Berkeley, M.A., and Maxwell T. Masters, M.D., F.R.S. *Comparative Anatomy and Zoology*: G. J. Allman, M.D., LL.D., F.R.S., and Professor E. Ray Lankester, M.A., F.R.S. *Practice of Medicine*: Professor Wilson Fox, M.D., B.A., F.R.S., and Charles Murchison, M.D., LL.D., F.R.S. *Surgery*: John Cooper Forster, M.B., and W. S. Savory, M.B., F.R.S. *Anatomy*: George W. Callender, Esq., F.R.S., and Professor John Curnow, M.D. *Physiology*: Professor William Rutherford, M.D., F.R.S., and Professor J. Burdon Sanderson, M.D., F.R.S. *Obstetric Medicine*: J. Hall Davis, M.D., and Professor W. S. Playfair, M.D. *Materia Medica and Pharmaceutical Chemistry*: T. Lauder Brunton, M.D., D.Sc., C.M., F.R.S., and Professor Sydney Ringer, M.D. *Forensic Medicine*: Professor Ferrier, M.D., M.A., F.R.S., and Thomas Stevenson, M.D. *Hygiene, Medicine in relation to the Origin and Prevention of Diseases, and Vital Statistics*: William Farr, M.D., D.C.L., F.R.S., and John Simon, C.B., D.C.L., F.R.S. *Sanitary Law and Engineering, Meteorology, and Geology*: T. R. Fraser, M.D., F.R.S.E., and Captain Douglas Galton, C.B., F.R.S.

## MEDICO-PARLIAMENTARY.

### HOUSE OF COMMONS.—Thursday, May 3rd, 1877.

*Universities (Oxford and Cambridge) Bill.*—A proposal by Mr. COURTNEY for enabling the University to examine female students concurrently with male students, and to grant licences to practise medicine to female students, was negatived by 239 to 119.

*Closing Burial-Grounds.*—Sir H. SELWYN-IBBETSON, in answer to Mr. Greene, said there were no actual difficulties in the way of closing overcrowded churchyards or other burial-grounds. There were some difficulties which would be overcome by the transfer of the authority to the Local Government Board.

### Friday, May 4th.

*Army Surgeons.*—Mr. MITCHELL HENRY asked the Secretary of State for War whether he would state why the commissions of the gentlemen who were gazetted as surgeons under the Royal Warrant of April 28th, 1877, were not antedated as was heretofore the case; and, in the event of their not being antedated, would the time spent at the Army Medical School, Netley, count towards promotion for those who might be continued in the Department after ten years.—Mr. HARRY



said that previous to the year 1876 the time of instruction at Netley was allowed to count as a period of service. When, however, the ten years' system of short service was adopted, it appeared undesirable to cut off the period during which they were under instruction. It was not desirable to make a distinction between those who left at the end of ten years and those who did not.

## MEDICAL NEWS.

**ROYAL COLLEGE OF PHYSICIANS OF LONDON.**—The following gentlemen were admitted Fellows on May 7th, 1877.

Baxter, Evan Buchanan, M.D. Lond., Weymouth Street  
Farquharson, Robert, M.D. Edin., Brook Street  
Ferrier, David, M.D. Edin., Upper Berkeley Street  
Little, William John, M.D. Berlin, Park Street  
Moore, Norman, M.D. Camb., St. Bartholomew's Hospital  
Parsey, William Henry, M.D. Lond., Hatton, Warwick  
Poore, George Vivian, M.D. Lond., Wimpole Street  
France, Charles Rooke, M.D. Edin., Plymouth  
Roberts, Frederick Thomas, M.D. Lond., Harley Street

The following gentlemen were admitted Members on May 7th.

Abercrombie, John, M.B. Camb., St. Bartholomew's Hospital  
Barnes, Robert Sydenham Fancourt, M.B. Aberdeen, Weymouth Street  
Beach, Fletcher, M.B. Lond., Clapton Asylum  
Buck, William Elgar, M.D. Camb., Leicester  
Fonmartin, Henry de, M.D. Paris, Kennington Road  
Harris, Vincent Dormer, M.D. Lond., St. Bartholomew's Hospital  
Humphreys, Henry, M.B. Camb., Eccles Old Road, Manchester  
Lacy, Charles Sethward De Lacy, M.B. Oxford, Ovington Square  
Murrell, William, Albany Street  
Ormerod, Joseph Arderne, M.B. Oxford, St. Bartholomew's Hospital

**ROYAL COLLEGE OF SURGEONS OF ENGLAND.**—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on May 3rd; and, when eligible, will be admitted to the pass-examination.

Messrs. J. T. Mitchell, W. F. Thomas, Arthur Warburton, W. H. Neale, Wm. Banks, and James McCulloch, students of University College; J. W. Gill, Ponsonby Garrard, W. E. Veale, E. S. Tait, and W. D. Thomas, of St. Bartholomew's Hospital; P. S. G. Williams, P. M. Wood, W. P. Morgan, and William Whitworth, of Guy's Hospital; G. S. Robinson and Edmund Vaudrey, of St. George's Hospital; and A. C. Bridges, of St. Mary's Hospital.

Six candidates were rejected.

The following gentlemen passed on May 4th.

Messrs. Walter Wickham, E. W. Shepard, H. G. S. Warren, Herbert Lillies, W. Shaw, and Henry Smith, of St. Bartholomew's Hospital; G. C. S. Perkins and B. N. Rake, of Guy's Hospital; J. E. Lane and R. H. Lovell, of St. Mary's Hospital; A. C. Wey and J. W. L. Ware, of the Middlesex Hospital; D. R. Bartlett and H. W. Hubbard, of St. George's Hospital; Frank Shapley, of the London Hospital; Arthur Lofthouse, of King's College; and F. W. Mott, of University College.

Seven candidates were rejected.

The following gentlemen passed on May 7th.

Messrs. H. F. Hann, A. J. McC. Routh, Theophilus Hoskin, and A. J. Harries, of University College; W. A. Hume, A. C. Preston, H. T. Groom, and Joseph Faulkner, of St. Bartholomew's Hospital; H. A. Clowes, J. S. Crook, and J. T. Brett, of Guy's Hospital; C. M. H. Jones, of St. Mary's Hospital; W. S. Webb, of St. George's Hospital; W. H. Hallam, of King's College; and E. H. Fenwick, of the London Hospital.

Nine candidates were referred.

The following gentlemen passed on May 8th.

Messrs. E. W. Farmer, A. E. Wegg, M. F. Sayer, and F. W. H. D. Harris, of University College; John Jones and W. A. S. Bridgeford, of the Charing Cross Hospital; A. P. Adams, of St. Bartholomew's Hospital; T. M. Andrews, of St. Thomas's Hospital; G. B. Waterhouse, of the London Hospital; and J. H. Martin, of the Middlesex Hospital.

Fourteen candidates were rejected. With this meeting, the primary examinations were brought to a close; and, it is deserving of mention, that out of the 169 candidates examined, as many as 66 were rejected. The pass-examination will commence this day (Friday).

**APOTHECARIES' HALL.**—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 3rd, 1877.

Brown, William Perrin, Warrington  
Ground, Edward, Whittlesea  
Haines, William John, Hendon  
Langton, Herbert, Brighton  
Mercier, Charles Arthur, Hackney  
Reader, Jeremiah, Bridport  
Thomas, John Raglan, Llanelly  
Wood, John, Wolverhampton

At the Preliminary Examination in Arts, held at the Hall of the Society, on the 27th and 28th of April, 1877, 75 candidates presented themselves; of whom 27 were rejected, and the following 48

passed, and received certificates of proficiency in general education—viz., in the First Class, in order of merit:

1. W. H. Hart and Jam Jaffé. 3. P. M. Earle and T. W. Price. 5. C. O. Fowler, R. J. Harcourt, and Constance V. Hitchcock. 8. F. St. John Kenzie, R. M. Norton, and G. F. Travers.

In the Second Class, in alphabetical order:

F. W. Bate, R. B. D. Batt, H. H. Button, W. Case, T. H. Chittenden, W. T. Crick, E. Daunt, H. M. Davidson, D. T. Davies, G. H. Dawson, E. R. Derrett, T. Dixon, M. E. Doraston, T. L. Downes, W. G. Ellis, A. Greetham, A. P. H. Griffiths, A. Kingston, G. P. L. Llewellyn, G. T. Miles, H. C. Otway, A. A. Parrott, J. Payne, R. F. T. Perkins, G. Perria, A. Pocock, T. W. Price, G. C. Roberts, N. Roberts, R. M. Roberts, F. E. Row, A. M. Rugeroni, M. M. Siddall, H. G. Sworn, A. W. Thomas, F. H. Thornton, A. J. R. Tyler, and R. W. Watson.

## MEDICAL VACANCIES.

The following vacancies are announced:—

**ALRESFORD UNION**—Medical Officer for the First District and the Workhouse.

**BOSMERE and CLAYDON UNION**—Medical Officer for the West Needham District.

**CHESTER GENERAL INFIRMARY**—Visiting Surgeon. Salary, £80 per annum, with residence, board, and washing. Applications to be sent in on or before the 21st instant.

**CHIPPENHAM UNION**—Medical Officer for the Workhouse.

**COUNTY ASYLUM**, Prestwich, Manchester—Resident Clinical Assistant.

**DAVENTRY UNION**—Medical Officer for the Workhouse and First and Second Districts.

**GLENORCHY and INISHAIL**, Parish of—Medical Officer and Vaccinator. Salary, £70 per annum, and fees, with dwelling-house. Applications to be made on or before the 18th instant.

**METROPOLITAN FREE HOSPITAL**—House-Surgeon. Salary, £50 per annum, with apartments, board, and washing.—Assistant House-Surgeon. No salary, but apartments, board, and washing. Applications to be sent in on or before the 15th instant.

**NEW HOSPITAL FOR WOMEN**, Marylebone Road—Junior Physician; also, Resident Medical Officer. Women only eligible. Salary, £50 per annum, with board, lodging, washing, and attendance.

**NOTTINGHAM GENERAL HOSPITAL**—Resident Surgeon-Apothecary. Salary, £150 per annum, with furnished apartments and board.

**ROTHERHAM HOSPITAL and DISPENSARY**—Assistant to House-Surgeon. Salary, £25 per annum, with board, lodging, and washing.

**ROYAL ALBERT HOSPITAL**, Devonport—Resident Medical Officer. Salary, £200 per annum, with board and lodging. Applications to be sent in on or before the 12th instant.

**ROYSTON UNION**—Medical Officer for No. 5 District. Salary, £50 per annum, and fees. Applications to be made on or before the 22nd instant.

**SOUTH MOLTON UNION**—Medical Officer for the Fourth District.

**UNIVERSITY COLLEGE**, London—Professorship of Anatomy. Applications to be made on or before the 12th instant.

**WESTHAMPTON UNION**—Medical Officer for the Singleton District.

**WESTERN GENERAL DISPENSARY**—Honorary Physician. Applications to be sent in on or before the 14th instant.

**WOODBIDGE UNION**—Medical Officer for the Sixth District.

## MEDICAL APPOINTMENTS.

*Names marked with an asterisk are those of Members of the Association.*

**CHAVASSE**, Thomas F., M.B., C.M., appointed Resident Surgeon to the Royal Infirmary, Edinburgh.

**DORAN**, Alban H. G., F.R.C.S., appointed Surgeon to the Out-Department of the Samaritan Free Hospital.

## BIRTHS, MARRIAGES, AND DEATHS.

*The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.*

### BIRTHS.

**MACLAREN**.—At the Stirling District Asylum, Larbert, N.B., the wife of James MacLaren, L.R.C.S.L., Medical Superintendent, of a daughter.

### MARRIAGES.

**GARRARD**—MEAKIN.—On April 25th, at Chellaston, by the Rev. Joseph Deans, Rural Dean, assisted by the Rev. Richardson Cox, Vicar of Tickenhall, William Arthur Garrard, M.R.C.S. Eng., of Wellgate, Rotherham, to Elizabeth Mary, eldest daughter of Robert Meakin, of The Elms, Chellaston, near Derby.

### DEATH.

**TYSON**, William Taylor, M.R.C.S. Eng., at Folkestone, aged 65, on April 27th.

**COTTAGE HOSPITALS.**—The Queen has been graciously pleased to accept a copy of Mr. Henry C. Burdett's book on *Cottage Hospitals*, being the most recent and the only book on the subject at present procurable.

**DISTRICT MEDICAL OFFICERS' SUPERANNUATION.**—The Local Government Board have interrupted the full measure of the generosity of the St. Saviour's Union Board of Guardians in rewarding the long services of a valued officer, Dr. Hunt, by allowing him a superannuation allowance of £120 per annum, being two-thirds of the yearly emolument he had received from the office of District Medical Officer. The Central Board say that the vaccination fees ought not to have entered into the calculation. This reduces Dr. Hunt's pension to £87 : 8 : 10.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—Charing Cross, 2 P.M.
FRIDAY .....	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

TUESDAY.—	Pathological Society of London, 8.30 P.M. Mr. Vandyke Carter: Memorandum on Leprous Nerve-disease. Mr. W. Haward: Cystic Disease of Testicle. Mr. Spencer Watson: Melanotic Sarcoma of choroid. Mr. Butlin: Chondroma of Submaxillary Gland. Mr. L. Browne: Cancer of Larynx. Mr. M. Baker: Pericardial Omental Hernia. Mr. M. Baker: Case of Morphæa (living specimen). Dr. Gowers: Specimens showing the state of the Nerve-Centres in Hydrophobia. Dr. F. Taylor: Lymphoma of the Intestine, and other specimens by the President, Mr. Wagstaffe, Mr. Godlee, Mr. Nunn, and Drs. Lyell, Crisp, Dunbar, and Goodhart.—N.B. Dr. Gowers's Microscopical Specimens will be on view at eight o'clock.
THURSDAY.—	Harveian Society of London, 8 P.M. Clinical and Pathological Evening.
FRIDAY.—	Medical Microscopical Society, 8 P.M.

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## INSTRUCTION IN VACCINATION.

THE vaccination stations in the Marylebone district, attended by Mr. W. A. Sumner, at which students can obtain from that gentleman instruction in vaccination, have been recently removed to the undermentioned places: 77, Welbeck Street (Marylebone General Dispensary), Tuesday, at 2 P.M.; and 16A, Omega Place, Alpha Road, N.W. (Working Men's Christian Association), Wednesday, at 10 A.M. Mr. Sumner has recently received his third grant, which amounted to £131 2s., for proficiency in vaccination.

## TREATMENT OF INTERMITTENT FEVER BY SALICIN.

SIR,—In reading Dr. Thomson's article "On the Treatment of Intermittent or Fen Fever by Salicin," I was forcibly reminded that there is "nothing new under the sun". In proof thereof, I send you an extract from J. F. Sobernheim's *Handbuch der praktischen Arzneimittellehre*, fifth edition, 1844, page 409, article "Cortex Salicis".—Yours truly,

V. POULAIN, M.D., M.R.C.S.

"Lately, salicin has been largely employed in the treatment of ague. Blom especially speaks much of it (*Medical Observations and Contributions on Salicin*, translated from the Dutch by Salamon; Potsdam, 1835). Blom gave it with advantage in five cases of ague, in doses of one grain every hour; in three cases of chronic diarrhoea, etc. It has this advantage over quinine, that it does not interfere with digestion, and causes no congestion to the head, and is therefore well adapted to persons of a plethoric constitution and of dyspeptic habit. Krombolz tried salicin in ague and intermittent facial neuralgia (*Medical Annual for the Austrian States*, 1834, vol. vi). Salicin, combined with an acid, acts more powerfully, for instance, in pills with citric or tartaric acid, or as a drink with diluted sulphuric acid. *Gazette Medicale*, January 1833). . . . It may here be observed, that as a substitute for quinine it is very dear, and also that it requires a much larger dose to quell the fever. Dose: Salicin, gr. vi three or four times a day in ague (Bally); or also gr. v, vi, or viii every half-hour in the apyrexia, shortly before the attack."

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## A CAUTION TO MEDICAL MEN.

SIR,—During the past week, several suspicious characters have been patronising the residents in the neighbourhood of Cavendish Square. One, a respectable looking gentlemanly man, giving the name of Fullard, Fuller, etc., calls on pretext of arranging when to bring his wife to see one. In a day or two he calls again, saying that his wife's aunt will be in town on such a day, and his wife will come with her. On leaving, he immediately returns, saying he has left his purse in the waiting- or consulting-room. On failing to find it, he asks if he can "fall back" on the medical man and borrow a sovereign, as he has an appointment to keep, for which he is late, and has nothing in his pocket to pay the cabman. Various modifications of this are tried. Whether this is all that is attempted, we will not undertake to say.

Another, Mrs. Harrison, wearing a white straw-hat trimmed with black velvet, about thirty years of age, the hair being worn somewhat over the face, introduces herself for treatment of a bad leg, and quotes numerous authorities who have not succeeded in effecting a cure. The police are on the look-out for this individual, on account of sundry and diverse petty larcenies. She also visits dentists, under pretence of procuring an artificial set of teeth.

A third—Challice by name—calls about ten P.M., and, after running riot among names of people whom he expects one to know, says his parents live at 7, Upper Wimpole Street, but that he has married contrary to their wishes; his wife is expecting her confinement, and has been delirious for the last two nights, and he desires you to attend her or recommend some friend. He is about twenty-one years of age, of moderate height, has an awkward, diffident manner, and evidently is on the look-out for anything he can readily lay his hands upon. One of his tales is, that he has just left Bennett's billiard-rooms, where he was obliged to leave his great-coat in paw, and wants you to advance him five shillings until he can see his friends on the morrow.

Medical men will do well to warn their servants not to allow these individuals to occupy their waiting-rooms.—I am, etc.,  
22, Wimpole Street, W., May 1877.

ARTHUR W. EDIS, M.D.

The article on the Factory Bill shall appear next week.

## AMENDMENT OF THE MEDICAL ACTS.

SIR,—Many thanks are due to Dr. Carpenter and the Council of the East London Medical Defence Association, as well for the trouble they have taken in preparing the Bill to amend the Medical Act recently introduced by Dr. Lush, as for their successful prosecution of sundry quacks and harpies, hangers-on of our profession. The new Bill, should it become law, will affect the interests of many. I think, therefore, it should be fairly discussed in all its bearings. The first two clauses of the Bill, as at present drafted, leave, I think, nothing to be desired; but the third is open to criticism.

If there is to be reciprocity in the matter of medical degrees, let such be free, and let no invidious distinctions be drawn as to examination tests. If a man can prove that he has studied a certain number of years at a continental school of repute, and that after examination has obtained his degree, he is, by a new by-law recently passed by the College of Physicians of London, entitled to offer himself for examination for the College licence; and, if successful in obtaining it, I would allow him to register his degree with his licence. So much, then, for foreign medical practitioners who may be desirous of practising in this country. To throw the onus on a continental university of proving that the examination required for its degrees is equal to that required by the College of Physicians for the diploma of member, is, I venture to think, hardly fair, and will, if persisted in, cause much heart-burning and jealousy. Then, again, there are many English practitioners who from time to time take their degrees abroad. Let it be enacted that after the new Bill becomes law, such degrees may be registered, if obtained after due examination, on the possessor of such becoming a member of the Royal College of Physicians of London. I think this would meet the case so far. Foreign universities would then compete but slightly with those of our own country; and a foreign graduate, if twitted on his foreign degree, could reply that when it suited him he could register it. It is not the severity of the examination test that men fear at the College of Physicians, but the restrictions to general practice which the possession of the member's diploma entails.

Lastly, since the Act of 1858 was passed, a large number of English practitioners—and among them are to be found many very able men—have, after examination, and only on producing their English licences as a proof of having undergone a proper professional training, obtained foreign degrees.

Now I venture to think, sir, that the claims of these gentlemen should not be altogether ignored. Give the Medical Council power to register these degrees; if obtained before the passing of the new Act, provided the graduate is in possession of a similar qualification as that required of a foreigner—viz., the L.R.C.P. Lond. Be it remembered that a foreign graduate does not enter into serious competition with the holder of an English degree in the matter of hospital appointments, inasmuch as in nearly all cases there is a qualifying cause existing that a candidate for the vacant post must be a graduate in medicine of a British university. And again, the registration of a foreign degree in medicine should not, in the interest of the general body of English practitioners, be considered as a qualification to practise, unless the holder of it, in addition, possesses an English qualification; but to an Englishman possessing a foreign degree, if honourably obtained, its recognition by the Council would be an answer to those selfish and uncharitable persons one occasionally—and, I am thankful to say, so far as my experience goes, but occasionally—meets with, who regard a foreign graduate as little better than a quack.—I remain, sir, faithfully yours,

MAIDSTONE, May 7th, 1877.

J. F. PLOMLEY, M.D. Brussels.

P.S.—It can hardly be intended to make it penal, under the first clause of the proposed Act, for those who have taken foreign degrees since 1858 to continue to use them; but the clause is open to such a construction.

MR. ELSOM (Whitwell) will find the information which he requires in the last paragraph of Mr. Ormsby's paper, published in the JOURNAL of April 14th.

## MIGRAINE.

SIR,—I should feel obliged if any of your readers would kindly give me a hint on the treatment of migraine. I have tried all the ordinary text book remedies on a typical case with very little benefit. Have any of your readers tried nitrite of amyl in this affection?—I am, sir, your obedient servant,

A MEMBER.



**NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.**

**SAFE EMPLOYMENT OF NITRITE OF AMYL.**

**SIR**—For some weeks past an advertisement has appeared on this subject. Messrs. Allen and Hanburys offer to supply nitrite of amyl in capsules containing four grains each. I desire to make known that that quantity of the drug is a dangerous amount to some patients. Lately I prescribed it for a gentleman, aged 39, suffering from asthma, in two-drop doses, which proved almost too much. Fortunately, his brother was present, and he promptly gave some sal volatile, which was on the table. The patient was so alarmed by his "deathly" feelings, that I could not induce him to take another inhalation in his next attack. Further, I think it most undesirable that such a drug should be procurable by the public in "boxes of 2s. each".—I remain, yours truly,  
JAS. THOMPSON, M.B.  
Avenue House, Leamington, May 2nd, 1877.

**OWING** to pressure on our space, the letters of Mr. S. Cartwright, Mr. J. H. Craigie, Mr. Gaine (Bath), Dr. Allfrey, Dr. Mahomed, and some others, are necessarily postponed until next week.

**SPASMODIC MUSCULAR CONTRACTION.**

**MR. R. FISHER** suggests to "M.B. Lond." that he should treat his case of spasmodic muscular contraction by properly regulated exercises of the affected muscles. His patient should daily practise grasping large objects, gradually reducing their size, and stopping the moment muscular spasm is excited, at the same time carefully avoiding all attempts at writing, or using the hand and arm in any way that excites the spasmodic contractions. Mr. Fisher believes that sometimes the muscular tissue itself is, from injury, unable properly to respond to impressions received through the motor nerves; and that the history of the accident which the patient met with four years ago indicates that the original lesion was muscular and not nervous.

**MIDWIFERY ENGAGEMENTS.**

**SIR**—Would you kindly give me your opinion, or if any of your numerous readers would do so, I shall feel greatly obliged, upon the following case. I was engaged to attend a woman (whose husband at the present time owes me a bill for professional attendance upon his child and the woman's father) in her confinement. Without advising me, another practitioner who lives a considerable distance away was called in and attended her. I wish to know, therefore, if I can legally demand my fee as if I had attended the case. I do not for one moment think that my professional brother alluded to is aware of the above circumstance; and, as I do not know him personally, I have had no communication with him.—I am, yours truly,  
H.

\*A court of law has before now awarded the fee where a practitioner has been retained to attend a case of labour but has been superseded. See *BRITISH MEDICAL JOURNAL*, September 23rd, 1871, page 368. On the other hand, an adverse decision has been given (*ibid.*, December 25th, 1875, page 805).

**DEATH-CERTIFICATES: THE CASE OF MR. DOWNES.**

**SIR**—A case having been reported in the daily papers, in which an act of carelessness on my part was, by the solicitor of the Medical Defence Association, attributed to a deliberate wish, from paltry and dishonourable motives, to evade the law, I ask a small space in your columns to totally deny any such motives. I have written to various daily journals and to the *Lancet* an explanation of the affair, and will therefore only ask you to allow me to state that the evidence given before the magistrate fully corroborated my assertion, that while I admitted that in the hurry of business I had acted without proper caution, I had neither any motive for, nor any intention of, acting in a way derogatory to my name and calling.—I am, sir, yours obediently,  
CHAS. DOWNES, M.R.C.S.

**OSTEOTOMY.**

**SIR**—In reference to Mr. Maunder's letter of the 28th April, I must observe that I do not perceive how the language I employed with regard to his cases could possibly lead to an erroneous impression, seeing that not merely are his results described as "without fatal issue," but that "a little suppurative" is mentioned as the worst that happened. Mr. Taylor's case at Guildford, in which Mr. Maunder assisted, was unknown to me, and has not been laid before the profession. Although, then, that gentleman has preceded me, my work was quite independent of his: I borrowed the idea, as stated in my lecture, entirely from Volkman.

Mr. Maunder, judging by the italics in his letter, seems to lay some stress upon my having made use of his chisel, also upon his presence. The matter happened in this wise: Finding on December 1st that some directions I had previously given for the making of a chisel might not be completed by the following day, on the morning of the 2nd I sent my coachman to ask Mr. Maunder to lend me his chisel that afternoon. That gentleman courteously acceded, and at the same time expressed a wish to be present at the operation. To this I at once gave a cordial assent. Thus my use of Mr. Maunder's instrument was not prompted by any wish for his particular chisel; but I borrowed it simply because mine had not been completed, just as I might borrow a scalpel or a bougie from any other of my friends. Nor, indeed, do I lay any weight on the shape of the chisel; if the metal and the temper be such as render it secure against chipping, breaking, or bending, the shape ordinarily in use among carpenters would answer as well as any other.—I am, etc.,  
RICHARD BAKWELL.

**MEDICAL ETIQUETTE.**

**SIR**—As Mr. Huddart has answered my letter signed "L.R.C.P.E., etc.," I must correct him in some statements. I was asked to come down by a gentleman living in Greenhithe, he stating there was a good opening here for another medical man. Mr. Huddart says I "began by applying for clubs held by him." I had not been here long before I wrote to him, stating why I came down, and offering to help him if I could. To this letter I had no reply in any way. As to the "rather hazy accusation," I did not speak of any club-patient of mine, as I do not remember any one who left me for him, and certainly deny that I ever threatened to get any one expelled for doing so, or that I ever used "strong language" to any patient. The case I meant was this: A man, while visiting a servant at a house, had a fit lasting about an hour. I was sent for, and undressed the man and saw him to bed, where he was under my care for some days, the fits continuing once or twice daily, and I did not think it safe to let him go home. After six days, I said he could go the next day. In the evening, Mr. Huddart and Mr. Cook (of whom he bought the practice) called and saw my patient, without saying a word to me about it, though they knew he was under my care. They said he might be moved at once. This was done, and he had fits all night. About the clubs, I was asked by one or two to apply, as they objected to pay 4s. 6d. when others only paid 4s.—Yours truly,  
EDWIN TIPPLE, L.R.C.P.E., etc.  
Greenhithe, April 24th, 1877.

**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

**AMERICAN MEAT.**

**SIR**—I have purchased some American meat at the advertised dépôts, but I found the meat so peculiar to the taste, smelling so "meaty" or "sickly", and so very soft, or flabby or tender, that I could not continue to use it without considerable loss, although, in consequence of the price, as compared with the price of our own meat, I should have been thankful to do. I shall feel obliged if I can be assured whether meat possessing these qualities is healthy and fit for human food. Where is the line to be drawn between wholesome and unwholesome meat?—I am, sir, yours obediently,  
London, May 1st, 1877.  
FATER.

**ERRATUM.**—In the *JOURNAL* of May 5th, among those who have passed the primary examination of the College of Surgeons, the name Henry Stanford is given instead of Henry Handford.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Scarborough Daily Post; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Warrington Express; The Croydon Chronicle; The Northampton Herald; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Dudley Herald; The Shrewsbury Chronicle; The West Surrey Gazette; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; The Hull Criterion; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The High Peak News; The Metropolitan; The Observer; The Home Chronicle; The Derbyshire Advertiser; The West Middlesex Advertiser; The Rock; The St. Andrew's Gazette; The West Coast Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Richmond and Twickenham Times; The Western Morning News; The Liverpool Mercury; The Carlisle Journal; The Mersey Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; The Manchester Free Lance; The Belfast News Letter; The Malvern News; etc.

\*We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

**COMMUNICATIONS, LETTERS, etc., have been received from:—**

Dr. George Johnson, London; Dr. J. Hughlings Jackson, London; Dr. William Rutherford, Edinburgh; Dr. Gimschaw, Dublin; H.; M. Magnan, Paris; Dr. Spencer, Ballinasloe; Mr. F. Elsom, Chesterfield; Dr. C. B. Taylor, Nottingham; Surgeon-Major A. A. Gore, Dublin; Dr. Heath, Newcastle-upon-Tyne; Mr. H. Sewill, London; Mr. C. Patchett, Nottingham; Dr. J. M. Fothergill, London; Mr. Joseph White, Nottingham; The Rev. Dr. S. Haughton, Dublin; Dr. W. B. Carpenter, London; Mr. C. S. Loch, London; Mr. Hugh Robinson, Preston; Dr. J. W. Moore, Dublin; The Registrar-General of England; Mr. Richard Davy, London; Dr. W. Fairlie Clarke, Southborough; Mr. G. Eastes, London; The Registrar-General of Ireland; Dr. Edis, London; The Secretary of Apothecaries' Hall; Dr. Bradbury, Cambridge; The Secretary of the Harveian Society; Dr. J. Crichton Browne, London; Mr. H. Handford, Atherstone; Mr. John Woodman, Exeter; Gothamite; Mrs. Howgrave Graham, London; Dr. J. C. Steele, London; Dr. Edward Woakes, London; Dr. Shuttleworth, Lancaster; Mr. Talfourd Ely, London; Dr. E. T. R. Tenison, Shepherd's Bush; Mr. Balmano Squire, London; Mr. James Williams, Talgarth; Dr. Arnold, Belfast; Mr. Alfred Coleman, London; Dr. F. J. Brown, Rochester; Dr. Hinds, Birmingham; Mr. A. W. M. Robson, Leeds; Mr. W. Andrew, Launceston; Dr. Joseph Bell, Edinburgh; Dr. W. R. Smith, Sheffield; Our Edinburgh Correspondent; Mr. Richard Barwell, London; Mr. Charles Gaine, Bath; The Registrar of the Royal College of Physicians; Mr. E. W. Thurston, Ashford; Dr. Lauchlan Aitken, Rome; Mr. Henry M. Jay, Chippenham; Dr. Manson, Chesterfield; Mr. A. H. G. Doran, London; Mr. Thomas Fore, Birkenhead; Mr. J. Williams, Sienitz; Kappa; Mr. T. Jones, Manchester; Mr. Lloyd Owen, Birmingham; Mr. Samuel Cartwright, London; Dr. Plomley, Maidstone; Dr. Mahomed, London; Dr. Allfrey, St. Mary Cray; Dr. Payne, Calcutta; Dr. Parsons, Dover; Dr. Thompson, Leamington; Dr. Macpherson, London; Mr. H. S. Leigh, Manchester; Miss Lankester, London; Mr. C. D. Field, London; Dr. Farquharson, London; Mr. J. H. Craigie, London; Mr. Vacher, Birkenhead; Dr. Eastwood, Darlington; Mr. Vincent Jackson, Wolverhampton; M.D. Ed.; Mr. Ralph Goodall, Silverdale; Studiosus; Mr. N. A. Humphreys, London; Dr. Barlow, London; A Member; Our Dublin Correspondent; Dr. Trollope, St. Leonard's-on-Sea; Mr. W. H. Atkin, Sheffield; Dr. Thudichum, London; W.; Mr. Lingen, Hereford; Dr. Leech, Manchester; Dr. J. H. Aveling, London; Dr. Tripe, Hackney; Mr. H. N. Davies, Pont-y-pridd; Dr. Hansel Griffiths, Dublin; M.; Dr. Beamish, London; Dr. Joseph Rogers, London; Dr. Francis Warner, London; Mr. Chavasse, Edinburgh; Dr. Pendleton, Liverpool; Dr. Fletcher Beach, Clapton; Mr. Thomas E. Jones, Llanrwst; Rhun; Mr. W. J. Tyson, Folkestone; Mr. Alford, London; Our Paris Correspondent; Mr. Wanklyn, London; etc.



## AN ADDRESS

ON

OPHTHALMOLOGY IN ITS RELATION TO  
GENERAL MEDICINE.*The Annual Oration delivered before the Medical Society of London.*

By J. HUGHLINGS JACKSON, M.D., F.R.C.P.,

Physician to the London Hospital, and to the Hospital for the Epileptic and Paralysed; etc.

## II.

As mentioned in the introductory remarks, the study of paralysis of the ocular motor nerves is of importance, not only for immediate utilitarian purposes, but for discipline. The indirect value of the facts with which ophthalmic surgeons have supplied us from their laborious research into these cases, for the elucidation of some very difficult problems in general medicine, is very great indeed. It is almost solely in this regard that I intend to speak of them. I begin with vertigo from paralysis of ocular muscles.

Although it is well known to ophthalmic surgeons that vertigo is one of the most important symptoms of paralysis of an ocular muscle, this is certainly not known widely in the profession. Graefe says that its non-recognition has often led to medical errors. It is common for the inexperienced, who do not know it, to overlook so simple a cause of this symptom and to treat the patient for some central affection. The case does not always diagnose itself. The patient who has paralysis or paresis of an ocular muscle or muscles, does not always come complaining of double vision, but sometimes giddiness and irregularity of gait, or confusion of sight. In cases of slight weakness of the external rectus, or when the superior oblique is the muscle paralysed, the palsy is by no means obtrusive; there is no ordinary strabismus; and in such a case the giddiness may be with fallacious ease attributed to some central lesion, to disease of the cerebellum for example; or it may even be put down to disease or temporary disorder of a part of the body so distant as the liver. Even when ocular palsy is obtrusive, as when the sixth nerve is completely paralysed, it may happen that the attendant vertigo is erroneously put down, not to that palsy itself, but to some supposed additional lesion of a nervous centre. This is attributing a symptom to a complex state of things, from overlooking a simple and obvious cause. I speak strongly here, because in former years I have erred from not knowing the real mode of causation of vertigo in ocular paralysis. In any case of vertigo, having excluded obvious possible causes, we should not be content with an ordinary examination of the movements of the eyeball, but should test the patient by coloured glasses and candle in a darkened room.

Apart from the obvious clinical value of the fact, that ocular paralysis causes vertigo, the cases help us to a demonstration of the physiology of vertigo, and again to a knowledge of the state of things in disorder of co-ordination. To study the nature of vertigo, we must take a very simple case.

The simplest ocular palsy we can study for this purpose, is that of the external rectus muscle; for this palsy is the simplest of all palsies; but one nerve is affected, and but one muscle. As that muscle moves the eyeball, the defects from its palsy are easily and also precisely studied. The movement which the muscle effects is, unlike that of some other ocular muscles, uncomplicated: it moves the eyeball directly outwards. For still further simplicity, we take a case in which this local palsy is the sole paralysis, and that it depends on lesion of the trunk of the sixth nerve, as it mostly does; we shall suppose it to be of the right side.

Let us remark, first of all, that the vertigo occurring with this, or with any other variety of ocular palsy, is *not* owing to diplopia, as it is very often supposed to be. My attention was first drawn some years ago to the true explanation by Brudenell Carter, and I have in very many ways profited by this knowledge. The vertigo is due to a wrong estimation of the position of external objects by the one eye, whose muscle is paralysed. This is the really important matter for our consideration. There is what is technically called "erroneous projection". This can be proved by a very simple experiment. In our supposed case of palsy of the right external rectus, the patient (his left eye being closed), when told to strike quickly an object held to the right of the middle line, strikes beyond the object. When the patient tries to turn the eye outwards, Helmholtz says: "The organ no longer obeys the will; it stops midway, and objects appear to displace

themselves to the right, while the eye and the retinal images produced there do not change position."

The patient judges of the position of the external object by the effort he makes to bring the eye to bear on it, not by any movement actually accomplished. The patient judges, to use the language of Bain, by the "outgoing current"—out-going, but, be it observed, not muscle-reaching. The eye does not, or, to use Helmholtz's expression again, the retinal images do not, change position. The patient judges by the activity of the centre for the movement. Thus, to speak metaphorically, the hand is *misinformed* as to the position of the object, and, therefore, strikes beyond the object; or, we may say, if so incoherent a simile can be excused, "the hand makes a false step". It is not difficult to understand how a similar dis-harmony betwixt the ocular and wider locomotor movements can cause vertigo or actual reeling. During walking, there would be many real "false steps", from acting on the untrustworthy estimates of positions given by the centre for the impossible movement of the paralysed ocular muscle. Even in the simple experiment just mentioned, the patient will sometimes not only miss the object on his right, but will actually *stumble* to that side.

The facts of ocular vertigo have long seemed to me to give actual demonstration that vertigo is on its physical side a motor symptom. I find that Russell Reynolds had previously come to the same conclusion. My colleague Dr. Gowers has recently adopted this view. The facts mentioned show that vertigo is, physically, a disorder of co-ordination; that it is itself incipient or actual reeling. It is, I submit, inaccurate to say—in a case of disease of the cerebellum, for example—that vertigo *causes* disorder of co-ordination; it is itself, on the physical side, disorder of co-ordination. In this opinion I am glad to be able to say that Ferrier agrees with me. The only difference betwixt vertigo without outward manifestation and vertigo with the outward manifestation of a reel is one of degree; in one there are slight central changes, and in the other strong central changes, leading to peripheral effects. The difference is, I think, strictly analogous to the physiological difference betwixt speaking internally and externally; there is only a difference in strength of the central excitations or discharge.\* The statement that vertigo is, on its physical side, a disorder of co-ordination, incipient or actual, seems strange only because the sensation of vertigo is often confounded with the *nervous process* occurring along with it. A sensation, that is, a state of consciousness, is often spoken of as being the same thing as a state of a sensory nerve; just as a horse-chestnut might be supposed to be the same thing as a chestnut-horse. The sensation of vertigo differs as much from the physical process occurring along with it as colour does from the physical process occurring along with it. Unfortunately, it is not the habit to analyse carefully betwixt abnormal states of consciousness and the physical conditions accompanying them. Thus pain is said to produce this or that physical effect. There is no more objection to the popular use of this expression than there is to the statement that the sun rises in the east. But the use of the word sensation, both for a state of consciousness and for a state of nervous centres, produces the same kind of confusion as the use of the expression that the sun rises in the east would do in an exposition of the movements of the solar system.

Considering the extreme simplicity of the facts with which ophthalmic surgeons have supplied us, it is surely somewhat perverse to study the more difficult cases of auditory vertigo, and the most difficult case of epileptic vertigo, before we have studied ocular vertigo. We can make a patient, who has complete paralysis of the third nerve, giddy and reeling, when we like. We have only to make him close his sound eye, and keep the paralysed lid upheld by a piece of sticking plaster, and let him walk; he tells us that he feels giddy, and we see him reel more or less. Starting here, we can next investigate, with more hope of success, auditory vertigo.

It is a very interesting fact, that Cyon has found that experimental irritation of the semicircular canals produces ocular deviation, each canal its own deviation. And Ferrier finds that irritation of what he calls the auditory centre, in the cerebrum of the monkey, produces movements of the eyes to the opposite side, with dilatation of the pupil. These facts are very significant, and enforce what has been said as to the desirability of making ocular vertigo the starting-point of our investigations into vertigo in general. As to epileptic vertigo, the demonstration that vertigo is a motor symptom is of vast importance; for it helps to show a real relationship betwixt epileptic vertigo and convulsion; it shows that epileptic vertigo is, not only clinically but physiologically, a minor degree of convulsion. Here, again, we must note the distinction between a mental state and a nervous state. There is no relationship whatever possible betwixt epileptic vertigo, considered, as it commonly is, as a defect or loss of consciousness, and convulsion;

\* The peripheral effects are due to the development of movements of muscles, usually associated with the paralysed muscle (*musculi*).



but there is one betwixt convulsion of the eyes, or discharge of the ocular motor centres (the physical side of epileptic vertigo), and general convulsion. Moreover, Hitzig's experiments, by passing galvanic currents through the head, show that there are all degrees, from a feeling of vertigo only (that is, with weak central discharge only) to vertigo with actual turning to one side, that is, with central discharges strong enough to produce peripheral effects.

Not only do we learn from ocular palsies the nature of vertigo, but we illustrate a very important principle in physiology, and in that part of physiology which corresponds to psychology. The facts of ocular vertigo, with other allied facts from other departments of medical practice, throw light on psychico-physical operations. Speaking generally, they help to show that ideas arise, not only during enervising of sensory centres, which every body admits, but during enervising of motor centres, which scarcely any body seems inclined to believe. We have seen that the patient judges of the positions of objects by central discharges, which do not actually displace his retinal images. Now, the extension of an object is really made up of relations of innumerable positions. To give a particular illustration, the facts of ocular vertigo are of inestimable value in supporting the doctrine, that the anatomical substratum of a word is a motor, an articulatory process.

The scepticism with which such a statement as the last is received is for the same reason that vertigo is considered to be not a motor but a sensory symptom. It depends on the confusion of sensations—states of consciousness—with states of sensory nerves—physical states. I do not say that a word is a motor process, but that the anatomical substratum of a word is. Such a conclusion has been reached by Bain and Fournie deductively; it has long since seemed to me that on this basis only is possible the explanation of all the symptoms in cases of aphasia: recently, by a totally different kind of evidence, Ferrier has come to an identically similar conclusion. Surely, *à priori*, there is no more difficulty in believing that a mental state can occur with an outgoing than that it can occur with an incoming nervous current. Why should the mere direction of the current make such a marvellous difference? There is no more reason, *à priori*, why the idea of a word should not arise in consciousness during a nervous discharge going to or towards the articulatory muscles, than there is that colour arises, as everybody admits, during a discharge of a centre receiving retinal impulses.

Were it only for its bearing on the interpretation of aphasia, ocular vertigo is well worthy of careful study. There are other facts supporting the doctrines advanced.

In some cases of palsy of the ocular muscles, the size of objects is altered, as in paralysis of the superior oblique and in cases of weakness of the internal rectus. There is a similar phenomenon in certain simple experiments on the eye. If, so to speak, we impress the retina with a scarlet object, we find that the after-image alters in size with accommodative efforts. Now, in this instance, the retinal area affected is unaltered; there is a motor change only. We can also alter the shape of objects to some extent; if we obtain an after-image of a circle and project this on to an inclined sheet of paper, the spectral circle becomes oval. This statement I owe to an American ophthalmic surgeon, whose name, I regret to say, has escaped me. Moreover, a sensation which is of entirely central origin is alterable in size by accommodation. A medical man, the subject of migraine, has, at my request, noticed the alteration in size which he can make in the visual spectre which precedes his headache by altering his accommodation. When he looks at a book at reading distance, the spectre is of about the size of a shilling; at a distance of eight or nine feet, it is about two feet in diameter. In some cases of epilepsy, and particularly in those in which loss of consciousness is very early in the paroxysm, there is a warning by alteration of size of objects; mostly they get bigger and nearer; one expressed it that the walls of the room seemed to come nearer. In the scientific investigation of the epileptic paroxysm, the warning is the most important thing. It is quite as important to study warnings of alteration of shape as warnings by projection of colours; they are exactly correlative motor and sensory symptoms. In all such cases, *post mortem* careful search of those spots which Ferrier declares to be respectively the special centre for movements of the eye and the visual centre should be made.

In all these cases, except possibly in the cases of epilepsy, the retinal area affected, or the number of central elements affected, corresponding to a given retinal area are unaltered; they show that estimation of size of objects depends on activity of a motor element only. There is more than this; these are facts showing that activity of motor centres causes alteration of the size of objects when actual movement is impossible or slight. Thus, in paralysis of the ciliary muscle, either by atropine or in disease, objects appear smaller. These facts, like those given when speaking of vertigo, show plainly, I think, the inseparable connection of motor activity with sensory activity in ideation.

They show that, whilst the colour the secondary or dynamical quality of an object is a sensory affair, its size and shape, its primary or static quality is a motor affair. If so, then ophthalmological facts are of inestimable value not only as bearing on an important psychological problem, but as bearing on the most important of all questions whatever in psychology; they demonstrate that the estimation of the extension of objects is due to motor activity; and they show that activity of motor centres will suffice; and thus they lend support to the doctrine that, in remembering the shape of an object, there is slight activity of central motor centres as much as there is slight activity of sensory centres in remembering its colour. This general conclusion, reached before Hitzig's and Ferrier's researches, is in absolute harmony with them.

There is evidence quite independent of that already stated supporting this doctrine. Weir Mitchell has found that faradising the ends of nerves in stumps makes the patients feel "movements" of the lost parts which used to be supplied by the nerves, the amputated ends of which are irritated in the experiment.

My friend Dr. Sturge has supplied me with an illustration of ideal movements occurring during central discharge in a case of hemiplegia. There were ideal movements of parts which were really immovable. "A man suffering from left hemiplegia, with scarcely any recovery of power in the arms, marked rigidity of arm and hand, no affection of sensation. Frequently, when in bed, or at other times, the patient endeavours to exercise his paralysed muscles. In the case of the hand, he endeavours to open and close the fingers, being unable in reality to perform any movements with the hand, which is constantly flexed on the forearm, with the fingers firmly closed. In doing this, he has many times felt exactly as though the fingers were in reality opening and closing to their full extent; 'would take my affidavit that this is so'. This has so surprised him, that he has put the other hand down to see whether the fingers really were moving, but he has always found them flexed firmly in their usual position, and he has felt them remain in this position with his right hand during the very time that he has had the sensation in the hand itself that it was opening and closing. On one occasion, he called out to one of the other patients that he was able to move his paralysed hand, but this patient has told me that, when he went to look, he found the hand in its usual state, and devoid of all movement."

One reason for alluding to this case is, that I understand that Professor Bain has suggested that ideal movements would be found to occur in some cases of hemiplegia if inquired for; in this case, the facts stated by Dr. Sturge were volunteered by the patient; the movement was not the one often observed when a hemiplegic man yawns.

To resume the facts, we stated, when speaking of ocular vertigo, those of which we called deceptive as to size in paralytic states of the ocular muscles, and of alteration of size of after-image in accommodative efforts, of alteration of size of a migrainous spectral image, the facts of Weir Mitchell's experiments, and those of Dr. Sturge's observation, all point to one thing—to the truth of Bain's doctrine of the "out-going current", and, as it appears to me, they give a demonstration that enervising of motor as well as of sensory centres occurs during ideation. In particular, they supply powerful indirect evidence that the anatomical substratum of a word is a motor, an articulatory process. Weir Mitchell has independently reached the same conclusion as Bain, but his facts have been explained by the hypothesis that the ideal movements were simply owing to the patient's imagination. Supposing this so-called explanation were acceptable in a popular way, it might still be affirmed that the physical state during the imaginative state was an activity of motor centres. Physiologically, the imaginative explanation is of the same value as the explanation given of the inability of some aphasics to speak, viz., that they do not speak because they have lost the memory of words; these explanations are not physiological, they are attempts to explain physical conditions by psychical conditions; in reality, they explain nothing.

[To be continued.]

MARYLEBONE.—Dr. Whitmore states in his report for the five weeks ending December 2nd, that there were 531 births and 341 deaths registered, which were equivalent to an annual death-rate of 22.26 per 1,000 population. He also reported that, whilst small-pox was spreading in a similar manner to what it did in 1871, the revaccination of adults was almost entirely neglected. As regards primary vaccination, there was no reason to find fault, as the percentage is gradually increasing. There had been three deaths from small-pox, and two of these had occurred amongst unvaccinated persons. Dr. Whitmore gives analyses of water which are scarcely satisfactory, and tables of the sanitary work performed, which indicate a fair amount of work for the time of year.



# ANOTHER CASE OF POISONING BY THE SO-CALLED "HOMŒOPATHIC SOLUTION OF CAMPHOR".

By GEORGE JOHNSON, M.D., F.R.S.,

Professor of Clinical Medicine; Senior Physician to King's College Hospital.

I AM indebted to my friend Mr. Philip Grubb of Warminster for the following notes of a case of poisoning by homœopathic camphor. The notes were sent to me in consequence of my having published some cases of poisoning by this dangerous drug in the *Clinical Society's Transactions*, 1874, vol. vii, p. 27. Subsequently, cases of the same kind were published by myself and others in the *JOURNAL* (1874 and 1875). The following is Mr. Grubb's history of his recent case.

"On Wednesday, April 11th, the following case occurred in my practice. A young gentleman aged eighteen years, reading for Oxford, of fair average health, in whose family no trace of hereditary tendency to epilepsy exists, for the cure of a cold took on sugar, between 6.30 A.M. and noon, seven doses of homœopathic camphor. Each dose, he says, was three drops, though I fully expect that he took more than three drops each time. Within five minutes after taking the last dose, without the slightest warning, he had a severe epileptic fit, in which his tongue was badly bitten. I did not see him during the actual convulsion, but from the description there can be no doubt as to its nature. It lasted more than fifteen minutes. He has been under treatment ever since the fit, feeling, as he says, 'queer', complaining of a peculiar cold sensation on the tongue, extending for about half an inch from the tip. After the immediate effect of the attack went off, I put him on the bromide of potassium, which, however, did not seem to agree with him. I am now (May 7th) giving him nux vomica, liquor potassæ, and infusion of cusparia; and he is all but well, though not yet quite what he was before this occurred. I enclose the two labels which were on the bottle containing the camphor.

"Saturated Spirit of Camphor, as used by Dr. Rubini. Ten times the strength of the ordinary Spirit of Camphor."

"Concentrated Solution of Camphor. Dose: two or three drops on sugar every fifteen minutes; less frequently when relieved. Prepared by J. J. O. Evans, Chemist, and Agent for Homœopathic Medicines, Medical Hall, Teignmouth."

"It is right to mention that, about a month before the fit, my patient had a fall while hunting; but he declares that this left not the slightest trace of injury."

## DEDUCTIONS FROM THREE HUNDRED AND NINETEEN OBSERVATIONS OF THE ACTION OF CHRYSAROBIN—A NEW EMETIC-PURGE.\*

By J. ASHBURTON THOMPSON, M.D.,

Councillor of the Obstetrical Society of London; Member of the Harveian Society.

CHRYSAROBIN is the term which has been selected to designate what is more commonly known, because so first known, as Goa-powder. It has been chosen for these reasons: that Goa-powder is so called only because it is derived by the rest of India from the port named Goa; that the same powder is known over South America as Bahia-powder, except in the province of that name from which the other parts of the country receive it; while in that province it is known by its native name of Aroba-powder. But since this powder is the active part of a whole tree, rather than continue the compound word Aroba-powder, it is convenient to substitute the single word arobin. Yet further, while Goa-powder (or old powder) is brown, Aroba-powder (a newly prepared powder) is yellow. Yellow is its right colour. Hence, to arobin is added the prefix chrys-, and thence is formed chrys-arobin, *i.e.*, yellow Aroba-powder. The following is

Professor Atfield's Analysis of Chrysarobin.†

Constituents.		Parts per cent.
Moisture	...	1
Glucoside	...	...
A bitter principle or principles	...	7
A variety of arabin	...	...
Chrysophanic acid	...	80.84
Resin-like bodies	...	2.
Woody fibre	...	5.5
Ash	...	5

\* Read before the Harveian Society of London.

† The *Pharmaceutical Journal*, March 1875.

The large proportion of chrysophanic acid which enters into the constitution of chrysarobin gives some reason for believing that it may be the active principle. The crude powder and the extracted acid, indeed, have the same locally irritant effects. Either, kept in contact with the skin, produces irritation, inflammation, and discoloration of the cutis. Either, introduced in minute quantity to the eye, causes conjunctivitis. Farther, some other vegetables, which contain chrysarobin, possess active properties which are in some respects similar to those both of chrysarobin and of chrysophanic acid. Thus, the common dock contains chrysophanic acid; and the common dock, made into a poultice or used as an infusion, is well known to be in common use by the country people for the cure of some cutaneous disorders—the same purpose for which Sir Joseph Fayrer introduced chrysarobin to the notice of the profession in 1874. Senna has purgative properties; and, without asserting that this power is owing to the chrysophanic acid which senna contains, it may be stated that purgation is one of the properties of chrysophanic acid taken internally. The same may be said of rhubarb, and more too; for rhubarb is a cholagogue, and I believe I have ascertained that chrysophanic acid is a purgative of decided cholagogue powers.

These facts led Professor Atfield to surmise that chrysophanic acid might be possessed of active therapeutic powers; and, upon his suggestion, Messrs. Young and Postans of Baker Street entrusted me with the clinical investigation of this body, in the course of 1875. With the exception of one or two specimens elsewhere procured, this firm has supplied all the preparations employed in the three hundred and nineteen observations, the deductions from which I shall presently describe.

Chrysophanic acid occurs as a granular powder of a fine bright orange colour. It possesses neither odour nor taste. It may be crystallised. The resin, as appears from Professor Atfield's analysis, is of two kinds. I used a combination of these two; they form a body of a deep reddish-brown colour, brittle, and shining. The aqueous extract is black. The crude chrysarobin presented the usual appearances, which are well known. These constituents were offered as perfectly isolated from each other.

*First Series of Observations.*—All that could be proved of chrysarobin was that it would be slightly purgative; for such is the action ascribed by Schroff to chrysophanic acid. All that was known of it was its powerfully irritant property, shown by its action on the skin and the conjunctiva. It seemed possible that it might prove an irritant poison. I soon ascertained, by a series of personal experiments, that it possesses no power, in a moderate dose, so active as this. On reaching a dose of six grains, I experienced, at the fourth hour, sensations of nausea, accompanied and followed by sensations of disturbance in the bowels; even an abortive attempt at vomiting; then relief from all symptoms; sixteen hours afterwards, a loose action of the bowels. The next higher dose was given to my brother, a student of medicine. He dined at seven; at half-past eight he took eight grains of chrysarobin made into a pill with confection of roses; at half-past ten he vomited; he then slept, but at twelve o'clock was roused by another attack of vomiting. The bowels remained unaffected. There was no depression except during the act of vomiting.

*Second Series of Observations.*—This includes ninety cases—thirty children and sixty adults.

The action of chrysarobin is emetic and purgative. Vomiting is always the first sign of action. This is not attended by any depression at all comparable with that caused by tartar emetic or ipecacuanha. In the doses presently to be named, it has not caused any distressing retching; and in children, as well as in adults, the acts of vomiting varied between none in three out of the whole number, and six in two out of the whole number. They were usually two or three; very often only one. The action on the bowels was much more variable—from none in a few cases to nine or ten in equally few cases; most often the range was between three and seven. There is no gripping pain, but the nausea continues more or less markedly until the bowels recover. The motions are very watery, and of such a brown colour as suggests its origin with the powder taken. If the vomiting be very early, then the purgation, although marked by a fluid stool or stools, will certainly not be violent; and in some cases, in which there was no vomiting, the bowels acted very freely. It does not always happen so, however, under the same condition; and I conclude, therefore, that some persons can take a larger dose than others. I cannot distinguish these persons any more than I can accurately gauge the amount of any other purgative which a given person will require at first seeing him. If the dose be taken into a full stomach, that delays its action and determines it to the bowels.

With regard to the dose of chrysarobin, from thirty of these observations which were made on children, I draw the following conclusions. A dose of six grains produces scarcely any effect upon children of twelve,



eleven, ten, or nine years. Upon children of eight and six years, the effect is uncertain. Upon children of from five years down to five weeks it is certain to operate; but the time which elapses before its action is manifested may vary between ten minutes and nine, or even twelve, hours. The effect of the same quantity is not increased as the age of the child is diminished. (Thus, three children of five weeks, of three years, and of six years respectively were affected by the six-grain dose to precisely the same extent.) I am not able to say upon what this peculiarity depends, but the intervention of sleep delays the manifestation of any effect, and was the cause of delay in the two cases in which alone so long intervals as nine and twelve hours elapsed.

For adults, I chose a dose of twenty grains. From sixty observations, I make the following deductions. A scruple is a moderate dose for an adult, operating, except under circumstances to be mentioned presently, with tolerable uniformity. The interval which elapses before it begins to operate may be so long as five hours; but, if the dose be well adapted to the individual, that is quite exceptional; four hours is a pretty frequent interval, but two hours or less is the most common interval. It may be so short as fifteen minutes, but is seldom shorter than thirty.

From these ninety observations, I conclude that chrysarobin is, in a dose of twenty-five grains for adults or of six or more grains for children, an emetic-purge of which the action is unattended by any inconvenient symptoms; while, on the other hand, it is as certain as other medicines which act in either of those ways, at the same time that the speed and thoroughness with which it operates recommend it for use in most of those cases in which such an effect as it produces is desirable.

*Third Series of Observations.*—From chrysarobin I pass to the action of chrysophanic acid. Of this body something is known, but not much. It is stated by Schroff to be mildly purgative. It is a constituent of rhubarb, which contains other active principles. It is but very sparingly soluble in most other fluids than benzole; only it is freely soluble in the alkalies, and, in proportion, in alkaline fluids. I shall again refer to this fact in considering the mode of action of the bodies under consideration. The series from which I draw the following conclusions upon the dose and action of chrysophanic acid includes one hundred and sixteen observations upon persons of all ages and both sexes.

*The action of chrysophanic acid* is similar to the action of chrysarobin, with this difference; that while in a suitable dose each will cause vomiting and purging, if the dose be too small, chrysarobin is most likely to purge only, while chrysophanic acid is most likely to cause vomiting only. For this reason, and from giving too small a dose, I was at first inclined to anticipate that the acid would prove to be a simple emetic. With reference to the details of the amount and kind of action, whether on the bowels or stomach, which the acid produces in a suitable dose, I have not been able to formulate it, and I believe I have acquired evidence enough to say that it is not possible to formulate it. I do not know of any other equally extensive series of observations upon any other given emetic or purge; but I believe that the same statement might be made of any of them, and I make this statement in that sense. A larger full dose, that is to say, from fifteen to twenty grains, will always both vomit and purge the patient very freely at the same time that it causes an inconvenient amount of either of those effects very rarely indeed. Farther, there is but little danger of inconvenience from too large a dose.

*The dose of chrysophanic acid.*—In this case, as in that of chrysarobin, I observe first of all that, with a quantity which acts well upon a child of five or six years of age, no increase in effect is observed with the same dose upon the very youngest children. Yet farther, of chrysophanic acid I am obliged to say what does not hold good of chrysarobin; that on children of less than four or five years its action is uncertain in that it sometimes fails to act entirely, or acts very feebly, or most often of all causes vomiting only. It never acts upon them with unexpected violence. Of course, it will be borne in mind, as before, that it is difficult to insure the perfect administration of powders to babies; and that an attempt to give this powder in water, contrary to instructions, may perhaps have contributed to the uncertainty. I have found that six grains of chrysophanic acid is a good dose for children of ten years and under; and that in that dose it may be depended upon, with the above exception, to operate speedily and effectually. For adults, I find the action of the acid certain in a dose of fifteen grains; upon some adults I have found ten and even eight grains act as often as fifteen grains upon other adults apparently of similar physique; and again I have found some, but very few, who demand as much as a scruple for the manifestation of a reasonably brisk action. But I am able to say that that is a large dose, and should not, or rather need not, be given as an initial dose to any person except in case of emergency.

The two hundred and six observations with which I have been dealing were made upon persons who were out of sorts rather than ill, with the exception of the last twenty or thirty. In these (which included cases of various acute diseases), I employed chrysophanic acid to produce what I had then ascertained to be its proper effects. I have, therefore, perhaps lacked the opportunity of observing its specific effects, if it possess any. Of chrysophanic acid I have, however, observed this effect: that, whatever the condition of the patient, it causes the evacuation, one way or the other, of large quantities of bile. I have utilised this observation in a few cases of hepatic obstruction—congestive, catarrhal, and the like—with marked advantage to the patient. Rhubarb, it will be remembered, has a distinct power of increasing the amount of excreted bile, and is used, with other cholagogues, for that purpose every day. Rhubarb also contains some chrysophanic acid; and perhaps it is not going too far to suggest, upon a knowledge of the fact I have just stated, that this power of rhubarb may be owing to that constituent. At least, I consider it worth the trial whether repeated small doses of chrysophanic acid are or are not serviceable in such cases as I have just mentioned, and which are at present a little tedious of cure.

*The Resin of Chrysarobin: the Fourth Series of Observations.*—I have made ten observations upon adults with the resin of chrysarobin. It was made into pills with a little tragacanth and glycerine. One grain had no effect upon two individuals. In three cases, three-grain doses caused vomiting from twice to five times, and purging from five to seven times. In one case, two grains were taken by a man aged 20, instead of four as was intended. In six hours, the bowels began to act, and then they acted very loosely three or four times. There was no vomiting, but considerable nausea, which lasted for eighteen hours. In the remaining four cases, four grains were taken for a dose; and this in every case acted within two hours—in one within half an hour—vomiting being the first sign, and purging very quickly ensuing. In three of these cases, the acts of vomiting were three to five; of purging, from five to ten. In the fourth, a stout woman, fairly strong and the subject of habitual constipation, the vomiting and purging were continued during five or six hours with very small intervals. She was suffering from neuralgia, which I had traced to the state of the bowels; and it disappeared during this violent action. The sickness, except in the last case, was not said to be attended by much depression. It will thus be seen that the action of the resin of chrysarobin is identical with that of the crude powder, and of chrysophanic acid, but very much more powerful.

*Mode of Action of these Bodies.*—Are these bodies direct irritants, like mustard or the sulphates of zinc and copper? or concentric irritants, like apomorphia? or eccentric irritants operating, like ipecacuanha, during elimination? With these questions in view, I devised the *fourth series of observations*, including one hundred cases. I shall, for the most part, avoid distinct reference to the indications which they may appear to afford. Such an investigation cannot be completed without many planned experiments upon the lower animals—experiments which I have neither the time nor the opportunity of conducting. The first question which presented itself is, Does chrysophanic acid act as a direct gastric irritant or in a more circuitous manner? Twenty observations were first made upon the modifying effect which a full or empty stomach might have upon the operation of this drug. Owing to the inherent variability of action which this shares with all other medicines of its class, the result was not very satisfactory. I believe I am warranted in making the following statements. That, if a dose of chrysophanic acid be taken and immediately followed by a meal, its action will be considerably delayed; that, if it be taken after a meal, its action will be delayed in proportion (more or less) to the progress which has been made with digestion; that, if it be taken upon an empty stomach, its action is manifested quickly; that there seems reason to believe that fullness of the stomach or the consequent delay in action determines its effects to the bowels, without, in all cases, obviously diminishing its emetic power; but that emptiness of the stomach does determine it rather to emetic action, and does also diminish its purgative action, notwithstanding that, except in the case of babies, the latter is never entirely absent.

Does the food, then, protect the stomach from direct irritation? I made the observations with draughts consisting of ten grains of the acid, fifteen grains of tragacanth gum, and three ounces of water. This forms quite a thick solution of the gum in which the acid is suspended. So far was this from protecting the stomach, however, that I observed action to begin earlier, to be more violent, and to be more evenly divided between vomiting and purging than after any other mode of administration.

Chrysophanic acid being soluble in alkaline (but not in acid) fluids, I made three observations with draughts composed of ten grains of



the acid, fifteen minims of liquor potassæ, and three ounces of water, allowed to digest during three days. Their action was so evident, that I found it impossible to use any more so large doses. I, therefore, made seven other observations on the effect of similar draughts containing only six grains, and I found them to take all the effect which a dose of fifteen grains given as powder takes.

I made sixty observations with pills containing either the acid or the crude powder combined with confection of roses. I confine my remarks to those containing the acid, since I observe no essential difference in action between them. Each pill contained four grains of chrysophanic acid. I find the action of the drug in this form more uniform than in any other, except that of an alkaline draught. Eight grains are sufficient to take with effect in both kinds upon the majority of persons. Action is delayed almost invariably beyond two hours; often, if sleep intervene, the dose taken at night does not operate until the next morning. In that case, sickness, as always, is the first effect, but the purging ensues almost immediately.

It appears, then, that to give chrysophanic acid in the form of a pill, whereby its diffusion in the stomach is delayed, or as a partial solution (in an alkaline fluid), enhances its powers; for eight grains in the former case and six grains in the latter seem equivalent in power to fifteen grains given as powder. At the same time, by both of these means its action is rendered more equable, and in both, although chiefly in the latter, delayed. On the other hand, neither increased action nor the greater facility of absorption offered by these means increases depression.

Lastly, I repeat that four grains of the resin (which I do not know to have any irritant power as a topical application) are equal to from fifteen to twenty grains of the acid as measured by its effects. From these three hundred and nineteen observations, I conclude—

1. That chrysophanic acid is an emetic purge; that its action is as certain, when given in appropriate doses, as that of any other drug which acts in either of these ways; that, if either kind of action should be wanting, on account of the dose having been too small, it is the purging which will fail to appear; but that is rare.

2. That its action is favoured by its exhibition in a manner favourable to its absorption; i.e., by its diffusion in water, by its exhibition as a pill, and, above all, by its combination with a strongly alkaline fluid; that its action may be delayed by sleep and modified by a full stomach.

3. That its dose is, as powder, not less than six grains for babies; at twelve years, one may give ten grains; above that age, fifteen grains, a dose which it is not often necessary to increase. As a simple draught, perhaps ten grains is enough for most adults. As an alkaline draught, six grains is an average dose, if three days have been allowed for digestion and partial solution. As a pill, eight grains is an average dose, six grains often suffice, twelve grains are too much.

4. That the most convenient form for exhibition is, for adults, that of a pill. In children, the powder, which must be mixed with honey or jam, since it cannot be mixed with water; it is tasteless.

5. Lastly, that I see reason to regard chrysophanic acid as an useful addition to our list of remedies, because it affords a means of clearing out the *prima vie* with a thoroughness and promptitude not equalled by any other medicine with which I am acquainted, a combination of tartar emetic and ipecacuanha alone excepted; while it is at once more certain to produce both purging and vomiting than that, and is unattended by the serious depression which is often an inseparable objection to its employment; that the power of evacuating large quantities of bile which I claim for chrysophanic acid especially fits it for the purpose named.

## ON A NEW REMEDY IN CERTAIN FORMS OF SKIN-DISEASE.

By J. IVOR MURRAY, M.D., F.R.C.S. Edin., Scarborough.

NEARLY twenty years ago, when I went out as Her Majesty's Colonial Surgeon to Hong Kong, I accidentally became aware of the existence of a remedy, known to the natives of the Malay Peninsula (for the cure of ringworm and some other forms of skin-disease), and which in their hands had proved most successful. After much trouble, I obtained some of the remedy in the form of an imperfect tincture, prepared by immersion and maceration of the root of a plant in the impure native spirit called arrack, and verified the wonderful power it exerted in the cure of various forms of tinea and some forms of eczema. The quantity of the remedy I obtained was at first very small, and I encountered great difficulty in getting it in any quantity, as the secret appeared to be kept in one family. After much trouble, however, I succeeded in

increasing my supply, and got proof-spirit substituted for the arrack in its preparation. Subsequently, Messrs. Watson of the Hong Kong Dispensary negotiated with the natives to procure the remedy more freely; and, at my request, they have made arrangements to supply it, to any reasonable extent, through their London agent Mr. Edwards, 38, Old Change, of whom it may now be obtained. It is known as the fluid extract of *Tong Pang Chong*.

I have submitted some of the root, through the kindness of my friend Dr. Hooker, to Mr. Jackson, the curator of the Kew Museum, who pronounces it to be "the produce of a Berberideous plant, and nearly identical with *Akebia quinata* (Decaisne)". Mr. John Thomson of King's College has extracted from the tincture a crystalline substance, which may prove to be allied to chrysophanic acid, and so account for its action.

I shall not pretend to enter into any explanation of the *rationale* of its curative power, but limit myself to the statement that I have used it in hundreds of cases, often with almost magical effect, and that it is now much employed in the East. It is necessary, however, to discriminate in selecting the cases in which to test its value. I have found it most useful in tinea circinata, where the circular margin of the disease is maintained; and perhaps it is even more successfully used in that very troublesome form of eczema (tinea?), which attacks the inside of the thighs and perinæum, and the parts around the anus, which I have known to resist every description of treatment, internal and external, even in the most experienced hands; and I may add that, both in this and other forms of disease, I have found it succeed where the Goa powder had completely failed.

The method of application which I follow is to paint the part over by means of a camel's-hair pencil three times, allowing it to dry between each coat, and this is done every night at bedtime, until the part resumes its natural appearance.

I have employed it successfully in many cases in this country, both in my own practice and in consultation with other practitioners. The following is a characteristic case:

A. B., a gentleman high in the Bengal Civil Service, arrived in England in July 1874, then suffering from eczema marginatum in a slight degree. He placed himself immediately under the care of a distinguished specialist in London, and subsequently was treated by one of our most celebrated physicians, who ordered him to Harrogate. From the latter place he came here, having, from the first, steadily got worse; so that, when he put himself under my care on September 22nd, or fourteen months after the first appearance of the disease, the patches were over eight inches in diameter, and the patient in agony, and almost sleepless. After trying other treatment unsuccessfully, on September 29th I applied the tong pang chong; and, on my visiting him next day, he declared the result to be almost miraculous. He was obliged to leave Scarborough on October 4th, and shortly afterwards returned to India. The disease had entirely left him before he embarked.

In conclusion, if this new drug prove, in the hands of other practitioners, half as efficacious as it has done in my own, it will be a valuable addition to the means of treating one of the most troublesome classes of disease, and quite justify me in bringing it before the notice of the profession.

## CASE OF SYNCOPE FROM ETHER INHALATION.

By R. J. PYE-SMITH, F.R.C.S. Eng.,

Surgeon to the Sheffield Public Hospital and Dispensary.

HARRIET T., aged 14, was admitted into the Sheffield Public Hospital on May 3rd, 1877, suffering from disease of the right hip, of two months' duration. She was a delicate-looking child, and did not appear so old as fourteen. She was somewhat feverish (temperature about 100 deg. Fahr.); the heart's action was rapid (about 120 beats per minute), but it was not accompanied by any *bruit*, and the pulse was regular and fairly strong. As the hip was completely flexed and very tender, it was determined to administer ether, in order to examine the part and to apply a splint. Accordingly, on May 5th, the assistant house-surgeon, Mr. A. H. Denton, proceeded to anaesthetise the patient, who was lying in bed. An American inhaler was used, composed of a number of folds of webbing stretched on a frame, surrounded, except at the top, by India-rubber; and an ounce of ether was poured on to it. At the first whiff, the child began to cry and to struggle slightly; but on being told to breathe quietly, she at once began to inhale in an exemplary manner—long, deep, regular respirations—and in less than a minute was evidently becoming anaesthetised. I was commencing to manipulate the limb, when we noticed the breathing was quickly becoming extremely



shallow; the pulse, however, was good and the inhaler was kept to the face. In a few seconds more, the movements of the chest and abdomen were scarcely perceptible, and the face, which had till now been of good colour, began to be blanched. The inhaler was at once removed; but the pulse now began to fail, and was soon scarcely perceptible at the wrist, though the heart was easily felt beating against the chest-wall. The pillow was pulled from under the head, and the chin thrown forcibly upwards by pressure behind the angles of the lower jaw. The muscles seemed to be fully relaxed, and the surface quite insensitive. The case looked exactly like one of syncope from chloroform, and I expected to have to resort to artificial respiration. On flipping the chest and face, however, with a cold wet towel, slight inspirations were taken, and very soon the head was moved, colour returned to the face, and the pulse was again felt at the wrist. On moving the diseased joint, the child opened her eyes and began to cry, and presently asked if we were putting her leg straight. The inhaler, with two drachms more of ether, was now reapplied, and again the patient began to inspire very freely. Only a few inspirations of ether were allowed, but they were quite enough to produce complete anaesthesia, and, although the pulse did not again flag, respiration soon became extremely feeble, as it had done before. The inhaler was but occasionally applied for short periods, and without being replenished with ether, whilst a dislocation of the hip was reduced, and weights and a long splint were applied to the limb. In about twenty minutes from the commencement of inhalation, when all was finished, the child awoke and talked a little nonsense, but was soon quite rational and comfortable. There was no sickness nor other observed ill effect of the anaesthetic. The ether was of specific gravity .735, and was from the same bottle as had been successfully used the day previous for anaesthetising a boy.

The above case is, I think, of considerable interest, as it points, perhaps more conclusively than the one recorded by Mr. A. S. Morton in the *Lancet* of October 14th, 1876, to failure of the heart's action, as well as of respiration, during the inhalation of ether, without obstruction of the respiratory passages. I have seen difficulty of breathing during ether inhalation, from collection of mucus in the larynx and in the nose; but in this case here recorded there was no evidence of any such condition. Nor do I think that a falling back of the tongue can have produced the symptoms; for it was distinctly in response to the wet towel, and not to the previous pushing upwards of the jaw, that respiration was restored, and, moreover, the pallor and the rapid failure of the pulse point to a different cause; there was at no time any congestion of the face. It is not, I know, uncommon for patients to breathe very lightly when recovering from ether anaesthesia after the completion of an operation; but in such cases they are, I think, always sensitive, and can at once be roused by the infliction of pain; this was not the case in the present instance. Contrary to what has been my experience in cases of chloroform syncope, the pulse gave no warning of the failure of respiration, though it became imperceptible very soon after the breathing had ceased. In conclusion, I may say that the impression of Mr. Denton and myself is that, if we had been using chloroform instead of ether, it would have been less easy to avert a fatal termination to the case.

#### A CASE OF OPISTHOTONOS CURED BY CHLORAL-HYDRATE.

By HARRY DAVIS, L.R.C.P.Lond., M.R.C.S.Eng., etc.,  
Callington, Cornwall.

A SHORT time since, about midnight, I was requested to visit a man immediately, who was thought to be *in extremis*. On my arrival at the house, I found him greatly convulsed, and being supported in an upright posture by two persons, his head drawn back to its extreme point of flexion, and the spinal column arched forwards and very painful, especially near the base of the sacrum and towards the lower extremities. His face presented the usual *risus sardonius*, with retraction of the lower lip, etc. The eyes were fixed and motionless, with slightly contracted pupils. The countenance was very pale and distressed. Speech was nearly obliterated, words being very indistinct, with an ejection of saliva at each attempt to speak. He could neither sit, lie, nor stand; and, on the removal of his support, he would immediately fall backwards. The heart-sounds were weak; pulse regular and small, about 72. I at once ordered him a mixture containing eighty grains of chloral-hydrate, half a drachm of extractum opii liquidum, and camphor mixture to four ounces; a fourth part of the mixture to be taken every four hours until the spasms and pain were relieved. After the third dose was taken, he was much relieved and slept a short time. I then ordered him some powders containing calomel and

jalap; one to be taken every six hours until the bowels were freely acted upon. The back was occasionally rubbed with a liniment composed of turpentine and belladonna liniment. During the succeeding three or four days, he was frequently threatened with the spasmodic attacks; but, on taking a dose of the chloral mixture, he was immediately relieved.

When the spasms had entirely abated, hemiplegia of the left side and paralysis of the right side of the face set in. I then ordered him a mixture containing iodide of potassium with compound tincture of cinchona at a later stage; and occasionally at night, when there was much restlessness, a dose of the sedative mixture. His diet consisted of light farinaceous foods and beef-tea.

After a month's treatment, he became quite convalescent, and soon afterwards resumed his work, and continues to do so up to the present time, without the least sign of inconvenience or remains of the paralysis.

The history of the case, as far as I can gather, is as follows. About eight weeks previously to this attack, the man was employed in repairing a building, when the scaffolding gave way, causing him to fall several feet, when he seemed to have received a blow on the head, as he was picked up insensible. This condition passed off within a few minutes, so that he was able to resume his work without any inconvenience. From the time of the accident till within a few weeks of his illness, he occasionally complained of slight pain in the frontal and temporal regions of the right side of the head, with a certain amount of loss of hearing. A *thick purulent* discharge was then observed to be oozing from the right ear (but never any signs of hæmorrhage), with more pain, and at times very intense, which caused him to give up his work. He then applied to a medical man, who attended him until I was called to see him in his very grave condition. What the remote cause of the convulsions was, I think, is very doubtful. Could it be possible that a man receiving a fracture at the base of the skull, however slight or obscure, continued his work for six weeks with little or no inconvenience? or could it have been an ordinary case of localised inflammation terminating in suppuration? or had he been taking nux vomica or strychnia before I was called to see him?

#### THERAPEUTIC MEMORANDA.

##### PITYRIASIS VERSICOLOR TREATED BY MEANS OF GOA POWDER.

At a time when the action of Goa powder is so much under discussion, it may not, perhaps, be out of place to give my experience of its application in a disease for which I believe it has not been previously used. If I relate one "out of several cases", it will illustrate my point sufficiently. A gentleman applied to me for advice with his chest and abdomen covered with pityriasis versicolor, which had existed for several years, and was gradually creeping above his collar; I gave him the following prescription (which I find to be a very convenient form).—R. Goa powder gr. 30; acetic acid  $\pi$ 10; glycerine  $\tilde{3}$ j—and told him to apply it over the affected parts at bedtime for four nights. He saw me again in a fortnight, when the disease had entirely disappeared, and the only marks visible were some livid patches, due to the application, which were gradually disappearing. He then told me that the morning after the first use of the remedy, the parts anointed presented a very red appearance, as if a mustard poultice had been applied, but that the irritation did not increase much, although he persevered with the treatment for the time recommended.

I find the above formula a convenient and efficient application for ringworm, and hope soon to be able to give the history of some obstinate cases of pityriasis rubra which are now being treated by the same preparation.

A. W. MAYO ROBSON, M.R.C.S., L.R.C.P.,  
Demonstrator of Anatomy, Leeds School of Medicine.

##### CHRYSOPHANIC ACID.

I ORDERED chrysophanic acid ointment for an obstinate case of ringworm of the scalp, which extended behind the left ear. After a few applications, the skin of that side of the neck and ear became swollen and inflamed, of a dark or dirty red colour, its surface covered with minute vesicles. The skin around both eyes (about half an inch wide) was stained claret-colour; and conjunctivæ so intensely inflamed that the patient could not open her eyes for days. When the ointment was discontinued, the inflammation gradually subsided. I tried it also in another case of ringworm, when the skin around became much inflamed and of the same dark red colour.

THOMAS E. JONES, Llanrwst.



## REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN  
THE HOSPITALS AND ASYLUMS  
OF GREAT BRITAIN.

## HOSPITAL NOTES.

ST. BARTHOLOMEW'S HOSPITAL (DR. SOUTHEY).

**Intestinal Obstruction.**—A bricklayer, aged 29, had been healthy till his present illness, which commenced three weeks previously to admission with severe constipation and vomiting of food. He had taken several doses of castor-oil and drastic purgatives before coming to the hospital; the bowels were, however, very slightly moved thereby. A very small amount of feculent matter was passed, but much "blood and slime". The vomiting was attended by great abdominal pain, and became bilious, but unattended with feculent matter. He had been able to take but very little nourishment, was somewhat emaciated, and greatly prostrated. On admission, the abdomen was distended and painful; the central portion hard and prominent; the flanks hollow and tympanitic, indicating an empty condition of the colon and a loaded state of the small intestines, probably depending upon obstruction near the ileo-cæcal valve. The glands in the axillæ and groins were enlarged. There was some loss of flesh; and his general appearance suggested the presence of abdominal cancer as not improbable. Temperature 98.4 deg. There was no history of any likelihood of lead-poisoning. He was ordered a hot bath and subcutaneous injections of morphia. In a few hours, the vomiting ceased; he began to pass copious loose motions, and within two days was free of all pain and abdominal tenderness, and the tongue cleaned spontaneously. No purgative or other medicine was given.

Dr. Southey then narrated the case of a young woman who had been attacked three days before, on board-ship, with great abdominal pain, complete obstruction of the bowels, and vomiting becoming fecal. She had been treated by the ship's captain with ten grains of calomel and one scruple of jalap powder every two hours. This occurred during a menstrual period, and suggested possible obstruction from pelvic hæmatocele; examination, however, did not confirm this idea. She was evidently very ill. The rectum was emptied by enemata; no obstruction could be felt by the finger; the loins were hollow and resonant, and the hypogastrium hard, indicating an empty colon and loaded small intestines. The long tube was then passed, but was soon arrested by an obstruction (very probably the promontory of the sacrum); only a little fluid could be injected, and that caused great pain. It was proposed to the patient to administer chloroform before proceeding further, but she declined it. The question of abdominal section was proposed, but it was decided to try the following plan first. The patient was placed in the genu-pectoral position, the tube again inserted, and the anus held closely around it. A syphon bottle of soda-water was then connected with the tube, the bottle being placed in hot-water to increase the elasticity of the gas contained in it. On opening the valve of the bottle, and allowing the gas and water to ascend into the rectum, enormous abdominal distension and severe pain resulted. Two syphons of soda-water were thus used. The patient then felt "something give way or burst", and copious action of the bowels followed. Probably some band of adhesion gave way, or a twisted portion of intestine was unfolded. In two days, the patient was well enough to undertake a journey. No medicine was used, except subcutaneous injections of morphia. The plan was recommended two years ago in one of the French reviews, and it seemed preferable to the simple injection of fluid, the elastic gas forcing its way more easily than fluid would do.

**Rheumatic Fever.**—Dr. Southey frequently uses salicylic acid after the first week of the fever, giving ten-grain doses dissolved in liquor ammoniac acetatis every two hours to twelve doses, and then every four hours, or according to the symptomatic indications, but producing slight physiological effects, as noises in the head, etc. Dr. Southey is of opinion that this mode of treatment reduces the temperature, lessens arthritis, and renders the patient less sensitive to the pain; not, however, preventing endocarditis or other complications. In *pericarditis*, it was pointed out that an amount of effusion, not causing perceptible increase of præcordial dulness, may almost always be detected by an increase in the rapidity of respiration.

**Intracranial Syphilis.**—A man, aged 37, complained of severe and continuous pain in the head. He was in hospital last January with

weakness of the left arm, leg, and of the facial muscles, and paralysis of the external rectus of the right eye. Syphilis being suspected, iodide of potassium was given in large doses, with the result of apparent cure. He has returned with great weakness of both legs, so that "his body seems too heavy for him". In going up stairs, there is great difficulty, and he complains of pain in his legs. The tibiae are somewhat tender, and the muscles rather wasted. He also complains of constant pain in the left side of his head, worse at night or on any movement. The power of taste is lost (glosso-pharyngeal nerve), but the perception of bitters and acids is retained (gustatory). Pus is seen coming from above the palate, probably from the posterior portion of the nasal bones being diseased. His nights are restless, and digestion is indifferent. He was ordered fifteen grains of iodide of potassium three times a day, and two drachms of Carlsbad salt in hot water every morning.

OUT-PATIENT DEPARTMENT (DR. DUCKWORTH).

**Diabetes Insipidus.**—A healthy looking man, aged 53, complaining of thirst and debility, had been under treatment since February; he then weighed twelve stone twelve pounds, and was passing eight pints and a half of urine, of specific gravity 1008 (average). He had noticed loss of flesh for eighteen months, having lost two stone weight by Christmas last, at which time thirst became a prominent symptom. No determining cause was apparent; his previous health had been good. No lung-change was perceptible. He had not been able to discover any change in symptoms to be dependent on diet, but found that beer made him worse; he takes sherry and water. He has been continuously treated with extract of valerian only, in increasing doses of four, eight, twelve, and fifteen grains three times a day, and is now taking forty-five grains daily. At present, the amount of urine is five pints daily, of specific gravity 1012; no albumen, no sugar. He weighs thirteen stone, and is improved in his general health.

**Favus.**—This lad had been an in-patient for a year or more, and was shown to the Clinical Society two years ago (see James Bryan, *Transactions*). At that time, he had the disease in a characteristic form, with well developed "favus-cups", the marshy smell, etc. The case has improved, but has not been cured, though many plans of treatment have been carefully carried out with frequent epilation. He is a strumous lad, small for his age, with pale complexion, long eyelashes, large coarse teeth; arms, back, and chest hairy, a sign of degenerative type. Lately, the glands of the neck have enlarged, and signs of pulmonary phthisis have developed. The head is now very impetiginous; it was ordered to be kept clean with oily poultices and thorough washing. As to diet, milk, bacon, and fatty food are recommended, but, unfortunately, this is unpalatable to the boy. He was ordered cod-liver oil and tonic mixture.

**Double Facial Palsy.**—A man, aged 33, was completely deaf with both ears; no otorrhœa. There was double facial palsy, complete on the left side, less so on the right. There were no signs of syphilis, but there was necrosis of the lower jaw, resulting from an injury four years ago. The deafness and facial palsy came on last October. The case was transferred to the aural surgeon.

**Emphysema and Facial Palsy.**—A man, aged 50, presented the usual signs of emphysema and chronic bronchial catarrh. The condition of his face was remarked upon, the puffy cushiony state of his cheeks, with dilated venules and deeply marked labio-nasal furrows. There was slight facial palsy of the right side, not complained of by the patient, and not very apparent till he was made to grin and show his teeth, and then close his eyes; the thickened indurated condition of the face concealed the partial palsy. On inquiry, a scar was found behind the ear, where a tumour had been removed when he was ten years old; doubtless the facial nerve had been injured then.

**Variocities of the Face** were pointed out as being common in cabmen and others much exposed to the weather, also in those addicted to alcohol, or the subject of emphysema, or cirrhosis of liver or kidneys, and as especially worthy of note when occurring at an early age.

**Bronchiectasis and Fætid Bronchitis.**—A woman, aged 24, complained of dragging pain in the left side of the abdomen and some cough. It was noticed that the ungual phalanges were markedly bulbous; this suggested some chronic obstruction to the circulation within the thorax, such as fibroid changes in the lungs, emphysema, mixture of arterial and venous streams in the heart, etc. A similar condition of "bulbous nose" is not uncommonly seen in such cases. Nothing was found wrong in the abdomen, except a loaded colon; constipation is often of a week's continuance. The left side of the chest was found contracted, with signs of fibroid induration, contraction of the lung, and bronchiectasis. She had been ill for eighteen months with fætid bronchitis and slight hæmoptysis. Five years ago, she was laid up with acute chest trouble, and the patient has noticed her fingers



enlarging since then. Probably there is great thickening of the pleura, with adhesions, the lung being contracted. The heart is not displaced. She was ordered ten drachms of confection of senna in the morning; cod-liver oil, quinine mixture with ten minims of glycerine of carbolic acid, and to have the chest painted with iodine liniment.

*Bromine Ane* was produced in a girl, aged 18, by using half a drachm of bromide of ammonium twice a day to check her epileptic fits. The following lotion almost completely removed them during the continuance of the bromide mixture: R sulphuris precipit. ʒiij; spiritus camph. ʒi; aquæ calcis ad ʒiij. Fiat lotio.

*Insomnia*, depending upon excessive mental activity, as the worry of business or other anxiety, may generally be best treated by bromide of potassium, taken early in the evening, and followed by a light supper. This allows the full absorption of the drug before the hour of rest, and renders its action more certain. Dr. Duckworth has tried lupuline extensively, but has not found its action as a soporific satisfactory.

## GENERAL COUNCIL

OF

### MEDICAL EDUCATION AND REGISTRATION.

SESSION, 1877.

Thursday, May 10th, 1877.

DR. ACLAND, President, took the chair at 2 P.M.

*New Member of Council.*—The official notice of appointment of Sir James Paget as representative of the Royal College of Surgeons of England having been read, he was introduced and took his seat.

*President's Address.*—The PRESIDENT delivered an address, which was published at page 594 of last week's BRITISH MEDICAL JOURNAL. At its conclusion, it was moved by Dr. ANDREW WOOD, and carried by acclamation, "That the President's address be entered on the minutes".

*The Registrar.*—Dr. HUMPHRY read the following report.

"The Executive Committee report that, in pursuance of the resolution of the General Council, passed on June 1st, 1876, which 'delegated to the Executive Committee to elect, in October, a Registrar to the General Council' (p. 201), they issued advertisements as directed, and, after consideration of the applications received, elected Mr. W. J. C. Miller as Registrar."

Dr. AQUILLA SMITH moved, and Dr. STORRAR seconded:

"That the Report of the Executive Committee in reference to the election of Mr. Miller as Registrar be received and entered in the minutes."

Sir DOMINIC CORRIGAN moved as an amendment, to the effect that "the Council does not regard with unqualified approbation the proceeding of the Executive Committee in having selected for the appointment of Registrar to the General Medical Council, and to the Branch Council for England, a gentleman who is not a member of the medical profession, inasmuch as it is contrary to the spirit and intention of the Medical Act of 1858, and has not given satisfaction to members of this Council or to the profession generally". He said that, in proposing the amendment, he had no desire to treat the question as a personal one. But, in going beyond the circle of the profession, the Executive Committee had not acted in accordance with the spirit and intention of the Medical Act. The carrying out the Act was altogether entrusted to members of the profession. A suggestion was, indeed, once made that a non-professional man should be elected as President; but the proposal was never entertained by the Council. According to the letter of the Act, it was not necessary that the President of the Council should be a medical man; but in no case had any other been elected. Again, the Crown nominees had never been other than qualified practitioners, although the Medical Act did not state that they should be so. The Branch Councils also, recognising the spirit and intention of the Act, had never elected any other than medical men as local Registrars. It was said that Mr. Miller was elected because he was most accomplished for the office. But, would any member of the Executive Committee say that a competent man could not have been found among the 22,500 men on the *Medical Register*? If the Admiralty wanted a man to command a ship, would they select one who had seen a ship, or one whose chief recommendation was that he had discovered a planet? That Mr. Miller was an Editor of the *Educational Times* (as stated in the President's address) was, he thought, an objection. It was the function of a Registrar to record the proceedings of the Council, but not to influence them. In the University of Oxford, and in the King and

Queen's College of Physicians, the Registrar was elected from among those belonging to the bodies; and there was no complaint of want of men capable of discharging the duties. Besides, the payment of the Registrar was not provided by the public, but by the members of the profession. The Executive Committee should have ascertained the opinion of the profession before proceeding with the election.

The amendment was not seconded; and the motion was put to the vote and carried.

Sir DOMINIC CORRIGAN required the names and numbers of those who voted for and against the motion, and of those who declined to vote, to be taken down:—*Majority*, 20: Dr. Pitman, Sir James Paget, Mr. Bradford, Dr. Rolleston, Dr. Humphry, Dr. Storrar, Dr. Haldane, Dr. Andrew Wood, Dr. Fleming, Mr. Turner, Dr. Thomson, Dr. A. Smith, Mr. Macnamara, Dr. Leet, Dr. Apjohn, Dr. Quain, Sir W. Gull, Mr. Simon, Mr. Teale, Mr. Lister. *Minority*, 1: Sir Dominic Corrigan. *Declined to Vote*: The President, Dr. Pyle.

*Committees.*—It was moved by Dr. HUMPHRY, seconded by Sir W. GULL, and agreed to: "That a Business Committee be appointed, to consist of the following members: Dr. Andrew Wood, Chairman; Dr. A. Smith; Dr. Leet; Dr. Haldane; and Dr. Pyle."—It was moved by Dr. ANDREW WOOD, seconded by Mr. TURNER, and agreed to: "That a Finance Committee be appointed, to consist of the following members: Dr. Quain, Chairman; Dr. Pitman; Dr. A. Smith; Dr. Fleming; and Sir James Paget."

*Visitation of Examinations.*—Dr. HUMPHRY moved:

"That, having regard to the good spirit in which the Visitations of Examinations and the Reports of the Visitors have been generally received by the licensing bodies, and to the improvements which have been made in all, or nearly all, the examinations for admission to the *Register*, it is desirable not to enter now into a discussion on the Reports of the Committee on the Visitations of Examinations and the answers of the licensing bodies, but to send copies of the Report of 1876 to each of the licensing bodies for consideration."

He said that his object was not to avoid consideration of the Report or to interfere with the visitation of examinations, which had been one of the most effective works in which the Council had been engaged. It was because of the good which the visitations had done and might yet do, that he thought it would be advisable not to discuss the Reports at present. As a result of the visitations, improvements had been effected in almost every instance; not as a result of pressure exercised by the Council, but in consequence of the licensing bodies having considered the Reports and endeavoured to bring their regulations into conformity with the recommendations of the visitors. After some further remarks, he concluded by recommending that the Council should for the present session leave the improvement of the examinations to the licensing boards, and give its attention to the subject of medical education.

Mr. TEALE seconded the motion.

Mr. LISTER said that much good had been effected by the visitations of examinations. Much, however, still remained to be done.

Dr. ANDREW WOOD said that one of the greatest benefits of the Council had been the visitation of examinations; but there was danger of pushing too fast. More was likely to be done by moral influence than by attempting to goad the examining bodies. It would be premature to resume visitations for the present year. In Scotland, there had always been a tendency to improve the examinations. The suggestions of the visitors, though not always adopted, were always received courteously.

Dr. AQUILLA SMITH thought that the Executive Committee should be put in a position to resume the visitations.

Dr. HUMPHRY said that, while much of the object of the visitations had been accomplished, he had no doubt that the Council had still much good work to do in the same direction; and he trusted that the work would be continued.

The motion was carried.

*Preliminary and Professional Education and Examination.*—Dr. ANDREW WOOD moved, Mr. TURNER seconded, and it was agreed to:

"That the following Report of the Executive Committee, with the three documents specified therein, be received and entered on the minutes."

The Report of the Executive Committee was as follows.

"The Executive Committee, as was remitted to them by the Council, have obtained from the licensing bodies answers in regard to the results of professional examinations and the deficiencies in preliminary education, which they now submit to the Council. The Committee requested Dr. Humphry, who acted as Chairman of Committee on Results, to prepare a Report on these answers. This Report they have also now to submit for the consideration of the Council. In addition, Dr. Aquilla Smith has furnished the Committee with an analysis of the



annual returns of the final examinations furnished to the Council for a series of years, which they also submit to the Council.

"The Committee recommend that these documents should be entered in the minutes, and referred to the Committee on the recommendations of last year, which should, for that purpose, be reappointed, and requested to report to the Council with all convenient speed."

The first of the documents referred to was a series of answers from the medical licensing bodies to the following questions proposed to them in July 1876 by the Executive Committee.

"1. In what subject or subjects are the rejections most frequent, and to what circumstances are these proportionately frequent failures of candidates attributable?"

"2. Are the rejections chiefly in the written, the oral, the clinical, or the practical parts of the examinations?"

"3. Is it desirable that any alterations should be made in the subjects of the examinations, as to their number, range, division, or combination, or in the mode of conducting the examinations; and, if so, what should these alterations be?"

"4. In what respects is the education of the candidates found to be most defective? Do the defects show a want of proper preliminary education, or a want of proper professional education, or both?"

"5. Does it appear that insufficient time is allowed for the study of the subjects of the respective examinations?"

"6. Does it appear that, on the whole, the attainments, general and professional, with which candidates present themselves for examination, are now higher than they were ten or fifteen years ago?"

"7. Has your body any suggestions to offer for the improvement of the present system of professional education?"

On February 27th, 1877, a letter was also sent to the several medical licensing bodies to inquire whether they had any observations to communicate to the Medical Council in regard to the following resolution, which was passed on June 5th, 1876, and sent to each licensing body June 19th.

"The Council desire to direct the attention of licensing bodies to the important fact that, from some of the reports of visitations, it appears that many candidates still enter upon their professional studies who are very deficient in preliminary education."

Dr. Humphry's report was an analysis, accompanied with comments and suggestions, of the answers of the licensing bodies. Answers, containing much valuable information and suggestions, had been received from the Universities of Oxford, Cambridge, Edinburgh, Glasgow, and Aberdeen; the Colleges of Physicians of London, Edinburgh, and Ireland; the Colleges of Surgeons of England, Edinburgh, and Ireland; the Apothecaries' Society of London, and the Apothecaries' Hall of Ireland; also recommendations from a Conference of Representatives of the Colleges of Physicians and Surgeons of Edinburgh, and the Faculty of Physicians and Surgeons of Glasgow. The Faculty of Physicians and Surgeons of Glasgow "regretted that they had not before them sufficient data to form a reliable judgment in regard to many points raised in these queries"; and "the experience of the Faculty of the University" of St. Andrew's "was so very limited and exceptional that they did not deem it advisable to submit any opinion". The report concluded with the following recommendations.

"1. That it is desirable that the examinations in subjects of general education should be now left to the national educational bodies, and that it be delegated to the Executive Committee to communicate with the licensing bodies on this subject, and to report to the Council at its next meeting.

"2. That it be recommended to the various licensing bodies to instruct their examiners in professional subjects to report to them any cases of decided ignorance in general education displayed by the candidates, with the name of the board or boards before which the preliminary examinations have been passed; and that the licensing bodies be requested to transmit such reports to the Registrar of the General Medical Council.

"3. That a letter be addressed to each of the examining boards whose certificate is accepted as a test of preliminary education by this Council, directing attention to the complaints which have been made by several of the licensing bodies with regard to the insufficiency of the general education of many of the candidates presenting themselves for their examinations.

"4. That it be a recommendation to the licensing bodies that there be in future three professional examinations; the 'first' to be passed before the end of the first year of professional study; the 'second' to be passed before the end of the second year; and the 'third' to be passed after the completion of four years of professional study.

"5. That the first examination be in Physics and Chemistry, Elementary Human Anatomy, and Practical Pharmacy; that the second

examination be in Anatomy, Physiology, and Materia Medica; and that the third examination be in the other subjects of medical study.

"6. That a Committee be appointed to consider the subjects of the professional examinations to be required, and the limitation of the range of the subjects by schedule; to draw up such schedules in the instances in which it may seem appropriate; and to make, with reference to the subjects of the examinations, such suggestions as may appear desirable.

"7. That a visitation of the several medical schools, the certificates from which are received by any of the licensing bodies, be made during the ensuing year; and that the reports of such visitations be laid before the General Medical Council at its meeting next summer.

"8. That two members of the Council be appointed visitors of the medical schools, and that their payment be the same as in the case of visitors of examinations.

"9. That the appointment of the visitors and the arrangements for the visitations be left to the Executive Committee.

"10. That certificates of study, attendance at lectures, and hospital practice be accompanied by evidence of attendance at examinations from time to time in the several subjects.

"11. That every candidate for the final professional examination be required to give evidence that he has had practical experience in charge of patients during six months, in hospital or elsewhere, under the supervision of a competent medical practitioner."

The next document was an analysis by Dr. Aquilla Smith of the annual returns of final examinations for fifteen years. It consisted principally of a series of tables, compiled with much care from the returns furnished to the Council.

Dr. ANDREW WOOD moved, and Dr. AQUILLA SMITH seconded:

"That the documents referred to in the preceding Report of the Executive Committee be referred to the Committee of Recommendations of last year, which should for that purpose be reappointed, and requested to report to the Council with all convenient speed."

Mr. TURNER moved as an amendment, and Mr. MACNAMARA seconded:

"That the Council discuss on Saturday, May 12th, as the first business of the day, Dr. Humphry's Report to the Executive Committee, together with the accompanying documents."

The amendment was carried; and, having been put as a substantive motion, was agreed to.

*Foreign, Colonial, and Indian Degrees.*—The PRESIDENT stated that communications had been received on the subject of Foreign, Colonial, and Indian Degrees.

It was moved by Mr. SIMON, seconded by Dr. HUMPHRY, and agreed to:

"That a Committee be appointed with reference to amendments (if any) which may have to be recommended in the Medical Acts, and that the communications received with reference to Foreign, Colonial, and Indian Degrees be referred to this Committee for consideration. The Committee to consist of the following members: Mr. Simon, Chairman; Sir W. Gull; Dr. Pitman; Mr. Turner; Dr. A. Thomson; Dr. A. Smith; Dr. Apjohn; and Dr. Storrar."

*Mr. Russell Gurney's Act.*—It was moved by Mr. SIMON, seconded by Dr. STORRAR, and agreed to:

"That it be an instruction to the Medical Acts' Committee, to consider the provisions of Mr. Russell Gurney's Act, as compared with the recommendations made by the Council at its last session, with regard to the Bill which was then before Parliament, and to report to the Council on the legal bearing of the provisions as they stand."

*Penalties.*—Dr. PITMAN moved, Dr. PAGE seconded, and it was agreed:

"That the question as to the recovery of penalties under Clause 42 of the Medical Act be referred to the Medical Acts' Committee."

*Results of Professional Examinations.*—It was moved by Dr. ANDREW WOOD, seconded by Dr. HUMPHRY, and agreed to:

"That the table of results of professional examinations for degrees, diplomas, and licences, granted in 1876 by the bodies in Schedule [A] of the Medical Act, be received and entered in the programme of business."

The following is a summary of the table [I=First Examination; II=Final Examination; P=passed; R=rejected].

*Royal College of Physicians of London.*—Licence: I, R 8, P 15; II, R 16, P 90. Membership: I, R 3, P 25.

*Royal College of Surgeons of England.*—Membership: I, R 224, P 469; II, R 138, P 408. Fellowship: I, R 42, P 38; II, R 17, P 27.

*Society of Apothecaries of London.*—I, P 9; II, R 68, P 191; II, R 31, P 253.

*University of Oxford.*—M.B. I, R 2, P 7; M.D. (Essay) P 1.

*University of Cambridge.*—M.B.: Three First Examinations, R 13,



P. 36; Second Examination, R 9, P 14; Third Examination,\* R 6, P 16. M.D.: P 7. M.C.: P. 1.

*University of Durham.*—M.D. (Essay): P 1.

*University of London.*—M.B.: Preliminary Scientific, R 81, P 97; 1st M.B., R 25,† P 51;‡ 2nd M.B., R 11, P 23. M.D.: R 6, P 11. B.S.: R. 2, P. 7. M.S.: P 1.

*Royal College of Physicians of Edinburgh.*—Licence: I, R 3, P 10; II, R 66, P 114.

*Royal College of Surgeons of Edinburgh.*—Licence: I, R 7, P 16; II, R 7, P 47.

*Faculty of Physicians and Surgeons, Glasgow.*—Licence: I, R 37, P 30; II, R 20, P 41.

*Royal Colleges of Physicians and of Surgeons of Edinburgh.*—Licence in Medicine and Surgery: I, R 38, P 78; II, R 53, P 85.

*Royal College of Physicians of Edinburgh, and Faculty of Physicians and Surgeons of Glasgow.*—Licence in Medicine and Surgery: I, R 2, P 4; II, R 13, P 22.

*University of Edinburgh.*—M.B., M.B. and M.C. (Three Examinations): I, R 87, P 149; II, R 55, P 103; III, R 10, P 88. M.D. (Thesis): R 4, P 19.

*University of Aberdeen.*—M.D. (By promotion): P 20. M.B. and M.C. (Three Examinations): I, R 30, P 71; II, R 24, P 64; III, R 10, P 65.‡

*University of Glasgow.*—M.B. and M.C. (Three Examinations): I, R 46, P 72; II, R 35, P 50; III, R 11, P 57.‡§. M.D.: I, P 2; II, R 2, P 3.‡\* M.D. (Thesis): R 3, P 22.

*University of St Andrew's.*—M.B.: P 1. M.D.: R 2, P 10. M.C.: P 1.

*King and Queen's College of Physicians in Ireland.*—Licence in Medicine: I, R 3, P 2; II, R 22, P 108. Licence in Midwifery: R 3, P 99.

*Royal College of Surgeons in Ireland.*—Licence (Three Examinations): I, R 71, P 95; II, R 25, P 97; III, R 12, P 97. Licence in Midwifery: R 1, P 20. Fellowship (Three Examinations): I, P 12; II, P 12; III, R 1, P 12.

*Apothecaries' Hall, Dublin.*—I, R 11, P 22; II, R 7, P 22.

*University of Dublin.*—M.B.: II, P 49. M.C.: II, P 21. At the Half M.B. Examination, the following were the results as regarded the several subjects: Anatomy (Descriptive), R 10, P 31; Chemistry, R 11, P 54; Botany, R 11, P 45; Materia Medica, R 11, P 37; Physics, R 10, P 32.

*Queen's University in Ireland.*—M.D. (Three Examinations): I, R 74, P 112; II, R 50, P 65; III, R 33, P 53. M.C.: R 29, P 47.††

*Additional Qualifications.*—Dr. A. SMITH moved, and Mr. MACNAMARA seconded:

"That the following addition be made to Chap. XIII, Section 7, of the standing orders—"In all cases in which additional qualifications are to be registered, they must be entered in the *Local Register* in which the practitioner was first registered."

The motion was negatived.

*The Standing Orders.*—Dr. HUMPHRY moved, Dr. STORRAR seconded, and it was agreed to:

"That the following report of the Executive Committee on the standing orders be adopted, and the sanction of the Council thereby given to the revised edition of the standing orders.

"The Registrar having called the attention of the Committee to some discrepancies, repetitions, and errors of arrangement in the standing orders, the Executive Committee have deemed it their duty to prepare a revised edition of the standing orders, which they now submit to the Council, and in which they have to state that no material alterations have been made."

\* Third is not, strictly speaking the final examination, because every candidate has, subsequently to the third examination, to write a thesis and keep an "Act", in which he is subjected to more or less of oral examination.

† Of these, four were among the candidates who proposed to go through the examination with the exclusion of physiology, and three were among those who, having previously passed the examination with the exclusion of physiology, presented themselves to be examined in physiology only.

‡ Of these, seven availed themselves of the option of reserving their examination in physiology for a future year, and seven who had previously exercised the same option passed in physiology only.

§ Of these, one took M.D., seventy-eight took M.B. and C.M., six M.B. alone, and three did not graduate.

¶ There were twenty-three candidates for the degree of M.D. Of these, nineteen passed and four were remitted in consequence of their theses not having been considered of sufficient merit.

§ Of these, sixty-one took M.B. and C.M., one M.B. alone, two took M.D. and C.M., and one did not graduate. One other (now of age) took M.B. and C.M.

§§ Of these, forty-nine took M.B. and C.M., eight M.B. alone.

¶¶ Of these, one took M.D. and C.M., two M.D. alone.

†† One of these Masters in Surgery passed the examination in October 1876, but as he was not present at the public meeting in October, the degree was not conferred until January 1877.

Friday, May 11th.

Dr. ACLAND, President, took the Chair at 2 P.M.

*Index to the Minutes.*—The PRESIDENT stated, in answer to a question by Mr. Turner, that the general index to the first ten volumes of the minutes was complete and in type, but awaiting final correction, and would, before long, be ready to be placed in the hands of the Council.

*Registration of Honorary Degrees.*—The following communications were read. 1. Communication from the Queen's University in Ireland with respect to the non-registration of honorary degrees in medicine granted by the Queen's University. 2. Application of date May 2nd, 1877, from Richard Eustace, Esq., Honorary Doctor of Medicine of the Queen's University in Ireland, that his honorary degree may be registered as an additional qualification. 3. Counsel's opinion thereupon given to the Registrar of the English Branch Council. 4. Joint request, from Dr. Acland and Dr. G. E. Paget, that the title of M.D. of the University of Dublin be removed from their names in the *Register* on the first convenient occasion, pending the decision by the General Council of the question as to the legality and expediency of registering such additional titles.

Dr. THOMSON moved, Dr. STORRAR seconded, and it was agreed:

"That Mr. Ouvre be requested at once to state his views on the subject that is before the Council."

Mr. OUVRE began by remarking that there was no imputation on Dr. Eustace, who was a gentleman of high acquirements and deserving of honour; but it was necessary to decide whether the honorary degree conferred on him could be registered. It had been stated that there was no power in the Medical Act to exclude honorary degrees from registration; but, on the other hand, there was no power to include them. Again, with reference to the section of the Act providing for the registration of higher degrees, there could not be a higher degree unless there had been a lower one.

Sir WILLIAM GULL moved, and Dr. ROLLESTON seconded:

"That the documents relating to the registration of the honorary degree of M.D. of the Queen's University in Ireland, conferred on Richard Eustace, Esq., having been read, and the advice of the Solicitor of the Council having been heard, it is the opinion of the Council that the degree in question cannot be registered."

Sir DOMINIC CORRIGAN objected to the course of the proceedings. The Council should have taken the opinion of the law officers of the Crown in England. Notwithstanding what had been said, there was an imputation on Dr. Eustace. If he left the Navy, he could not hold an office requiring a medical qualification. To say that the degree in question could not be registered, would be to place the advice of the Solicitor of the Council above that of the law officers of the Crown in Ireland. As regarded the possession of medical knowledge by Dr. Eustace, could there be any better proof than the award to him by the Director-General of the Medical Department of the Navy and the Presidents of the Royal Colleges of Physicians and Surgeons in London of the Blane Medal, for superior medical and surgical knowledge? He had also been sent home in charge of sick and wounded after the Crimean war; and had received the thanks of the Director-General. The disgrace of refusing the registration of Dr. Eustace's honorary degree would attach not to him but to the Council. In 1869, the Council had registered the licences of the College of Physicians of Edinburgh, though conferred without examination. The honorary degrees conferred on himself, Dr. Smith, Mr. Macnamara, and other members of Council, had been registered, and why was that of Dr. Eustace refused? It was because the truth had been told, the grounds on which the degree was given having been stated.

Mr. TURNER proposed as an amendment:

"That the Solicitor be requested to obtain the opinion of the law officers of the Crown of England as to the power of the Council to register honorary degrees."

He thought the subject scarcely ripe for discussion at the present meeting. Honorary degrees had been registered unchallenged; but in the present case the degree was distinctly stated to have been conferred *honoris causa*. In the case of the late Mr. Syme, his honorary degree of M.D. from the University of Dublin had been registered, although he had previously no medical title.

Dr. QUAIN seconded the amendment. It was of great importance to get an authoritative opinion.

Mr. MACNAMARA would prefer to meet the original motion with a direct negative. If the opinion of the law officers in England was against that of the law officers in Ireland, who was to decide? Legal opinions were of very little value in settling disputed questions. There was very little chance of a reckless giving of honorary degrees, as they were bestowed *honoris causa*, without fee. It was a serious imputation



against Dr. Eustace to say that the degree was conferred on him without evidence that he was qualified. The Medical Act contemplated the registration of honorary degrees; for, while in Sections xv and xx qualifications alone were referred to, in Section xxx power was given to register "higher degrees" or additional qualifications. He held that the Council was bound to register the honorary degree.

Dr. ROLLESTON thought that the case admitted of no doubt whatever.

After some observations from Mr. Lister, Dr. Humphry, Dr. Andrew Wood, Dr. A. Smith, Mr. Macnamara, and Dr. Haldane, the amendment was carried; and was also agreed to as a substantive motion.

On the proposal of Dr. ALLEN THOMSON, seconded by Mr. LISTER, it was resolved:

"That the consideration of the request from Dr. ACLAND and Dr. PAGET—that the title of M.D. of the University of Dublin be removed from their names in the *Register* on the first convenient occasion, pending the decision by the General Council of the question as to the legality and expediency of registering such additional titles—be deferred till after the opinion of counsel on this subject shall have been received."

Mr. MACNAMARA moved, and Sir DOMINIC CORRIGAN seconded:

"That the cases and opinions concerning the honorary degree conferred by the Queen's University in Ireland be entered in the minutes."

The motion was negatived; five members voting for it.

*Removal of a Name from the Register.*—The name of George Stratton Symmons was ordered to be removed from the *Register*, he having been convicted of an attempt to commit sodomy, and sentenced to two years' imprisonment and hard labour.

*Returns from the Army Medical Department.*—The returns sent by the Director-General of the Army Medical Department of degrees, diplomas, and licences of the candidates for commissions in the Medical Department of Her Majesty's Army, who presented themselves for examination on September 14th, 1876, and on February 12th, 1877, were submitted, and ordered to be inserted in the programme of business.

The following are summaries of the returns. September 14th, 1876. Total number of candidates, 41; Found physically unfit, 5; Disqualified (not having attended the whole of the examination), 1; Failed to appear at the examination, 1; Unsuccessful, 1; Successful, 33.—February 12th, 1877. Total number of candidates, 25; Found physically unfit, 1; Failed to appear at the examination, 1; Unsuccessful, 6; Successful, 17.

Saturday, May 12th.

Dr. ACLAND, President, took the Chair at 1 P.M.

*Preliminary and Professional Education and Examination.*—Dr. HUMPHRY said that the Council has sent certain questions to the licensing bodies with the view of obtaining opinions on professional education. The result had been very satisfactory. Nearly all the bodies had given a large amount of valuable information; and the report which had been presented to the Council did not fully show the labour undertaken by them. He could speak from personal knowledge of two—the Royal College of Surgeons of England and the University of Cambridge. Letters had been sent to the several bodies by the President, thanking them for their willing co-operation, which the Council had no right to demand of them. The report which he presented was a *résumé* of the views of the bodies, along with an expression of opinions as a basis of discussion. It would, he thought, be better to discuss the matter in Council than to refer it to a Committee. He proposed

"That the Council now resolve itself into a Committee of the whole Council, for the purpose of discussing Dr. Humphry's report to the Executive Committee on the answers from the licensing bodies."

Mr. MACNAMARA seconded the motion.

Mr. TURNER proposed as an amendment:

"That as Recommendations 1, 4, 5, 6, 10 in Dr. Humphry's report to the Executive Committee refer to subjects on which Recommendations have been made by the Committee on Recommendations, their consideration be deferred until the report of that Committee comes before the Council."

If the recommendations to which he referred were discussed now, the Council would have to travel over the same ground twice.

Dr. ANDREW WOOD seconded the amendment. Dr. Humphry's proposals would be better considered in connection with the report of the Committee on Recommendations.

After some remarks by Dr. Rolleston, Mr. Teale, Dr. A. Smith, Dr. A. Thomson, and Dr. Humphry, the amendment was put to the vote and lost. The original motion was carried; and the Council thereon resolved itself into Committee.

Dr. HUMPHRY moved:

"That it is desirable that the examination in general education be left, so far as it can be, to the examining boards of the national educational and examining bodies recognised by the Medical Council, and that it be delegated to the Executive Committee to communicate with the licensing bodies for the purpose of carrying out this object."

It had already been repeatedly decided that the preliminary examinations in general education should ultimately be left to the national educational bodies. One great object of the Council was to improve the general education of members of the medical profession. At first it was not practicable to carry out the proposal, as the opportunities for examination were deficient; and, therefore, the medical licensing bodies had established examinations in general education. It had always been felt that the licensing bodies were going a little out of their way in doing this. Thanks, however, were due to the Apothecaries' Society and other bodies for instituting the examinations. But the examinations now held by the Universities covered the whole ground required, and were open to all at a very moderate charge.

Mr. TEALE seconded the motion.

Sir D. CORRIGAN asked what was the meaning of "National Educational and Examining Bodies". Did the term include the school-boards in England? It had been lately stated in Parliament that the terms on which the B.A. degree was granted at Oxford were disgraceful.

Mr. SIMON suggested the insertion of the word "Universities".

Mr. TURNER thought that this discussion would have been avoided if his amendment on the previous resolution had been adopted, as the Council could then have decided what bodies should be accepted.

Dr. A. SMITH thought that the Council was not in a position to discuss the question.

Dr. ANDREW WOOD said that the question was, whether the time had arrived for taking the control of the general education of the medical student from the licensing bodies and handing it over to the Universities. It had been said that the medical corporations had gone out of their way to institute the examinations in general education. But the licensing bodies in Scotland, the Apothecaries' Society in London, and other bodies, had instituted the examinations long before they were thought of by the Scottish Universities. When the College of Surgeons of Edinburgh proposed to hold the examinations before the commencement of professional study, there was a great outcry, and the regulation was at first made permissive. Provision was made on the first occasion for examining 20 or 30; but no fewer than 120 names of candidates were sent in. The time for making a change had not yet arrived for Scotland. The examination in general education held by the Conjoint Board of the Colleges of Physicians and Surgeons in Edinburgh was a very fair test of knowledge—higher, indeed, than in some of the Universities. There was no urgent reason for taking a revolutionary and decided step. It might be quite desirable to diminish the number of examinations recognised; but it would be a great hardship and wrong to exclude a large number of the colonial examinations. Applications for recognition of examinations in general education were considered by the Executive Committee, who always took care to satisfy themselves of the character of the examinations.

Mr. MACNAMARA said that a good general education was the basis of all medical education. The preliminary examination of the Royal College of Surgeons of Ireland was in advance of many others, and was conducted by a board of gentlemen who had obtained academical distinction. The Medical Council had acted somewhat as a drag on preliminary education by recognising examinations of the character of which they were ignorant. The preliminary examination of the University of Dublin was not regarded by the University itself as a sufficient test of general education. The Council should proceed in a cautious manner. He thought that it was wasting time by putting forth recommendations which it had no power to enforce.

Dr. QUAIN moved as an amendment:

"That it is desirable that the examination in general education be left to the Universities and such other bodies engaged in general education and examination as may from time to time be approved by this Council; and that it be delegated to the Executive Committee to communicate with the licensing bodies for the purpose of carrying out this object."

Mr. SIMON seconded the amendment.

Mr. BRADFORD opposed the proposal to remove the general examinations from the licensing bodies.

Dr. QUAIN believed that it was the general wish of the Council that the preliminary examination should be left to the general teaching and examining bodies; and the College of Physicians of London had acted on this principle seven years ago. The object of the amendment was to better define the bodies to which the conduct of the examinations should be left.



Dr. ROLLESTON said that the object of preliminary examinations was to testify the fact of sufficient education to the general public. The question seemed to be, whether a man had the education of a gentleman. Billroth had spoken highly of the continental *Gymnasias*, through which all must pass, no matter for what profession they were intended. In reference to Sir D. Corrigan's remark as to the University of Oxford, he said that more candidates were plucked at the class-examinations than at any other University.

After remarks from Dr. Apjohn, Mr. Turner, Sir D. Corrigan, Dr. Allen Thomson, and other members,

Dr. HUMPHRY replied. He said the amendment was precisely in accordance with the original resolution, the only change being to give greater definition to the words. There was nothing in either to prevent the recognition of the preliminary examinations of the licensing bodies; the only object was to ask them whether they were willing to forego the examinations. If they declined, the Council would have no power in the matter. The Council had no power to enforce its regulations. Much of the good it had done was to be attributed to its moral rather than to its coercive influence; and he believed that it had been more successful in this way than it would otherwise have been.

The amendment was put to the vote and carried.

Dr. ANDREW WOOD required that the names and numbers of those who voted for and against the motion, and of those who did not vote, be taken down.—*Majority*, 11: Dr. Pitman, Sir James Paget, Dr. Rolleston, Dr. Humphry, Dr. Storrar, Dr. Leet, Dr. Apjohn, Dr. Quain, Sir William Gull, Mr. Simon, Mr. Teale. *Minority*, 9: Mr. Bradford, Dr. Haldane, Dr. Andrew Wood, Dr. Fleming, Mr. Turner, Dr. Thomson, Dr. A. Smith, Mr. Macnamara, Sir D. Corrigan. *Did not vote*: the President and Mr. Lister. *Absent*: Dr. Pyle.

The amendment was then put as a substantive motion.

Dr. ALLEN THOMSON proposed as an amendment, and Dr. HALDANE seconded:

"That it is desirable that the examinations in general education be eventually left entirely to the examining boards of the national bodies engaged in general education and examination recognised by the Medical Council; and that the Executive Committee be empowered to communicate with the various licensing bodies as to the manner in which this may be carried out."

After some remarks from Dr. A. Wood, Dr. Storrar, Mr. Turner, and Dr. Thomson, the amendment was negatived.

On the motion of Mr. MACNAMARA, the further consideration of Dr. Humphry's Report was adjourned till Monday. The Council then resumed and adjourned.

Monday, May 14<sup>th</sup>.

Dr. ACLAND, President, took the Chair at 2 P.M.

*Preliminary and Professional Education and Examination.*—On the motion of Dr. ANDREW WOOD, seconded by Sir JAMES PAGET, the Council resolved itself into a Committee of the whole Council, for the further consideration of Dr. Humphry's report, and resumed the debate on the following motion:

"That it is desirable that the examination in general education be left to the Universities, and such other bodies engaged in general education and examination as may from time to time be approved by this Council, and that it be delegated to the Executive Committee to communicate with the licensing bodies for the purpose of carrying out this object."

Mr. MACNAMARA said that it had been repeatedly remarked that each minute of the sitting of the Council cost ten shillings. But there was no object in accumulating funds. The Council had about £30,000 invested; and the whole would be well spent in securing a satisfactory solution of the question of education. He could not agree with the motion. No restriction should be placed on the examining bodies except that of efficiency. He had been repeatedly applied to in Dublin to find persons competent to act as *locum tenens*, and he met with great difficulty in doing this. He believed that, from the increased severity of the examinations and other causes, the day would come when the supply of practitioners would not be equal to the demand. The preliminary examinations of the College of Surgeons in Ireland had been conducted in a manner which must be satisfactory to the Council, and under no circumstances short of legal enactment would the College give up the right of holding these examinations. Some of the preliminary examinations recognised by the Council did not fulfil the requirements of the Irish College of Surgeons. He moved as an amendment:

"That it be remitted to the Executive Committee to revise the present list of examining bodies whose examinations fulfil the conditions of the Medical Council as regards preliminary education, and to report

thereon at the next meeting, mentioning at the same time the steps they have taken in each instance to ascertain the efficiency of the examinations conducted by the said bodies."

The amendment was not seconded.

Sir DOMINIC CORRIGAN suggested the substitution at the end of the motion of the words "on the subject" instead of "for the purpose of carrying out this object"; and moved as an amendment:

"That it is desirable that the examination in general education be left to the Universities, and such other bodies engaged in general education and examination as may from time to time be approved by this Council, and that it be delegated to the Executive Committee to communicate with the licensing bodies on the subject."

The amendment was seconded by Dr. ANDREW WOOD, and carried. It was then put as a substantive motion.

Dr. STORRAR moved as an amendment:

"That it is desirable that the examination in general education be left to the Arts Faculties of the Universities, and such other bodies engaged in general education and examination as may from time to time be approved by this Council, and that it be delegated to the Executive Committee to communicate with the licensing bodies on the subject."

It had been stated that the preliminary examination of medical students in the University of Edinburgh was under the direction of the Faculty of Medicine. It was objectionable that the medical students should have a special examination coined for them.

Mr. TURNER said that all the examinations in the University of Edinburgh were regulated by the orders of the Scottish University Commissioners. It was not to be supposed that examinations were coined for a special purpose.

Mr. LISTER said that, in the University of London, there was a matriculation examination which all candidates were required to pass before graduating in any faculty. In Edinburgh there was nothing of the kind, and therefore it was necessary to institute an examination for the medical students. The question to be decided was, whether it was a sufficient examination for those about to enter the medical profession.

Dr. ROLLESTON said that the object of the preliminary examination was to give to the public evidence of general education.

Dr. ALLEN THOMSON said there was nothing to call for the insertion of the words proposed by Dr. Storrar ("Arts Faculties").

Dr. HALDANE was glad to hear that the preliminary examinations in the Scottish Universities were in the hands of the professors of the Faculty of Arts.

Sir WILLIAM GULL spoke of the necessity for the intellectual training of those intending to enter on the study of medicine.

Dr. ANDREW WOOD said that the Council had determined the subject of preliminary examination, and he believed that it required as much as could be expected. Candidates were rejected in large numbers, and many more again presented themselves. Since the institution of the preliminary examinations, the condition of the profession, in Scotland at least, had been greatly improved. In proportion to the amount of preliminary education would be the amount of professional competency. In Scotland, the system of secondary education had been, he believed, bound by the Education Act; and the Council should not exert too much pressure until an opportunity had been given of procuring secondary education.

Dr. STORRAR said that, in consequence of the changes made in Scotland, the more opulent persons sent their sons to the English schools. But those of less ample means, from whom the medical profession was in great measure recruited, were unable to do this. A stringent resolution on the part of the Council would act in Scotland as a stimulus to education. There was in that country a great amount of public spirit in favour of education, as well as much wealth; and he had no doubt that, if it were declared necessary, not only stone and lime could be found, but men to scatter education throughout Scotland. He thought that the general education of medical men should not differ from that of the members of other professions.

Dr. HUMPHRY could not understand what an University was apart from its medical faculty, which was an integral part of it. Every faculty in an University should have due influence. It was not wise for the Council to place restrictions of the kind proposed on the Universities.

Dr. A. SMITH said that it had been shown that candidates at the professional examinations displayed ignorance on subjects of general education which ought to have been detected at the preliminary examination. The Council should settle what ought to be the standard of preliminary education for the profession.

The amendment was put to the vote and lost, three voting for it.

The motion proposed by Sir D. Corrigan was carried.

Dr. HUMPHRY moved:

"That it be recommended to the various licensing bodies to instruct



their examiners in professional subjects to report to them any cases in which decided ignorance in general education has been displayed by the candidates, with the name of the board or boards before which the preliminary examinations have been passed; and that the licensing bodies be requested to transmit such reports to the Registrar of the General Medical Council."

The resolution was brought before the Council a year ago by Dr. Haldane, and was then agreed to in a modified form. A reference to the returns from the licensing bodies would show that there were great deficiencies in the preliminary examinations.

Dr. HALDANE seconded the motion. There were many rejections at the preliminary examinations, and no doubt many incompetent men were prevented from entering the profession. But there were apparently bodies in which the preliminary examination did not come up to the proper standard. At the professional examinations, candidates were met with who could not spell, and whose grammatical knowledge was very defective. It had been objected that the professional examiners had nothing to do with general education; but he thought they ought to take notice of defective knowledge of English and Latin shown at the professional examinations, and report to the Council.

After some remarks from Sir W. Gull, Mr. Simon, Dr. Smith, Mr. Lister, Mr. Macnamara, Dr. Storrar, and Dr. Wood, the motion was agreed to.

Dr. HUMPHRY moved, Dr. ANDREW WOOD seconded, and it was agreed:

"That a letter be addressed to each of the examining boards whose certificate is accepted as a test of preliminary education by this Council, directing attention to the complaints which have been made by several of the licensing bodies with regard to the insufficiency of the general education of many of the candidates presenting themselves for their examinations."

Dr. HUMPHRY moved:

"That it be a recommendation to the licensing bodies that there be in future three professional examinations; the 'first' to be passed before the commencement of the second year of professional study; the 'second' before the commencement of the third year; and the 'third' after the completion of the fourth year of professional study."

He said that the object of the proposal was not to increase the number of subjects of examination or the amount of examination; but to give an improved direction to medical study and insure a better employment of the earlier period. Examinations were not only tests of information, but also means of directing study. A great point would be gained by securing a better employment of time in the first year, which was often wasted. Another object was that the student, having obtained the fundamental knowledge, might be enabled to pass on with greater advantage to other subjects. Another was, that there should not be an accumulation of subjects at the end of the term of study. The student should not be allowed to count his second year of study until he had shown a knowledge of the first year's subjects. He believed that the plan which he proposed would reduce the number of rejections. There would be no increase of expense, as there would be no increase in the number of subjects of examination.

Mr. TEALE seconded the motion. The adoption of the proposal would meet an evil which had occurred to him. At present, second year's students did the work of the third year; and this interfered with the arrangements of medical schools. It would be an advantage that one period of study should not overlap another.

Mr. TURNER asked for information as to what was recognised as the commencement of professional study. He thought it would have been better first to determine what the subjects of study should be.

Dr. ALLEN THOMSON agreed with the observations of Dr. Humphry. The statement, however, as to the tendency to waste the first year did not agree with his experience. There was a relatively great amount of work done in the first year, probably in consequence of the interesting nature of the subjects then taught. In the second year, students were liable to fall into the study of practical subjects before they had mastered the elementary ones. The University of Glasgow had gone further in making a change than was proposed by Dr. Humphry. He was strongly of opinion that four years of professional study were not sufficient; but it was difficult to decide how to obtain more time.

Dr. ANDREW WOOD agreed that students should be induced to carry on their studies from the commencement. But he was not sure that the Council ought to lay down a definite scheme. There was no means of carrying out the intention of Council that four years should be actually passed in professional study. He would suggest that a student should not be registered until he had given evidence of having entered on a course of professional study.

Dr. HUMPHRY would not allow a student to count the second year's study until he had shown a knowledge of the first year's subjects. He

had been struck with the value of the plan of three examinations followed by the Universities of Glasgow and Aberdeen.

Mr. LISTER said, with reference to the necessity of the student passing his first examination before entering on the study of the second year's subjects, that great hardship might be inflicted with regard to elementary anatomy, in which a student might be deficient at the end of the first year, though he might become a good anatomist before the end of the second. Examinations were liable to hamper education instead of helping it. He would ask whether the conduct of the examinations could not be better arranged. Sir Robert Christison had suggested that students should be allowed to present themselves for examination in the subjects in which they felt themselves prepared. If a student had a good knowledge of chemistry, why should he be sent back because he did not know elementary anatomy? He agreed that it would be advantageous to have an examination at the end of the first year, if it were understood to be permissive. He thought that it would be well to make a distinction between the preliminary and more practical subjects, and that no student should be admitted to examination in the latter until two years after passing in elementary subjects.

Mr. SIMON approved of the general intention of Dr. Humphry's proposal. It would be a great reform in medical education to secure that the curriculum of study should be divided into two parts, of which the latter part should not be recognised until the first had been disposed of. He approved of examinations at the end of the first year; and would not allow students to enter on the study of the characteristic subjects of the second year before passing an examination in the elementary subjects of the first year. He hoped that the Council would be able to act up to Dr. Humphry's proposal without introducing too much detail into the regulations.

Dr. ROLLESTON suggested that students should be allowed to undergo an examination in elementary subjects at an early period; so that time might be allowed for clinical work. On the other hand, the time employed in studying practical subjects should not be allowed to count until the first year's examination had been passed.

Dr. HUMPHRY said that he proposed first to take the opinion of the Council on the first part of the motion.

Dr. STORRAR expressed his objection to over-regulation.

Mr. MACNAMARA said that the Royal College of Surgeons of Ireland had four years ago instituted three professional examinations, nearly on the same plan as that proposed by Dr. Humphry.

Dr. A. SMITH said that the Council had no power to enforce its recommendations. The King and Queen's College of Physicians in Ireland could not divide its examinations, as almost all the candidates who came before it possessed other qualifications.

The motion was then carried as follows:

"That it be a recommendation to the licensing bodies that there be in future three professional examinations."

Dr. HUMPHRY moved, and Mr. TEALE seconded:

"That the 'first' examination be passed before the commencement of the second year of professional study; the 'second' before the commencement of the third year; and the 'third' after the completion of the fourth year of professional study."

Dr. ROLLESTON moved as an amendment, and Sir WILLIAM GULL seconded:

"That these examinations be passed in a certain order, approved by the Council, a student being allowed to present himself for either of the two later examinations on a certificate of having passed the preceding examination or examinations."

The consideration of this amendment was deferred; and the Council resumed.

*Member of Council.*—An official notice from the Privy Council, of the reappointment of Sir William W. Gull, Bart., as a member of the General Medical Council for five years from June 29th, 1876, was read.

*Tuesday, May 15th.*

Dr. ACLAND, President, took the chair at 2 P.M.

*Questions to the President.*—Mr. TEALE asked the President the following question:

"Whether, as the recess of Parliament begins on Friday, and, as it is of great consequence that the opinion of the Council on important legislative matters should be ascertained and communicated to the Government before they disperse, the Medical Acts' Committee are prepared to give in either a partial or a complete report on the matters which have been submitted to them."

The President answered as follows:

"After communication with the Chairman of the Medical Acts' Committee, I have to state that the Committee have not yet prepared a



report, but that there is reason for supposing that a report, partial or complete, will be ready not later than Thursday."

Mr. TEALE asked the President "if he was prepared to state what are the Parliamentary matters requiring the opinion of the Council during the present session which most urgently demand consideration".

The PRESIDENT answered as follows:

"Applications have been made by the Government for the opinion of the Council on two subjects: 1. Foreign and Colonial Degrees; 2. Education and Registration of Midwives.

"Two subjects have been referred to the Council from other sources, viz., the East London Medical Defence Association, and the Obstetrical Society. The last of these is that referred to by the Government in relation to midwives. All these are referred to the Medical Acts' Amendment Committee. The amendment of Russell Gurney's Bill as to women, and the amendment of the Lunacy Acts in a particular known to the Council, have also to be considered."

*The Royal College of Surgeons and Women Candidates for Licences in Midwifery.*—Sir JAMES PAGET moved, Mr. SIMON seconded, and it was agreed to:

"That the following documents, relating to a legal difficulty hindering the College of Surgeons from taking part in a conjoint examination for the examination of women candidates for a licence in midwifery, be referred for consideration and report to the Medical Acts' Committee."

The first document was a memorandum by the President and Vice-Presidents of the College, stating that "on the 27th instant, various questions are about to come before the College with regard to the granting of professional qualifications to persons of the female sex". The questions were these:

"1. Whether, referring particularly to the provisions of the Act 39 and 40 Vict., cap. 41, commonly known as Russell Gurney's Act, the Council is prepared to admit women candidates to the respective examinations for the membership and fellowship of the College?"

"2. Whether, if the scheme which is now under consideration for a joint examining board in England be brought to bear as proposed, with the College of Surgeons taking part in it, women shall be admitted on the same footing as men to the ordinary examinations of the joint board?"

"3. Does the College of Surgeons agree to admit women to its membership by the proposed machinery of joint examinations?"

With regard to the examination in midwifery, the memorandum contained a number of important comments and suggestions, from which the following are extracts.

"In the first place, adverting to circumstances which are well known to every member of Council, the President and Vice-Presidents would express their opinion that no satisfactory new board of examiners for the midwifery licence can be formed till the Council shall be in a position to declare that the grant of the licence will in future be under improved conditions; for that, were it intended by the Council that examinations on the old footing should be resumed, the Council could not, in the opinion of the President and Vice-Presidents, expect that persons of credit in the profession would be found willing to take office at the board.....

"As regards any revival of the old system, whether it were for male or for female candidates, the President and Vice-Presidents would report to the Council that, in their opinion, the objections to such a course are insuperable. Not referring exclusively to the difficulty in which the College has been placed by the retirement of the examining physicians of its board, but looking also to the public interests in the matter, the President and Vice-Presidents would remind the Council that the registrability of midwifery licences, independently of qualifications to practise medicine and surgery, has been brought under the notice of Her Majesty's Government by the General Medical Council as 'a serious error in the Medical Act.....calculated to be injurious to the public interests', and an error which 'should be corrected by legislation'. And, in view of all the circumstances, the opinion which the President and Vice-Presidents have formed, and which they would now submit as their recommendation to the Council in this matter, is: That, except so far as the College may be coerced by any positive injunction of a court of law, no fresh action whatever should be taken under Section 17 of the Charter of 1852 till the law shall have been amended or declared in a sense which will allow the College to proceed satisfactorily under that Section.....

"Considering the legal aspect of the case as regards the College of Surgeons, and considering that, in relation to the claims of women candidates, the case of the Society of Apothecaries is probably almost the same as that of the College, the President and Vice-Presidents are of opinion that it might be well for the two bodies to consult together, and to see whether they could concur in promoting at the General Con-

ference (subject to such statutory sanction as would eventually be wanted in the matter) the adoption of special joint scheme rules having reference to the qualification of women.

"Reverting to a point which was incidentally raised in an earlier part of this memorandum, the President and Vice-Presidents would observe that, in their opinion, the College might properly, if permitted by law, take part, on the following basis, in special joint arrangements for the examination and qualification of women candidates, viz.: That, the conditions concerning education and examination being, in other respects, the same (or as nearly as practicable the same) for women as for men, the Committee of Reference should, in respect of the final examination, have authority to appoint, in agreement with the licensing bodies concerned, a modified examination for women—such examination not to require a knowledge of major surgical operations, nor a knowledge of diseases special after infancy of the male sex; and that every woman candidate who finally passed this examination should, subject to the by-laws of the licensing bodies, be entitled to receive the midwifery licence of the College of Surgeons, and the licence for general medical practice of such one or more of the medical licensing bodies as had been willing to take part in the arrangement.....

"In order, however, that the suggested arrangements should be made part of the joint scheme now under consideration, or should be adopted in any other effectual way, a small amendment of law would, it is believed, be indispensable; for, just as Section 19 of the Act of 1858 proved to be by itself insufficient for the general purposes of the joint scheme, so it would by itself prove insufficient for the special purpose now in question; and, unfortunately, the Act of 1875, which enabled the College to make effectual combination arrangements in respect of its membership, omitted (apparently in inadvertence) to give a like enablement with regard to the licence in midwifery. If the Council should approve of the suggestions which are made, the President and Vice-Presidents will ask for authority from the Council to take such steps as may be found necessary to promote the required amendment of the law."

The second document was a copy of resolutions adopted by the Council of the College of Surgeons on March 27th; the tenor of which is contained in the extracts given above.

*Dental Surgeons.*—A memorial from the President and Council of the Royal College of Surgeons of Edinburgh was read, stating that the memorialists had "had their attention drawn to certain proposals at present before the Royal College of Surgeons of England, to the effect that those persons only who possess the qualification of Licentiate in Dental Surgery of the Royal College of Surgeons of England 'shall be entitled to use the designation of dental surgeon, surgeon-dentist', etc.; also 'that a special schedule be added to the Medical Act for the registration of dental surgeons as such'; as well as to certain other suggestions that those only who possess the said qualification of Licentiate in Dental Surgery shall be entitled to hold dental appointments in hospitals, or to sign schedules, or grant certificates of attendance to dental students"; and, after giving reasons for objecting to the proposal, praying "that the sanction of the General Medical Council shall not be given to any application for power to register the qualifications of dental surgeons without obtaining the approval or the views of all the licensing bodies, under the Medical Act, possessing an interest in the matter referred to".

Dr. ANDREW WOOD moved, and Dr. A. SMITH seconded, "That the memorial be referred to the Medical Acts Committee".

Sir JAMES PAGET said that no such steps as those referred to in the memorial had been taken by the Council of the College of Surgeons.

The motion was carried.

*Restoration of a Name to the Register.*—It was resolved that the name of John Joseph Mullen, L.R.C.S.I., L.K.Q.C.P., which had been erased in conformity with Clause 14 of the Medical Act (a letter addressed to him not having been acknowledged within the prescribed time), be restored to the *Medical Register*, satisfactory evidence having been given that he was in practice at Brisbane, in Australia.

*Removal of a Name from the Register.*—The Council took into consideration the case of Thomas Richardson, registered in 1859 as a graduate of the "Metropolitan Medical College, New York". Mr. Ouvry, the solicitor to the Council, stated the case, pointing out that the diploma stated the said Thomas Richardson to have been examined by the College, whereas he had not been in America. The solicitor of Thomas Richardson was heard in reply, and pleaded for the forbearance of the Council. The Council resolved that it had been proved to their satisfaction that the entry in the *Register* of the name of Thomas Richardson had been "fraudulently or incorrectly made", and directed the name to be erased in conformity with Clause 26 of the Medical Act.

*Restoration of Names to the Register.*—Application was made by



Michael Manus Speedy and James Meehan, whose names had been erased in consequence of their conviction and sentence to imprisonment for conspiring to defraud an insurance company, by certifying that they had examined applicants for insurance whom they had not examined, to be replaced on the *Register*.

Mr. BUTT, Q.C., M.P., addressed the Council on behalf of Mr. Speedy. He acknowledged that a wrong act had been committed, but pleaded that his client (and also Mr. Meehan) had been misled by the representations of the insurance agent, who was tried at the same time with them, and that they had no intention of committing a fraud. He concluded by appealing to the mercy of the Council.

Dr. O'LEARY, M.P., gave evidence as to the character of Mr. Meehan, who had resided in his house in Dublin as a pupil, and whom he had always found strictly honourable.

After deliberation, the Council resolved "That the names be restored to the *Medical Register*". Mr. Speedy and Mr. Meehan expressed their thanks.

*Applications for Restoration to the Register.*—An application from Samuel Levenston, whose name had been erased under Section 14 of the Medical Act, for restoration to the *Register*, was considered; and it was resolved:

"That the Council, having considered the application of Samuel Levenston to have his name restored to the *Medical Register*, decline to accede to it, unless he shall furnish to the Executive Committee satisfactory evidence of character.

"That the Council delegate to the Executive Committee the duty of inquiring into and deciding on the case, having regard to the requirements of the Council."

The Council also considered an application for restoration to the *Register* from Henry Pearson, whose name was removed some years ago in consequence of his conviction in a court of law. It was resolved:

"That the Council do not see fit to make any order for the restoration of the name of Henry Pearson to the *Medical Register*."

Wednesday, May 16th.

Dr. ACLAND, President, took the chair at 2 P.M.

*New Member of Council.*—The official notification of the appointment of Alfred Hudson, M.D., for five years from May 14th, 1877, as Crown nominee for Ireland on the Medical Council, in place of Dr. Stokes, resigned, having been read, Dr. Hudson was introduced, and took his seat in the Council.

*Medical Education and Examination.*—The Council, having resolved itself into Committee, resumed the consideration of the motion proposed on Monday—

"That the 'first' examination be passed before the commencement of the second year of professional study; the 'second' before the commencement of the third year; and the 'third' after the completion of the fourth year of professional study";

And of the amendment proposed by Dr. ROLLESTON, and seconded by Sir WILLIAM GULL,

"That these examinations be passed in a certain order, approved by the Council, a student being allowed to present himself for either of the two later examinations on a certificate of having passed the preceding examination or examinations."

Dr. ROLLESTON said that the object was to give idle men an incentive to work, and also to assist the diligent students in getting over the preliminary matter and entering on clinical study. The subjects of examination should follow in such order as was demanded by science; but there should be no arbitrary space between the first and second examinations—it should be allowable to take up the second immediately after the first if the student were ready. An idle man would be made to see that it was for his interest to pass his examination as soon as possible, instead of having his habits of idleness confirmed. The difference between his proposal and that of Dr. Humphry was that, while he wished a certain order to be maintained, he desired to have no spacing of the examinations.

Dr. HUMPHRY suggested that, according to the amendment, the third examination might be passed at the end of seven months of study.

Dr. ROLLESTON thought that the third examination might be passed six months before the licence was granted, the intervening time being spent in practical work in a hospital.

Mr. SIMON suggested that the first and second examinations might be passed with or without an interval before the commencement of the third year.

Mr. LISTER thought the amendment unnecessary; and suggested

that the words "take place" should be substituted in Dr. Humphry's motion for "be passed".

Dr. ALLEN THOMSON doubted the propriety of entering on minute legislation. There was a general approval in the Council of the principle of separating the study of the easy from that of the more practical subjects. They should endeavour to secure a separation in a general way, without going into details, and should interfere as little as possible with the liberty of teachers to arrange the subjects as they thought best. Until the Council had determined what the subjects of examination should be, it would be premature to define the order in which they should come. To attempt to define too much would hamper the action of the universities. He would suggest that the examinations should be arranged in two divisions; those of the first division to take place before the end of the second year, and those of the second to be completed at the end of the fourth, and not to be commenced until the student had passed the examination in the first division.

Dr. HUMPHRY (in reply to a question from Mr. Teale) said that he intended that there should be three years of professional study after passing the first examination.

Mr. LISTER objected that it would be a hardship to students not to be allowed to count the second year's work until the first examination had been passed. He suggested that the final examination should not be passed until two years after the second examination, so as to secure two years of practical study; and that the second examination should take place at the end of the second year, but not before the student had passed his first examination, which should take place at or before the end of the first year.

Sir WILLIAM GULL thought the Council was trying to regulate too much. He thought that a general resolution would be better, leaving it to the licensing bodies to arrange for yearly examinations for two years, and a final examination at the end of the course of study.

Dr. ROLLESTON withdrew his amendment, and moved the following:

"That the 'first' examination be passed before the commencement of the second year of professional study; it being thereby understood that no time which may elapse after the first year of professional study shall count until the first professional examination shall have been passed."

Dr. HUMPHRY withdrew his motion in favour of this, which he seconded. It thereby became the substantive motion.

Dr. ANDREW WOOD thought that the Council was proceeding to too much detail. They had hitherto carried the licensing bodies with them almost unanimously, because they had not attempted to dictate how the branches of study and examination should be arranged. It would be better to take up the recommendation of the report of the Committee on Recommendations, and to give general directions only. The Council should divide the examinations into two parts, without stating of how many examinations each part was to consist. What was wanted was to have the examinations on the fundamental subjects concluded within two years, so that two years might be left for the study of practical subjects. He believed that the licensing bodies would act up to a proposal of this kind; but that they would not find it practicable to carry out a more detailed plan. Some might prefer one examination on the elementary and two on the practical subjects; others, two on the elementary and one on the practical. He thought that the plan which he proposed would fulfil the object of the Council. He proposed, as an amendment,

"That the professional examinations be arranged in two divisions; the first division to embrace the more elementary subjects. The first division may be completed at or before the close of the second year of professional study; but the second division not till the expiration of two years after the passing of the first division, nor before the completion of the fourth year of study."

Dr. ALLEN THOMSON seconded the amendment.

Sir JAMES PAGET advised the Council not to separate too much between elementary and practical matters. Anatomy and physiology came into both classes.

Mr. SIMON hoped that the Council would make provision for the application of anatomy to the last examination. The object was not to exclude the study of anatomy from the later years, but to insure that the student had a knowledge of the elementary subjects before entering on the study of the practical.

Sir JAMES PAGET objected to any steps that would discourage students from attending the hospital wards until the last two years of study. Much useful knowledge was obtained in the first year or two.

Mr. TURNER objected to the latter part of the motion. If a student were not allowed to count a course of instruction, he would not attend to it. Hospital study should not be limited to two years.

The original motion having been withdrawn for the time, the amendment was put as a substantive motion, and carried.



Sir WILLIAM GULL moved, Mr. TURNER seconded, and it was agreed to :

"That the following rider be added to the foregoing resolution, viz. : 'That the examinations, and the subjects included in each, be such, and in such order, as may insure, so far as possible, a due continuity and sequence of study.'"

Dr. HUMPHRY moved, and Dr. ROLLESTON seconded :

"That the 'first' examination be passed before the commencement of the second year of professional study ; it being hereby intended that no time which may elapse after the first year of professional study shall count until the first professional examination shall have been passed."

Dr. ROLLESTON said that his experience was that, when students worked well in their first year, they continued to do so afterwards. The object of his proposal was to stimulate them to work in the first year.

Mr. TEALE said that there were dull as well as idle students who might fail to pass the first examination, and the adoption of Dr. Rolleston's proposal would inflict a hardship on them.

Mr. TURNER said that some students were dull in abstract scientific matters, such as chemistry, but were apt at anatomy or in describing cases in hospital. Those who appeared stupid in their first year often took high prizes in the final examination. It would be a hardship to such to lay down so absolute a rule as that proposed by Dr. Rolleston.

Sir JAMES PAGET said that the question of examination at the end of the first year had been before the Council of the College of Surgeons of England ; but there were difficulties in the way of carrying out the plan, one of which was expense. He had felt very strongly in favour of an examination at the end of the first year, which was a time of much danger to those students who had a tendency to fall into habits of idleness. It had been suggested in the College that the first examination might be held at the medical schools, under the guidance of visitors or inspectors. It was a rule at the College that no teacher should examine his own pupils ; and this was very right as regarded the final examination. But what was required at the end of the first year was, not so much to find what the student knew, as to find whether he had employed his time well.

Mr. LISTER was much gratified with Sir James Paget's remarks. The holding of the examinations in fundamental subjects in the schools would get rid of the difficulty of expense, and would be more convenient to the students. It would also be beneficial to the teachers to know that they had to conduct examinations in the presence of the visitors or inspectors appointed by the Council.

The motion was put to the vote and lost ; five members voting for it.

Dr. HUMPHRY moved, Mr. TEALE seconded, and it was agreed to : "That the Committee on Recommendations of last year be re-appointed, and that Proposals Nos. 5, 6, 10, and 11 of Dr. Humphry's Report be referred to that Committee for consideration."

[The proposals referred to will be found on page 613.]

Dr. ANDREW WOOD moved, Mr. TURNER seconded, and it was agreed to :

"That the Committee on Recommendations consist of the following members, viz. : Dr. Andrew Wood, Chairman ; Mr. Teale ; Mr. Lister ; Dr. Humphry ; Dr. Fleming ; Dr. Apjohn ; and Dr. Hudson."

The Council then resumed.

*Returns from the Army Medical Department.*—The returns from the Medical Department of the Army having been read, it was moved by Dr. ROLLESTON, seconded by Dr. PYLE, and agreed to :

"That the returns from the Army Medical Department be inserted in the minutes, and that the best thanks of the Council be given to the Director-General of the Army Medical Department for his courtesy in sending these returns."

*Vaccination.*—The following communications from the Royal College of Surgeons of England and the Medical Faculty of the University of Edinburgh were read ; and, on the motion of Dr. ANDREW WOOD, seconded by Dr. HUMPHRY, were ordered to be entered in the minutes :

"Royal College of Surgeons of England, December 12th, 1876.

"Sir,—In reference to your letter of the 21st of June last, forwarding a copy of a Resolution adopted by the General Medical Council on the 5th of June last, on the subject of Certificates of Proficiency in Vaccination, I am desired to acquaint you that the Council of this College determined, on the 9th ultimo, that in future all Certificates of Proficiency in Vaccination should be such as would qualify the holders to contract as Public Vaccinators under the regulations at the time in force of the Local Government Board, and in accordance with such determination resolved that all Candidates presenting themselves for the Final Examination for the Diploma of the College be required, on or after the 1st of May, 1877, to produce Certificates of Proficiency in Vaccination as above described.

(Signed) "EDWARD TRIMMER.

"The Registrar of the Medical Council."

"University of Edinburgh, February 24th, 1877.

"Dear Sir,—Your notice in regard to Vaccination was duly received, and has been attended to by the Medical Faculty of the University of Edinburgh. (Signed) "J. H. BALFOUR, Dean."

*Lunacy Certificates.*—The following report by the Executive Committee with reference to a resolution of the Branch Council for England in regard to the Lunacy Acts was read.

"The Executive Committee have to report that, in their opinion, the difficulty can only be remedied by legislation in some such way as is suggested by the Lunacy Commissioners in their letter of November 24th, 1876, and they recommend that, on any occasion when either the Medical or Lunacy Acts are under consideration of Parliament, the requisite clauses be introduced."

It was moved by Dr. HUMPHRY, seconded by Dr. ANDREW WOOD, and agreed to :

"That, as it appears that there is at present sitting a Select Committee of the House of Commons on the Lunacy Laws, the President be requested to draw the attention of the Chairman of that Committee to the subject of the above report."

*Forgery of Death-Certificates.*—Correspondence between the President of the Medical Council and the Registrar-General, respecting the forgery of death-certificates by unqualified persons, was read. In the concluding letter, the Registrar-General wrote :

"I will thank you to assure the General Medical Council that, if a clear case be reported to me of an unqualified medical man forging for his own purpose the name of a registered medical practitioner, in the hope of obtaining a conviction, as an example to deter others from similar misconduct, I will take the opinion of the legal authorities serving under the Lords of the Treasury whether legal proceedings should not be instituted."

On Thursday, the Council considered a report presented by the Medical Acts' Committee, with the view of passing resolutions to be submitted to Government by a deputation of the Council on Friday. The report included the following subjects : 1. Territorial range of titles to practise ; 2. Legal difficulties under Russell Gurney's Act, and under the Medical (Royal College of Surgeons of England) Act of 1875 ; and 3. The appropriation of penalties accruing under the Medical Act. The Council decided to recommend the registration of colonial and Indian diplomas and degrees in a separate department of the *Register* ; also the registration in a separate department, under conditions to be defined, of foreigners holding degrees qualifying them for their practice in their own countries. It was decided that it was not desirable that foreign degrees should be registrable as additional qualifications or otherwise by British subjects. Resolutions on the other part of the report having been agreed to, a deputation was appointed, and the Council adjourned.

A more complete account of the proceedings on Thursday will be given next week.

#### POOR-LAW MEDICAL RELIEF IN GRAVESEND, ETC.

WE are pleased to record that, owing to the entire abstention of the profession of this town in competing for, or lending any assistance to any gentleman that accepted office on the guardians' terms, the Board has been compelled, though with an ill grace, to give way and to accede to the offer of the sole candidate who applied for the vacant appointment. This is as it should be ; and, were it generally followed, a considerable improvement in the position of Poor-law medical officers would speedily be secured.

Some time ago, we drew attention to the fact that the profession in Plymouth had unitedly resolved not to apply for, or lend any aid to, any gentleman who might be induced to accept office at the salary offered by the guardians. An outsider from the Midland Counties was, however, induced to accept the appointment ; but the profession, true to its just interests and of the poor as well, has hitherto abstained from according to him any aid, so that the medical officer who holds No. 1 District of the Plymouth Union occupies the anomalous position of not having named a qualified substitute. We are informed that the Board of Guardians has aided their medical officer in ignoring this regulation ; surely it only requires that the Local Government Board should be made acquainted with the fact that the guardians and their medical officer are in complicity to evade the law, for that body to at once exercise its authority and compel both to obey their regulations—notably when it is remembered that the action is prompted by the sole object of avoiding the payment of fair stipends to their medical officers.



## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, MAY 19TH, 1877.

### SCURVY IN THE ARCTIC EXPEDITION.

THE report of the Committee appointed by the Lords Commissioners of the Admiralty to inquire into the causes of the outbreak of scurvy in the recent Arctic Expedition, the adequacy of the provision made by the Admiralty, of the food, medicine, and medical comforts, and the propriety of the orders given by the commander of the expedition for the provisioning the sledge parties, has been this week very tardily given to the public. We have some months since stated the precise purport of this report, and the text of it appears now unaltered as we stated it two months ago. It bears official date March 3rd, and declares briefly that the cause of the outbreak of scurvy was the omission of lime-juice by Sir George Nares from the sledge provisions; that the general provisioning of the expedition was ample and excellent in quality and quantity; that, in omitting to send lime-juice with the sledges, Sir George Nares deviated from the instructions supplied to him by the Admiralty from Sir Alexander Armstrong; that he had no sufficient reasons for doing so, and that the orders which he gave in this respect were therefore improper. The full responsibility of the resulting catastrophe lies, therefore, as we have always contended that it lay, upon the shoulders of Captain Nares, and the hardly less serious responsibility lies upon the Admiralty for having done its utmost, by the hasty promotion of that officer, without reference to its medical department, to treat what is now admitted to have been conduct of a kind which is hardly less than culpable as though it deserved the highest honours and the most unequivocal praise. But for the course pursued by one of our contemporaries (the *Sanitary Record*) in persistently demanding inquiry on this subject, and in publishing unreservedly and with insistence such statements of fact as induced an irresistible demand for formal and searching inquiry into its allegations, it is tolerably plain that, in order to obtain credit to itself, and for the sake of giving a false and superficial *prestige* for its administration, the Admiralty were prepared to treat the disastrous outbreak of scurvy in this expedition as though it were an unavoidable misfortune, and not the result of arrogant blundering and unjustifiable disregard of the explicit directions, the scientific forethought, of the head of the Naval Medical Department. Naval officers—and, for that matter, military officers, too—are only too much accustomed to slight the non-combatant departments of the service; the sort of man who thinks himself capable of either cutting for stone or commanding the Channel Fleet is but too common in all departments of public service. It was this that led to the memorable disasters of the Crimean War; it was this which has led to the endless calamities and failures in the management of our iron-clads; it is this which broke down the Arctic Expedition; and the same spirit, encouraged as it is only too freely by the responsible heads of departments, has done much to disgust, to weaken, and deteriorate the skilled services, medical and engineering, both of the army and of the navy. Mr. Ward Hunt is greatly to blame in this matter; a comparison of dates such as he himself gave recently in the House of Commons in reply to a question, shows that, in the haste to blow a loud flourish of trumpets on behalf of his administration, he hurried to issue a vainglorious manifesto announcing the brilliant success of this expedition, and proceeded to make a series of promotions of all the

officers, except the senior medical officer of the expedition, without referring to the skilled heads of the department, who alone could inform him whether the deplorable prevalence of an easily preventable disease was due to misfortune, to ignorance, or to neglect. Herein he set a bad example; he was guilty himself, in another form, of the same kind of contempt of the skilled advice with which the nation provides him as led Sir George Nares into the painful position of having wasted the lives of some of his men, inflicted upon others most grievous and unnecessary sufferings, and of having compromised the results of an expedition, fitted out at great cost of time, thought, and expense, to which was entrusted the scientific as well as the personal honour of his country.

Had Sir G. Nares possessed a reasonable modesty and deference to skilled and scientific opinion, which might have been expected from a commander who, more than any other in the navy, had reason to respect the achievements of science, he would not have formed for himself the preposterous hypothesis that he could saturate his men with lime-juice in such a manner as to preclude the necessity of sending it on the sledges; he would not have issued worthless double rations during the month before the spring journeys; and he certainly would not have disregarded the plain, clear, and explicit instructions of Sir Alexander Armstrong in settling the provisions for the sledges. Had Mr. Ward Hunt felt some of that deference for skilled knowledge of which the First Lord of the Admiralty in these days ought not to be wholly destitute, or had he possessed a just perception of the importance of fortifying his own knowledge by reference to the heads of the department specially concerned, he would have spared himself the humiliating blunder of promoting an officer who is now condemned by what is tantamount to a court-martial, and of affording to the whole service and to the public the unpleasant spectacle of the first minister of the head of the greatest of our departments neglecting the elementary principles of administration and discipline by hurrying to praise those whom his appointed advisers know to be worthy of blame, and in passing by, in his haste to bid for popularity, the persons he was bound, by every administrative propriety, to consult, before he arrived at any public decision.

To the report now issued, is appended a very interesting and elaborate paper on scurvy by Dr. Donnet and Dr. Fraser. They enter very thoroughly into the history of the outbreak of scurvy, and give a valuable outline of the leading points in the medical evidence which was given before the Committee. The result is only to confirm the explicit medical opinion, which is supported by an overwhelming mass of evidence, that scurvy is essentially a disease due to the deprivation of vegetable food, or its equivalent, lime-juice. One interesting fact they specially point out, which upsets a good deal of the empty theorising of Mr. Clements Markham on the subject. It had been alleged that, owing to the more favourable conditions of wintering on board the *Discovery*, the men who wintered on that ship were better protected from scorbutic disease; the fact is on the contrary, that, in the eastern expedition, which included men from both ships, 75 per cent. of the *Discovery* men were attacked with scurvy, and only 60 per cent. of the men on the *Alert*. Fifty-nine cases out of sixty occurred on the sledge expedition; the one exception was that of a man, a cooper, who became ill in January 1876, and who, according to Dr. Ninnis, had been accustomed to drink to excess, disliked preserved meat and vegetables, and, further, is said to have surreptitiously abstained from fresh beef, preserved meat, and vegetables, whenever he found the opportunity. The Committee direct attention to the advisability of studying for convenience of carriage some concentrated preparations of lime-juice, or lemon-juice, in lieu of the crude juice. Finally, they add, "We have also had occasion to refer to the incompleteness of the present knowledge of the nature of scurvy. The essential nature of the disease, the exact abnormal conditions which are present, and even the variations from the standard of health in the performance of many important functions during its existence, are as yet unknown. Investigation of these several points is likewise required, and might with advantage include an examination of the effects on the excretions



of many articles of food reputed to be antiscorbutic. The details of the observations and experiments required for extending our knowledge on those subjects may be left to any competent investigator who may assume, or be directed to undertake, the investigation. The field of observation, however, is limited, while the objects to be attained are of the greatest value, not to science only, but to the interests of the human race generally, and especially to those of this nation. We believe that no department of the Government of this country but that to which this paper is about to be submitted can afford the requisite opportunities for attaining the objects referred to."

### MÉTALLOTHÉRAPIE.

AN interesting report has just been presented to the Société de Biologie de Paris. In August 1876, M. Burq obtained the appointment of a Committee, consisting of MM. Charcot, Luys, and Dumontpallier (reporter), to investigate the effects of the application of various metals to the skin.

M. Burq has maintained for a long time (since 1849) that, in certain affections of general and special sensation, a return of sensibility may be brought about by the cutaneous application of certain metals. The same metal does not equally affect all patients; in fact, there exists an idiosyncrasy towards this or that metal. The particular metal is easily ascertained by applying in succession for several minutes a plate or plates of gold, zinc, copper, or iron, to the affected parts. M. Burq has also maintained, in the face of much incredulity, that the affections of sensibility stand in direct relation to some general morbid condition, and that from the external application an indication is obtained for the internal administration of the same metal. This is the basis of his system of *métallothérapie*.

The Commission have not occupied themselves with M. Burq's metallotherapeutic speculations, but have confined their attention to the facts as regards the external application of the metals. The experiments of the Committee were begun in November of last year in the Salpêtrière, and have frequently been the cause of much astonishment to visitors to the *clinique* of M. Charcot. The patients experimented on have been chiefly those affected with hysterical hemianæsthesia or hysterolepsy. In these cases, both superficial and deep common sensation are abolished unilaterally to such an extent, that not the slightest reaction is exhibited, even when long needles are thrust through and through parts usually the most sensitive. In fact, as M. Dumontpallier in his report says, the procedure by which the fact of anæsthesia was demonstrated "would have been barbarous, had it not been practised on parts devoid of sensibility". Taste and smell are likewise abolished on the same side. Colocynth may be placed on the side of the tongue, and the most disagreeable odours held to the nostril, without exciting the slightest appearance of sensation or reaction. As regards sight and hearing, the loss on the anæsthetic side is not usually complete, but considerable, there being no signs of organic disease in the retina or ear. The temperature is also found to be lower on the anæsthetic side; and the muscular power, as tested by the dynamometer, considerably impaired. The Committee have found, in accordance with M. Burq's statements, that there exists in different patients a special *aptitude métallique*; that is to say, that sensibility returns under the influence of a certain metal. This is determined by bending on the arm or leg, or anæsthetic part, plates of gold, copper, zinc, etc. After from ten to fifteen minutes, it is found that, if the metal employed be the proper one, sensation begins to return at the point of application. The patient feels a sensation of heat or numbness; the part becomes red; and pricking with a needle causes great pain at the level of the bracelet and for some distance above and below it. At a given distance, well marked dysæsthesia, or perverted sensibility, becomes established.

When the metal is applied to the forearm, the sensibility gradually extends to the hand, and the temperature rises above that of the other

side, as determined by a thermometer fixed in each hand. At the same time, the muscular power rises very considerably above that which existed before the commencement of the experiment. Curiously, also, needle-punctures now bleed freely; whereas in the anæsthetic condition scarcely a drop of blood showed itself even when the needle was thrust through the limb. What is true of common sensibility is also true of the special senses. By the application of the metal at or near the organs of special sense, a more or less complete restoration is effected.

The effect, however, is very transitory, and next day the anæsthesia is found to have returned. The patients generally complain of great fatigue, headache, and a tendency to sleep after each experiment. But perhaps the most remarkable phenomenon of all is that the return of sensibility, under the influence of the metallic plates, is effected at the expense of the sensibility of the sound side. To this phenomenon the Committee give the name *transfert de la sensibilité*. This takes place in a symmetrical manner. Thus, if the sensibility be restored to the arm by the application of the metal, it is found that the corresponding part of the sound arm has lost its normal sensibility. The same is true of the organs of special sense, and of temperature and muscular power. It would seem, therefore, that there is no real gain, but that a *plus* on the one side is accompanied by a *minus* on the other.

The Committee have not yet ascertained the effect of the simultaneous application of the metals on both sides of the body. But experiments have been made on two cases of hemianæsthesia of cerebral origin. One of these had been affected for many years with hemianæsthesia and hemichorea on the right side, consequent on an attack of hemiplegia from organic cerebral mischief. This patient was subjected to experimentation with different metals—zinc, copper, gold, and iron. The result was negative as regards zinc, copper, and gold; but iron, applied to the thigh, arm, and forehead, caused return of sensibility after twenty minutes' application. Sensibility gradually extended over the whole of the right side, and the hemichorea was sensibly diminished. Plates of iron applied over the nose and tongue also restored sensation there. Similar results ensued in another case on the application of gold. It is further remarkable that in these two cases the recovery has been permanent and not transitory, as in the hysterical cases. M. Burq's statements having thus been fully confirmed, the Committee next endeavoured to ascertain the *modus operandi* of the metallic plates. It having been suggested by several members of the Society that the results were due to electrical action set up by contact of the metals with the skin, M. Regnard was entrusted with the experimental testing of the hypothesis. From Regnard's experiments with Du Bois Reymond's galvanometer, the fact was demonstrated that the contact of the metals with the skin did actually excite electrical currents, which varied with the metal employed. Thus, the plates of gold caused a deflection of the needle of from two to twelve degrees, while similar plates of copper caused a deflection of from forty to forty-five degrees. This being established, it was rational to suppose that currents of like intensity furnished by a galvanic pile would produce effects analogous to those caused by the application of the metals. This also was experimentally verified, it being found that in those patients sensible to gold, a current of from two to twelve degrees caused a restoration of sensibility, and in those sensible to copper a current of from forty to forty-five degrees was necessary. A further interesting fact was made out in the course of these experiments, viz., that on varying the intensity of the currents, active and neutral points were found to exist in the galvanometric scale. Thus, a patient sensitive to a current of 10 to 15 deg. ceased to be sensitive to a current of 45 to 60 deg., but again became sensitive to a current of 80 to 90 deg. The points of non-activity are termed by M. Regnard the *neutral points* of the scale.

What the explanation of these curious facts may be, is left undetermined by the Committee.

The results of this investigation are so novel and so unexpected, that they cannot fail to stimulate further speculation and research. The



Committee compliment M. Burq on the favourable results of their labours, and recommend his memoir for competition for the Prix Ernest Godard.

#### THE ADMISSION OF WOMEN TO MEDICAL DEGREES.

At the large meeting of Convocation at the University of London, on Tuesday the 8th instant, as we last week reported, the medical element prevailed, and prevented, by a majority of thirteen votes (142 to 129), the passing of a vote of thanks to the Senate for their resolution to admit women to degrees in medicine. The following is the form of amended resolution to that effect, which was proposed by Mr. Nesbitt, M.A., and Mr. A. W. Bennett, M.A., B.Sc.: "That Convocation, desiring that women should be admitted to degrees in all faculties, thanks the Senate for their resolution to admit women to degrees in medicine." This being lost, the amendment proposed by Mr. Savory and seconded by Dr. Barnes, "That this House is of opinion that it is undesirable for this University to admit women to the degrees in medicine before it shall have considered the general question of their admission to the degrees in all faculties", was carried by a majority of twenty-eight votes (144 to 116). This result need surprise no one; for many medical graduates who have consistently voted for the admission of women to all degrees, yet felt constrained to vote on the conservative side when advantage was sought to be taken of Mr. Russell Gurney's Bill for the admission of women to medical degrees only. Such proposal was felt to be unfair, in the sense that, supposing a woman to be desirous of obtaining a degree from the University, she must necessarily undertake the study of medicine, which, as many think, is the line of study and practice the least adapted for women. Again, an impression prevails that by the conjoint scheme it is thought possible that women may be examined for, and obtain diplomas wherewith to practise, medicine and surgery. Lastly, the champions of the ladies have always contended that they would not be satisfied with any examinations or regulations more advantageous to them than those to which men must conform; and in two points it had been hinted that the Senate was desirous of giving advantages to women, firstly, by allowing them to prosecute their studies at foreign medical schools, and, secondly, by varying the character or by diminishing some of the rigour of the examinations in their behalf. The question of the admission of women to all degrees will probably be again discussed by the Senate at an early date, and a change in the charter of the University be sought, to permit the graduation of ladies.

It was possibly inevitable that this question, which appeared to range the graduates in two hostile camps, should be discussed with much warmth; but it was certainly conducted with much ability as far as the medical graduates were concerned, amongst whom were Sir William Jenner, Dr. Savage, Mr. Savory, Dr. Barnes, Dr. Quain, Dr. Wilson Fox, Dr. Wilks, Dr. Poore, and others; and to this Mr. Stansfeld, who of course spoke on the opposite side, bore testimony. Nevertheless, the friends of the University could not but be sorry that so marked a division existed between the graduates in Arts and Laws and those in Medicine. Nor was the uncomfortable feeling decreased by the Chancellor's remarks made on the following day at the presentation of degrees, when Lord Granville said that one of the reasons advanced by the medical opponents of the ladies was their unwillingness to have the opposition of the ladies in the battle of life. It is true he afterwards admitted that in saying this argument had been used he was in error; but the argument nevertheless disfigured the report of his lordship's speech in most of the morning papers, and was not followed by his denial of its correctness. Again, in reviewing the gaps which death had made during the past year in the ranks of the Senate, the Chancellor paid high and richly deserved encomiums on the late Mr. Bagehot and Mr. Justice Quain, but failed altogether to mention the loss sustained by the death of Dr. Sibson. It is not thus that the medical graduates of the University will be strengthened in their feeling of affection for their Alma Mater.

#### THE GENERAL MEDICAL COUNCIL.

THE General Medical Council commenced its session on Thursday, the 10th instant, and will, we believe, not adjourn until next week. This year, the subjects which it has to consider are not of such exciting interest as those which occupied its attention in the session of 1876; still there are several matters of the highest importance to the profession and public on which it has to pronounce its opinion. The address of the President, which we published last week, gave a summary of the work which lay before the Council.

In the constitution of the Council, there have been two changes during the present year. One is the replacement of Mr. Quain as representative of the Royal College of Surgeons of England by Sir James Paget, whose addition to the Council is regarded with general satisfaction. The other change has been brought about through the retirement, through failing health, of Dr. Stokes, who, from the time of the formation of the Council in 1858, has been the Crown nominee for Ireland. All who have known Dr. Stokes will endorse the words with which the President spoke of him in his opening address. "It were hard to say whether, as we part, genius and culture, or endearing personal nature, will be most deeply impressed upon our memories." As successor to Dr. Stokes, Dr. Alfred Hudson has been appointed, and took his place in the Council for the first time on Wednesday last. Dr. Hudson is well known and highly respected as an eminent physician, who has filled several hospital appointments in Dublin, and is the author of a valuable work on *Fever* and of several contributions to medical literature. We believe that he will be found to be a worthy successor of Stokes.

Up to the present time, a large part of the time of the Council has been occupied in the consideration of education and examination: subjects on which it was impossible to enter last year, in consequence of the pressing nature of the topics then engaging public and professional attention—especially the Cruelty to Animals Bill—on which the Council had to pronounce an opinion.

On the last day of the session of 1876, it was resolved that the consideration of the reports on Visitations of Examinations in that and the previous year should be considered on an early day of the present session. On the first day of meeting, however, Dr. Humphry brought forward a motion which, after some discussion, was agreed to; that, having regard to the good spirit in which the visitations of examinations and the reports of visitors had been received by the licensing bodies, and to the improvements which had been made in many instances in accordance with the suggestions of the visitors, it was desirable not at present to consider the reports, but to send copies of them to the licensing bodies for consideration.

Another proposal adopted at the end of the session of 1876 was, that inquiry should be made of the licensing bodies as to the cause of the large number of rejections, and as to the mode of conducting the examinations. A series of questions was accordingly issued by the Executive Committee, to which answers, many of which were based on careful statistical investigations, were sent by most of the licensing bodies. A summary of these, with comments and a series of recommendations based on them, was laid before the Council by Dr. Humphry, who had been charged by the Executive Committee with the duty of examining and reporting on the answers—a task which he fulfilled with great ability. Along with this report was laid before the Council an elaborate analysis of the annual returns of the results of examinations of degrees, diplomas, and licences, from the year 1861 to 1875, drawn up by Dr. Aquilla Smith. We shall probably comment on a future occasion on this report of Dr. Smith, who has also laid before the Council a statement respecting the alleged deficiency of medical men in proportion to the population, to which a reply has been sent by Dr. W. Farr.

Several of the recommendations brought forward by Dr. Humphry have been the subject of earnest debate in the Council. An important recommendation that has been agreed to is, that there



ought to be *three* professional examinations—as, indeed, is already the practice in some of the Scottish Universities and in the Royal College of Surgeons of Ireland. While, however, there was a general assent to the principle that the examinations in the fundamental subjects of professional education should be passed before the more practical subjects, there was considerable discussion as to whether a strict rule should be laid down as to the time of passing the examinations. The ultimate result was to assert the general principle, and to leave the carrying out of details as much as possible to the licensing bodies. In the course of the debate, Sir James Paget mentioned a suggestion which had been made in the College of Surgeons; namely, that an examination in fundamental subjects—chemistry, anatomy, etc.—at the end of the first year should be made in the medical schools. This suggestion, which was warmly approved of by Mr. Lister, is one which merits consideration.

The subject of regulating honorary degrees was brought before the Council on Friday, *à propos* of the application made some time ago to register the honorary title of doctor of medicine, conferred by the Queen's University in Ireland on Mr. Richard Eustace of the Royal Navy. Pending the discussion of the question, the President of the Council and the late President (Dr. Paget) made a joint request that the honorary degrees conferred on them some years ago by the University of Dublin should be removed from the *Register* until a decision should have been arrived at. It was decided, after discussion, to refer the whole question of the power of the Council to register honorary degrees to the law-officers of the Crown for England, and to suspend action in regard to the request of Dr. Acland and Dr. Paget until the opinion of counsel shall have been received.

One day—Tuesday—was occupied in the consideration of several cases in which it was proposed to restore names to or remove names from the *Register*.

The proceedings on Thursday were of much interest. A very able report was presented by Mr. Simon as chairman of the Medical Acts' Committee appointed on the first day of the meeting; and the important subjects of registration of colonial and foreign degrees was dealt with; as well as some difficulties which presented themselves in the working of Mr. Russell Gurney's Act, and the old grievance of the appropriation by the receiver of police of the penalties for offences against the Medical Act. The Council agreed to resolutions on these subjects, and appointed a deputation to lay them before the Government this day (Friday).

There still remain for discussion portions of Dr. Humphry's report, as well as the report of the Committee on Recommendations regarding education and examination; and further reports from the Medical Acts' Committee. A communication regarding the Conjoint Examining Scheme for England will be made to the Council by Sir James Paget; and Mr. Simon will bring under the notice of the Council certain cases in which the administration of the Vivisection Act appears to be obstructing the progress of legitimate medical study. A letter on this subject has been addressed to the Council by the Physiological Society.

DR. PRANCE, of Plymouth, has been elected a Fellow of the Royal College of Physicians of London.

THE Havre Branch of the International Society for Help to the Wounded has resolved to forward to St. Petersburg the stores remaining from the war of 1870.

THE female sea-lion at Brighton has given birth to a fine young one. Both mother and offspring are doing well. This is the first instance on record of the sea-lion breeding in captivity.

THE annual meeting and dinner of the Birmingham Medical Benevolent Society will be held on Friday, May 25th, at four o'clock, at the Hen and Chickens Hotel, Birmingham, under the Presidency of Dr. Balthazar Foster.

WE publish in another column a letter from Mr. E. Lister, giving explanations concerning the published statements about a death at the Haydock Asylum, to which we have in former issues referred. These explanations throw a much more satisfactory light upon the facts alleged. The letter is accompanied by the sworn depositions at the inquest.

A CHEMIST, named Jenkinson, was charged at the Sheffield Town Hall last week for selling jalap mixed with nux vomica. A pennyworth of it had been administered to two valuable coursing dogs, which died within ten minutes. It was stated for the defendant that the nux vomica was mixed by misadventure, and that the owner of the dogs had brought an action for damages for £30. The Bench, taking this statement into consideration, imposed a mitigated penalty of £2 and costs.

WE are glad to hear that Dr. P. M. Braidwood is a candidate for the Lectureship of Surgery in the Liverpool School of Medicine. Dr. Braidwood is well known as the author of the Astley Cooper Prize Essay on Empyema, and of many other valuable original researches. His subsequent labours have fully maintained the high scientific reputation which he so early acquired, and give the fullest guarantees that his services as lecturer at any public institution, on any subject which he undertakes within the range of his studies, would be of great value, and would include such original work as could not fail to inspire scientific spirit in the students and to add to the reputation and efficiency of the institution.

DR. HERBERT TIBBITS commences at the National Hospital for the Paralyzed and Epileptic, Queen Square, Bloomsbury, on May 24th, at 5 P.M., a series of three lectures on the Essential Electro-Therapeutics. The first lecture is on Electrical Instruments; the second on May 31st, at the same hour, on the Methods of Applying Electricity; and the third on June 7th, on Electricity in the Diagnosis, Progress, and Treatment of Disease. Dr. Tibbits has had a very large experience on this subject, and has acquired a just reputation as especially expert in the matter.

#### UNIVERSITY COLLEGE HOSPITAL.

SIR HENRY THOMPSON presided at the anniversary festival of the University College Hospital on Wednesday evening last. A large company of the supporters of the hospital, including the principal members of the medical staff and some of its most distinguished former pupils, assembled. Going out of the ordinary routine of speeches on such occasions, Sir Henry Thompson entered upon a forcible and lively vindication of the immense value to hospitals of the association with them of medical schools. Such a theme needs little enforcement for a medical audience; for we all know that the presence of medical students in the hospital not only gives force, vigour, and exactness to the work of the principal medical officers, but affords to the patients the valuable assistance of a large staff of skilled clinical assistants, whose daily work it is to investigate thoroughly the histories of their diseases and watch and report their symptoms, and to perform all those minor offices intermediate between nursing and medical and surgical direction which are known as minor medicine and surgery. Sir Henry Thompson by no means exaggerated the value to every hospital of the presence in the wards of students of medicine. It is, however, very doubtful that benefit is fully appreciated by the outside public, who are much more disposed to be acted on by vulgar prejudices in this matter. The excellent statements Sir Henry Thompson made, which we are glad to see reproduced at length in the leading papers of the day, will have a very useful effect, especially at the present moment. At the same dinner, it was announced that Sir F. Goldsmid will give £10,000 towards the extension of the hospital, if £20,000 be collected from other sources for the same purpose. The Goldsmid family are hereditary benefactors of University College and Hospital. Sir Isaac Lyon Goldsmid, Bart., was a munificent supporter of Uni-



versity College, and, with Lord Brougham and Lord Macaulay, took an active part both in founding it and in maintaining it during its earlier years of trial. The present baronet and his nephew (Mr. Julian Goldsmid), who is a graduate of the University, have maintained a lively and generous interest in this institution.

#### GUY'S HOSPITAL.

At a meeting of the governors held on Wednesday, May 9th, Mr. John Birkett, Vice-President of the Royal College of Surgeons of England, was appointed Consulting Surgeon, and Dr. James Frederick Goodhart Assistant-Physician, to Guy's Hospital. We understand that these are the first appointments made by the present treasurer since his accession to office; and they will both, we are sure, give great satisfaction to Guy's men.

#### CONSUMPTION HOSPITAL, BROMPTON.

It is stated that a change will probably be made by the Committee in the internal management of this institution by the appointment of a lady superintendent with a housekeeper under her. The former will devote her attention especially to the nursing and supervision of the sick, and the latter will attend to purely household matters.

#### ROYAL INFIRMARY FOR WOMEN AND CHILDREN.

The Royal Infirmary for Women and Children in the Waterloo Road has lately been enlarged and redecorated, and was reopened this week by the Princess Louise. There are now fifty beds and cots in the hospital, and an asphalt playground on the roof. Last year, there were 232 in-patient children, and 1,430 visits were paid by the resident medical officer to sick children at their homes, besides a large out-patient department. We should be glad to be able to add that the latter has been placed under the supervision of the Charity Organisation Society's officers to prevent imposition, as has been done at the Children's Hospital, Great Ormond Street. The out-patients pay one penny for each visit, and the parents of the in-patients give sixpence a week: the sums collected in this way amounted last year to £120. Her Royal Highness was received by the officials of the hospital and by the medical officers, Dr. G. Vivian Poore, Mr. Greenfield, and Mr. Canton. The Prince of Wales, on whose estate, as Duke of Cornwall, the hospital stands, has allowed the purchase of the freehold on advantageous terms.

#### WOOD-PAVING AROUND HOSPITALS.

MOST of the metropolitan hospitals are situated near main thoroughfares, and it is well known that in many of these the noise of the neighbouring traffic is not only distressing to the patients, but also interferes seriously with their due treatment and the investigation of their cases. The governors of the London Hospital are in communication with the Board of Works of the Whitechapel district, as to the possibility of replacing the stone pavement in front of the hospital by wood-paving, and have offered to contribute towards the cost of the alteration. The Works Committee of the Board have recommended that the alteration be carried out, and it is hoped the arrangement will be completed, as it will certainly be a great benefit to both patients and medical officers.

#### PHARMACEUTICAL BENEVOLENT FUND.

THE dinner of the Pharmaceutical Benevolent Fund on Tuesday evening was attended by upwards of three hundred persons, including many medical men, among whom were, Dr. Risdon Bennett, Dr. Buchanan, Dr. Headlam Greenhow, Mr. Ernest Hart, Dr. Langdon Down, Dr. Silver, Mr. F. Brown, and most of the leading pharmacists of London and the provinces. The fund is in a prosperous condition, and a large addition was made to its treasury by the handsome subscriptions and donations which were announced at the dinner. Mr. F. Williams was in the Chair, and proposed, among other toasts, the medical profession, for which Dr. Risdon Bennett, as President of the Royal College of Physicians, cordially responded, expressing a

desire that the kindly relations between the medical profession and the members of the Pharmaceutical Society should be maintained and strengthened.

#### CONVERSAZIONE OF THE PHARMACEUTICAL SOCIETY.

A VERY pleasant *soirée* was given by the Pharmaceutical Society on Wednesday evening, at the South Kensington Museum. The whole of the arts department and the picture galleries were thrown open to the visitors. After reception by the President, the stream of guests passed into the North Court, where a band of the Royal Horse Guards played selections of music throughout the evening. In the Lecture Theatre, glees and madrigals were sung at intervals, under the direction of Mr. Winn, the room being crowded on each occasion with an appreciative audience. About two thousand five hundred members and visitors were present, and the arrangements appeared to give pleasure to all.

#### WESTMINSTER MEDICAL SCHOOL.

DR. CHARLES PHILLIPS has presented this school with a most valuable collection of specimens, both official and non-official, of materia medica. With the exception of the collection at the Pharmaceutical Society, it is without a rival in England. It has been years in course of collection under the care and direction of Mr. Martindale. Some of the specimens are of remarkable interest, and indeed unique of their kind. The school may be congratulated in obtaining so valuable a gift, one which will be a great addition to its teaching powers, and at the same time an object of attraction to all collectors and students of materia medica. This is, we believe, not the only instance of this gentleman's liberal and energetic aid to the school. Through his instrumentality, a sum of over £2,000 has been given to found scholarships and introduce a system of tutorial supervision of the students, in order to place their reading under the more immediate care and direction of the school authorities, so as to do away with the evils of men cramming to pass examination.

#### VICTORIA HOSPITAL FOR CHILDREN.

AMONGST the names on the new Committee of Management we observe that of Mr. Arthur Sullivan, the eminent composer. He is also a donor of a cot. It is with pleasure that we observe artists, than whom none are more generous in giving their valuable and gratuitous services to the cause of charity, taking a still more direct and immediate interest in the control and management of hospitals.

#### A NEW SCHOOL OF DENTISTRY.

A NEW Dental School was opened last week at the Dental Hospital, Great Portland Street, under the title of the National Dental College; the opening address being given by Mr. Oakley Coles, in the presence of many well-known medical men and dentists, and the students of the class. In a very interesting address, in which he discussed the present complicated state of opinion amongst dentists as to the best method of securing fully educated and qualified dental surgeons and improving the status of the dental profession, Mr. Coles pointed out that great progress had already been made, and that, out of three hundred and nine dental licentiates, only seven or eight were found to be advertising as defined by the laws of the Odontological Society. He believed that progress must be slow, and that it must be attained chiefly by an increase in the numbers of perfectly educated men to adopt the practice of dentistry. Examinations he defined as incidents in the educational career, and not as finalities. He earnestly advised all to pass the preliminary examination in Arts required of dental students by the College of Surgeons of England, since, if it did not make them better dentists, it would certainly make them better educated men. The possession of the dental diploma was essential; but to have the surgical diploma also was expedient. He observed that in Belgium, Germany, Austria, and Hungary, where there was restrictive legislation, the competency of the dentists educated in those countries was at a very low ebb; whilst in England and America,



where great educational facilities were to be found and a restrictive legislation can scarcely be said to exist, was found a higher degree of competency. A sudden attempt to alter the value and lower the esteem in which the dental diploma is held in this country could only end in disaster, if not in defeat. We must have two thousand dentists in this kingdom impressed with the value of the dental diploma, ere we can make them think of the necessity for another and more general degree.

#### A SURGEON'S FORTUNE.

THE late Mr. Coulson is stated to have bequeathed to his two nephews—one a practising surgeon—a fortune of upwards of £250,000, partly the result of a long lifetime of lucrative practice, and partly acquired by the bequest of his deceased brother, the eminent government draftsman. Mr. Coulson has left a bequest of £1,000 to St. Mary's Hospital; £500 to the Royal Sea-bathing Infirmary, Margate; and £500 to the Penzance Public Dispensary.

#### WILL OF THE LATE SIR WILLIAM FERGUSSON.

THE will of this eminent surgeon, who died on the 10th of February last, was proved on the 28th ult. by George Alfred Gadsden and John Ord Mackenzie, the executors, the personal estates in the United Kingdom being sworn under £30,000. The testator leaves to his children's nurse, Isabella Cairns, an annuity of £20 for life; to his butler, Wm. Hutt, £80; upon trust for each of his three daughters, £7,000—and they are to receive, while unmarried, the rents of his mansion-house, Bromlee Lodge, Scotland; to his son Charles Hamilton Fergusson, £7,000; and the remainder of his property to his son James Ranken Fergusson.

#### THE PUBLIC HEALTH (IRELAND) BILL.

A DEPUTATION from the Irish Medical Association, including Dr. Grimshaw and Mr. Speedy, are now in London, with the view of recommending to Government such improvements in the Public Health (Ireland) Bill now before the House, and in the working of the sanitary system in Ireland, as we have many times shown to be essential for real sanitary progress in Great Britain, and have been approved and earnestly supported by the Irish Medical Association, by the dispensary and public health officers generally of Ireland, by the Dublin Sanitary Association, and by all outside the merely official circle who have watched the progress of public health legislation and administration. We heartily hope that Sir Michael Hicks-Beach, who at one time, as a member of Parliament much interested in the working of the Joint Public Health Committee of the British Medical and the Social Science Associations, gave a full concurrence to the principle which we now advocate, and which it is the business of this deputation to urge, will fall in with the views expressed to him, and will no longer leave sanitary local administration of Ireland in its present state of absolutely disgraceful chaos, or perpetuate the meagre, defective, and mischievous mode of central administration which is at the present moment prevalent in health matters in Ireland.

#### ANTI-VACCINATION STATISTICS.

A PAPER on the Increased Mortality from Small-Pox, recently read before the Manchester Literary and Philosophical Society by Mr. Joseph Baxendell, contains statements which are being reprinted and disseminated broadcast by anti-vaccinators. It was hardly to be expected that the truth of statements so congenial to these agitators should be doubted by them. As, however, the statements are ostensibly derived from official sources, it cannot be unimportant to show that they only afford further evidence that figures may be so distorted as to prove anything. Mr. Baxendell states that a comparison of the mortality from small-pox in London in the five years 1849-53, when vaccination was voluntary, with that which prevailed in the five years 1869-73, when it was compulsory, shows "the extraordinary increase of 132.5 per cent." In other words, it is asserted that the mortality from small-pox in London has more than doubled in twenty years, concurrently with the more general adoption of vaccination. There is a specious appearance of fairness about this comparison which is very

deceptive. The last period of five years includes the remarkable epidemic of 1871-2, whereas the early period happens to be one in which the disease was comparatively quiescent. The publications of the Registrar-General contain records of the deaths from small-pox in London during the thirty-seven years 1840-76, both inclusive. The only fair way to compare the mortality from small-pox before and since compulsory vaccination is to take the entire period for which records exist, without selection of special quinquennials for comparison. During the thirteen years 1842-52, when vaccination was only voluntary, the annual death-rate from small-pox in London was equal to 429 per 1,000,000 persons living; whereas during the twenty-four years 1853 to 1876, after vaccination became compulsory, the annual rate declined to 334 per 1,000,000. Thus the mortality from small-pox during the twenty-four years of compulsory vaccination was 22 per cent. less than in the thirteen years preceding the passing of the Compulsory Act, and does not show an increase of 132.5 per cent., as asserted by Mr. Baxendell, who, it is to be regretted, has been accepted as an authority upon small-pox statistics by others as well as by anti-vaccinators. It is true that, during the remarkable epidemic of 1871-2, nearly ten thousand deaths from small-pox occurred in the metropolis; but the effect of this terrible fatality failed to raise the mortality of the twenty-four years of compulsory vaccination to the rate which prevailed in the preceding thirteen years, owing to the small number of deaths from the disease in non-epidemic years.

#### MODERN WARFARE.

FROM the most recent statistical researches, summarised in the handbook of Chassagne and Desbrousses, the consolatory conclusion results, that battles have not become more murderous, despite the improvements in firearms. Those of 1870 were less so than the great battles of the first empire, such as the battles of Moskowa and Leipsic. In the Crimea, the number of the killed was one in thirty-three of the effective force; in Italy, one in forty-five; in the war of 1870, one in fifty-three. The number wounded is almost uniformly one in seven.

#### COMPETITIVE DEATH-RATES.

SO soon as we fairly get into the middle of spring, the battle of watering-places and of health-resorts on the field of mortality-statistics may now be very safely looked for year by year. The Medical Officer of Health of Keswick, in a recent report on the sanitary condition of that district, with more enthusiasm than prudence or even accuracy, asserted that its mortality-statistics were favourable "without parallel in the United Kingdom or the world". Sidmouth has taken up the challenge; and, in estimating the comparative salubrity from the mortality-statistics of Keswick and Sidmouth, the medical officer of health in the Devonshire watering-place has, in a letter to a local contemporary, raised a question or two which are not without interest, even if he be not quite sound in the conclusions at which he appears to have arrived upon the subject. The main features of the report for Keswick, which were pronounced unparalleled, were a general death-rate of 17 per 1,000, and a proportion of 21½ per cent. of the deaths of persons aged upwards of eighty years. In Sidmouth, we are told that the general death-rate did not exceed 15 per 1,000, and that 11 per cent. of the deaths were of persons aged eighty years and upwards. Now these two facts alone are not sufficient to afford the means for deciding which return infers the most favourable sanitary condition and natural salubrity. Unless there be special conditions of age-distribution or other disturbing element, the lower general death-rate in Sidmouth would weigh heavily in its favour, compared with that of Keswick. On the other hand, the higher percentage of deaths of persons aged upwards of eighty years in Keswick cannot be ignored as evidence in favour of that district. The higher the proportion of deaths of old persons in a district, the higher will be the mean age of death, and the lower will be the death-rate of children and adults, which is unnatural, and due to unsatisfactory sanitary conditions. Very little value, however, should be attached to the mere proportions of deaths at different ages to the deaths at all ages. The only trust-



worthy means of estimating the mortality at different ages is to calculate the proportion of deaths to persons living at each age. Unless the proportions of persons living at the age of eighty years and upwards in Keswick and Sidmouth were known, it would be impossible to decide the relative salubrity of the two districts as a winter residence for aged people. Dr. Pullin asks whether the fact of 21½ per cent. of the deaths in Keswick being of octogenarians is a subject for congratulation. In reply, he may assure himself that, if at any time 100 per cent. of the deaths in Sidmouth be of octogenarians—that is, if every one in that pretty watering-place live to the age of eighty years and upwards—its sanitary reputation will acquire a fame which will fairly entitle it to be described as “without parallel in the United Kingdom or the world”.

#### COST OF BEDS IN INFIRMARIES.

SOME discussion has been going on in Manchester in reference to the cost of the beds in the Royal Infirmary of that city. In order to settle the matter, Mr. Goldschmidt employed Messrs. E. Cottam and Son, public accountants, to inquire into the matter, and he has written to the *Manchester Examiner* to state that the cost per bed for the year 1875-6 has been ascertained to be £80:5:2. Mr. Goldschmidt makes a comparison between the cost per bed in the Glasgow and Manchester Infirmaries. “I have received the annual report of the Glasgow Royal Infirmary, and I find that in this institution the cost per bed, including expenses for a school of medicine, amounts to £41:10:8 per bed per year, instead of £80:5:2 in our (the Manchester) infirmary. The house expenses, which included the cost of wine and spirits for the patients, amounted to £9,671:7:3 for 476 beds, whereas in our infirmary, the house expenses, which also include the cost of wine and spirits for the patients, amounted to £8,162:12:8 for 207 beds, or 94 per cent. more than in the Glasgow Infirmary. In this institution, the cost of wages for nurses and servants was £2,885:3:8, while in Manchester it amounted to £3,134:3:10, or, deducting from this the cost of private nurses (say £724:8), £2,409:15:10, an excess of 92 per cent. For meat, the expenditure in the Glasgow Royal Infirmary was £3,325:13:6, and in Manchester £2,870:5:1, or 98 per cent. more. Of course, in all the three instances, I have taken into account the relative number of beds in the two establishments.”

#### AN EPIDEMIC OF LEAD POISONING.

DR. ALFORD, Medical Officer of Health for Taunton, has reported to the local sanitary authority an epidemic of lead-poisoning in the district, which is of very considerable interest both from its extent and the manner in which it arises—viz., the method of grinding flour adopted in the neighbourhood. The lead-poisoning in most cases was of a very marked character, the blue lines on the gums, the cholice, and other symptoms, being unmistakable. The first cases that occurred were in an isolated farm-house. Repeated visits and analyses of water, preserves, etc., threw no light whatever on their origin; he could find no lead. Then, in sharp succession, a large number of fresh cases were reported to him in various houses, mostly isolated, in the neighbourhood, many of which were very severe. Some six or seven families were affected. They all had in common, it appeared, sent their corn to be ground at the same mill. He had visited and inspected this mill, and the origin of all the mischief was at once apparent. On having the millstone raised, he found the surface of each stone honeycombed with lead. The millstone being of a very loose nature, large spaces occur, which of late, during the illness of the owner, have been filled up by pouring in quantities of molten lead. The first grinding of wheat that took place after the “dressing” contained, no doubt, large quantities of the metal. He at once had the lead removed, but from what he heard it was by no means an uncommon way of repairing millstones. He had, therefore, the more fully reported this case, that the public might be aware of a dangerous source of poisoning. The kindness and courtesy of the various medical men in attendance on these cases, not only in informing him of their existence, but also in giving

him every assistance in their power, greatly aided him in his investigations. He was within the mark in saying that some six or seven families, numbering in all, perhaps, some fifteen or twenty persons, had been almost simultaneously poisoned. The knowledge of a source of so much danger being now made known would, he trusted, prevent a recurrence of such a calamity.—Mr. Bruford thought the name of the miller should be mentioned.—In reply to a question, the medical officer said there were about ten pounds of lead upon the surface of the millstone, and the cavities were all filled up with the same metal. The old man who occupied the mill was unwell and unable to be about when the lead was used, and it was probable that it had been used without his knowledge.—Mr. Pollard said he did not think lead was generally used by millers, the substance usually employed being red-lead and borax, or alum and borax.—The clerk was directed to write to the miller on the matter.

#### METROPOLITAN DRINKING WATERS.

FROM the weekly return of the Registrar-General, we learn that Dr. Frankland reports, as the result of his analysis of the waters supplied to the metropolis and some of its suburbs, during April, that, taking unity to represent the average amount of organic impurity in a given volume of the Kent Company's water during the last nine years, the proportional amount of this impurity in an equal volume of water supplied by each of the other Companies, and by the Tottenham Local Board, was: Tottenham, 0.5; Colne Valley, 0.9; Kent, 1.0; New River, 3.1; East London, 3.6; Lambeth, 4.7; West Middlesex, 5.3; Grand Junction, 5.7; Chelsea, 6.1; and Southwark, 7.8. All the water delivered from the Thames, except that supplied by the Middlesex Company, was more or less turbid, and was unfit for dietetic purposes, being much polluted with organic matter. The Southwark Company's water was “very turbid, repulsive in appearance, and contained fungoid growths and moving organisms”; this Company's filter-beds have been undergoing repair since the summer of 1876. The Grand Junction water also contained moving organisms. The water supplied, principally from the Lea, by the New River and East London Companies, was very superior to the Thames waters, and was efficiently filtered. The deep well waters supplied by the Kent and Colne Valley Companies, and by the Tottenham Local Board, were of their usual excellent quality. The Colne Valley water is softened previous to delivery, and showed less than 5 degrees of hardness, whereas in the Kent and Tottenham waters the degrees of hardness were 25 and 27 respectively. Dr. Hill reports that the water supplied to Birmingham was clear, and that the amount of organic matter had markedly declined. The Glasgow water, supplied from Loch Katrine, is reported by Dr. Mills to have been almost colourless, but to have contained “suspended particles and some hairy matter, with a minute trace of iron”.

#### THE HEALTH OF LONDON.

THE Registrar-General's weekly return states that during last week 5,671 births and 4,077 deaths were registered in London and twenty-two other large towns of the United Kingdom. The mortality from all causes was at the average rate of 26 deaths annually in every 1,000 persons living. The annual rates of mortality per 1,000 last week in the twenty English towns, ranged from the lowest, Portsmouth 19 to Salford 41. In London, 2,378 births and 1,613 deaths were registered. Allowing for increase of population, the births exceeded by 11, and the deaths by 179, the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the two previous weeks had been equal to 23.0 and 22.0 per 1,000, rose last week to 23.8. The 1,613 deaths included 78 from small-pox, 45 from measles, 24 from scarlet fever, 4 from diphtheria, 58 from whooping-cough, 16 from different forms of fever, and 20 from diarrhoea; thus, to the seven principal diseases of the zymotic class, 245 deaths were referred, against 213 and 189 in the two preceding weeks. These 245 deaths exceeded by 15 the corrected average number from the same diseases in the corresponding week of the last ten



years, and were equal to an annual rate of 3.6 per 1,000. The 58 fatal cases of whooping-cough considerably exceeded the numbers in recent weeks. Only 16 deaths were referred to fever, or 17 less than the corrected weekly average. The fatal cases of small-pox, which had been 89 and 54 in the two preceding weeks, rose again to 78 last week; 35 were certified as unvaccinated, 17 as vaccinated, and in the remaining 26 nothing was stated as to vaccination. The deaths referred to diseases of the respiratory organs, which had been 349 and 327 in the two previous weeks, were 355 last week, and exceeded by 109 the corrected average weekly number; 203 resulted from bronchitis, and 106 from pneumonia. Different forms of violence caused 53 deaths.

#### THE STARVATION CASE IN THE WESTMINSTER UNION.

THE case of Henrico Calo, whose parents were convicted at the Old Bailey on the 9th instant, of beating, burning, and starving him, merits a passing notice. When this boy was discovered by the police, he was extremely dirty, emaciated, his hands and feet covered with ulcers, and of a livid tint; the glands in the groins were much enlarged, whilst the head and body bore evidences of continuous ill-treatment; the child only weighed twenty-nine pounds; his appearance, indeed, corresponded with the state of health in which the parents, in their defence, alleged him to be, namely, one of severe scrofula. This defence, however, utterly failed, as it was shown by the prosecution that, so soon as he was sufficiently fed, clothed and placed in fair hygienic surroundings he rapidly improved in health; thus on the fourth day after his admission to the workhouse he had increased three pounds; on the eighth, six pounds; and at the end of a month he had increased ten pounds; weighing, in fact, thirty-nine pounds against twenty-nine pounds when admitted; and from being so feeble as not to be able to leave his bed, at the end of a fortnight was enabled to run about the ward as readily as any child of his age. This marked improvement in physical condition is interesting, as it completely proves that the theory of the prosecution, that the boy's condition was solely due to his parents' unnatural treatment, was fully borne out by the history of the case.

### SCOTLAND.

A RATHER severe outbreak of small-pox is reported from the village of Baillieston, near Glasgow.

EDINBURGH still keeps remarkably free from zymotic diseases. During the week ending May 5th, the only deaths from this class of disease were five from whooping-cough. The death-rate from other diseases has been rising for some weeks past, owing to the large mortality from chest-diseases brought on by the continuance of cold weather.

#### A LATE SPRING.

It was reported, at a recent meeting of the Edinburgh Botanical Society, by Mr. Macnab, that vegetation in the Botanical Gardens was about three weeks behind, and that this had been the most backward spring recorded for twenty-eight years past. When the warm weather comes, we shall probably see such a rapid advance of vegetation as has hardly ever been seen before.

#### THE REGISTRAR-GENERAL'S REPORT.

THE returns of the Registrar-General for Scotland for the year 1876, issued a short time ago, were accompanied by the twelfth annual report on vaccination, applicable to the same year. With regard to the vaccination report, the Registrar-General remarks that the mortality from small-pox last year was comparatively trifling, but, he adds, "the recent epidemic of 1872-3, and the still more recent spread of the disease in some of the great towns of England, make it only too probable that Scotland may ere long suffer again from this loathsome pestilence". He accordingly makes some suggestions, for the purpose of diminishing the number of those who are at present allowed to escape

the provisions of the Vaccination Act. The best means for effecting this object, he considers to be the shortening of the period after birth during which parents and guardians may, without incurring any penalty, suffer the children for whom they are responsible to remain unvaccinated. At present, this period is in Scotland six months. Were the law assimilated to that of England, and the period limited to three months, the object in view would probably be arrived at; and there is no reason to believe that medical men in general would have any objection to the change. In the general report, it was shown that the birth-rate of 1876 has been unusually high, while the death-rate has been the lowest experienced since 1861, and far within the average rate of the last ten years. The natural increase of the population of Scotland must, during 1876, have been very great, and the frequency of marriages during the last five years renders it probable that this increase will be next year sustained. Of the births, 10,871, or 8.6 per cent. of the whole, were illegitimate; the rate of illegitimacy being highest in the county of Elgin, where 17.5 per cent. of all the births came under this head; and lowest in Ross and Cromarty and Shetland, where less than 5 per cent. were illegitimate. For every 100 female births, there were 105 male births, the preponderance being most marked in the group of insular rural districts, where 1.103 boys were born for every girl. There is reason for believing that, during the last few years, the preponderance of male births over female births, among the Scottish Islanders, has tended to compensate for the disproportionate numbers of males and females living in the insular rural districts at last census. Births were most numerous in May, least in December. Of the deaths, it is remarked that the deaths from epidemic diseases were unusually low, both in large towns and in the country districts. The total deaths in February averaged 242 *per diem*, against 166 *per diem* in October. In every one of the eight principal towns, except Perth, where there is a slight increase, the mortality was much lower than usual; and the deaths from diseases of the zymotic class in these towns constituted only 17.92 per cent. of the whole—an unprecedentedly low figure. All the calculations are based on an estimate of the population of Scotland in the middle of 1876 at 3,527,811.

#### EDINBURGH BOTANICAL SOCIETY.

At a recent meeting of the Edinburgh Botanical Society, Sir Wyville Thomson gave the general results of observations made by him in regard to the character of the vegetation of Southern Patagonia. The vegetation of that region was the most curious he had seen. It was impossible to penetrate into the country at most of the landing points, on account of the dense wall of living vegetation which met them, and also of the endless expanse of dead and decomposing vegetable matter, into which one would every now and again sink up to the armpits. The general features of the vegetation were remarkably like those in the southern parts of Norway and Sweden, but there was a marked difference in species. He did not think the timber was of any value, as it was generally stunted.

#### THE PLEA OF INSANITY IN COURTS OF LAW.

IN his recent introductory lecture to a course on Mental Diseases, in the Glasgow Royal Infirmary School of Medicine, Dr. A. Robertson discussed, *inter alia*, medico-psychological evidence and the plea of insanity in courts of law. In relation to the latter question, it was stated that there had been a remarkable want of uniformity in the results where this plea had been advanced; that in cases seemingly parallel—so far as the evidences of mental unsoundness, or of the responsibility of the agents for their acts were concerned—the culprits had sometimes been found guilty and executed, and at other times held to be insane and committed to an asylum. This discrepancy was attributed largely to the difference in the tests of insanity propounded by the various judges in their charges to the juries. But while there had been this striking want of harmony among judicial deliverances, as recorded in the reports of the medico-legal trials of the country, there was, upon the whole, but more especially during late years, a marked change in the



character of these opinions, and now the diversity between them and the facts of psychology were much less than formerly. The *dicta* of different judges in several celebrated trials were quoted in proof of this statement. In the earlier periods, nothing but a total deprivation of reason was held to free from responsibility; partial insanity, in none of its forms, was any palliation. The Lord Justice-Clerk, in the cases of Macklin and Barr, who were tried for murder in May of last year, said, in speaking of the indications from which unsoundness of mind may be inferred: "At one time lawyers were apt to avoid all difficulty by inquiring whether the prisoner knew right from wrong; and as a point of fact, except in acute mania or idiocy, there are very few lunatics who do not know right from wrong, in the sense of being capable of forming and even acting on the distinction. Much unreasoning inhumanity had been the result of this unscientific maxim." The lecturer said that this was a great and important advance in forensic opinion; he was, however, unable to accept the test proposed by his lordship in place of the discarded one: "That soundness or unsoundness of mind was a fact which had to be judged, not as a question of law or of science, but on the ordinary rules which one applied in daily life; and if it turned out that a man was able to conduct himself with propriety in the ordinary relations of life, and was not excluded from the confidence of his fellow-men by reason of distrust of his sanity, they had advanced, not the whole journey, but nine-tenths of it towards their conclusions." It was held by the lecturer that this test failed to cover cases in which criminal acts were committed during sudden attacks of mania, to which persons who had been affected with sunstroke, or whose brains were otherwise enfeebled, were sometimes disposed; or those which were due to homicidal impulse; or such as were perpetrated while under the furor or in the peculiar automatic state which occasionally follows or takes the place of ordinary epileptic seizures: as in all these conditions it might be that the sufferers were usually quite fit for their occupations and were free from delusion, though in the paroxysms they were really irresponsible for their acts. In his opinion, there was no general test applicable to all cases, and that it would be more correct—more in accordance with the facts of nature—to avoid laying down definite criteria, and simply to hold, unless proof can be submitted that the mind is in a state of disease, or was so at the time of the alleged crime, to which that crime may be fairly attributed, that the plea of insanity should not be sustained, and, consequently, that the accused is a responsible agent. What that proof should be could not be stated, as it must vary according to the distinctive characters of different cases.

## IRELAND.

THE mortality in Dublin for the week ending May 5th represents an annual death-rate of 35.2 per 1,000. Zymotic diseases caused the large number of 42 deaths, one half of which resulted from measles, a bad type of which has been prevalent in Dublin for the last few weeks.

### BELFAST ROYAL HOSPITAL.

THE Coulter Exhibition, value £20, has been awarded to Mr. J. Collier; and the Malcolm Exhibition, consisting of two prizes—£12 and £8—has been divided between Mr. James H. Gibson and Mr. Isaac McLearn.

### COOMBE LYING-IN HOSPITAL, DUBLIN.

STEPS having recently been taken, owing to the liberality of the Guinness family, to make this institution contribute more largely than heretofore to the demands made upon it, the hospital has been enlarged and extended, and, on Saturday, the 12th instant, it was formally opened by his Grace the Duke of Marlborough, Lord-Lieutenant of Ireland. The new institution is fifty-six feet high, fifty-eight feet deep, and seventy-nine feet wide, and, on a tablet placed on the front of the building, bears an inscription, stating that the hospital was founded in 1821 by Mrs. Margaret Boyle and reconstructed in 1877. Upon the

ground-floor are the board-room and offices of the master, assistant-master, and secretary, porter's room, etc.; on the second-floor are situated three wards, called "The Alexandra", "The Lady Olive", and "The Guinness"; on the third storey are the convalescent wards. The wards are cheerful, airy, well proportioned, admirably lighted and ventilated, being in every way complete for the purposes required. The various apartments and wards having been inspected by the Duke and Duchess of Marlborough, the ceremony of formally opening the hospital was proceeded with in the "Lady Olive Ward", when, the chair having been taken by the Lord Mayor, an address, engrossed and illuminated, was presented to his Excellency, in which, having alluded to the urgent necessity for enlarging the hospital, the previous buildings having been old, incommodious, and unsuitable in other respects for the purposes to which they were applied, the governors thanked his Grace for reopening the institution, feeling satisfied that the objects of the charity met with his cordial approval. The Lord-Lieutenant, in his reply, said that it afforded him much pleasure to be present on the reopening of a most valuable institution, one which had for its object the shelter and protection of those who are specially in need of help, and which, from the resources at its command, and from being under the guidance and care of practitioners of such eminence as their present master, was enabled to afford to patients within its walls the medical assistance they could not otherwise obtain. Various resolutions having been passed, including one of thanks to Sir Arthur E. Guinness, Bart., M.P., for his munificence in the re-erection of the main building, thus completing the design of his late father, the proceedings terminated.

### BELFAST BRANCH OF THE ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

AT the quarterly meeting of the members of this society recently held in Belfast, several applications for relief were submitted for consideration. The annual meeting of the Society will be held in Dublin next month, at which the funds available are distributed. Seven cases were considered suitable for recommendation, all the applicants being widows of deceased practitioners.

### SANITATION IN IRELAND.

IN the Report of the Local Government and Taxation of Towns Inquiry Commission (Ireland) recently published, the Commissioners state that considerable improvements in the sanitary condition of the towns' population have undoubtedly been effected in some places since the county was divided into urban and rural sanitary districts by the Public Health Act of 1874; but that the evidence taken by them in the several towns included in the report will show that, while in many of them much has been done, far more still remains to be done, and it is impossible to contend that in any one of them have the powers of the sanitary authority been so exercised as to leave little room for further improvement. This, however, they observe it would be most unreasonable to expect, when it is borne in mind that the Act of 1874 has been barely two years in operation, and that the subject of it is one upon which the population everywhere, and not least in Ireland, most require education. In some instances (Ennis, Bray, and Queenstown more especially), revelations of a very startling nature were brought before them, indicating an almost culpable degree of apathy on the part alike of the sanitary authority and the inhabitants. They also refer to flagrant cases of neglect, where the most necessary sanitary reforms were avowedly resisted by interested owners, who were themselves members of the sanitary authority, on the ground that to carry them out would amount to a virtual confiscation of their property. Whether it is desirable to maintain the present system, by which the dispensary medical officer is as such the sanitary officer for the district of which he is in charge, is, they consider, deserving of consideration. The addition to his salary is usually very trifling; the work, if properly carried out, is of a very onerous and irksome character; the direct communication between him and the sanitary authority is absolutely *nil*, and between him and the executive sanitary officer usually



of a most casual character, and thus misunderstandings continually arise which might be readily removed by more direct personal intercourse between the sanitary officer and his employers. In name, there is generally a consulting sanitary officer, at a ludicrously small salary, but he is rarely consulted, and, except at Belfast, it is a perfect misnomer. At Cork, some material evidence was given bearing on this matter; and the opinion expressed by Alderman Nagle in favour of the appointment of one medical officer sufficiently well paid to enable him to devote his whole time to the duties of his office, thus rendering him independent of, and indeed debarring him from, private practice, has much to recommend it. Sanitary districts for the appointment of such an officer might, the Commissioners believe, be advantageously formed in Ireland, as in England, where the system, wherever it has been tried, has, they understand, worked successfully. The larger towns, such as Belfast, Cork, etc., might each support their own officer, and it should be a recognised part of his duty to attend, at least periodically, the meetings of the sanitary authority.

#### GENERAL MEDICAL COUNCIL.

DR. ALFRED HUDSON, Ex-President of the King and Queen's College of Physicians in Ireland, late Physician to the Meath Hospital, and author of the well-known *Lectures on the Study of Fever*, has been appointed by the Crown to the seat on the General Medical Council vacated by the resignation, through ill health, of Dr. Stokes. This appointment will be received with general satisfaction by the profession throughout Ireland. Dr. Hudson took his seat at the Council for the first time on Wednesday.

#### PRACTICAL PHYSIOLOGY.

THE consideration, by the Council of the Royal College of Surgeons of Ireland, of the recommendation of the teachers of physiology in the non-academical schools of medicine in Dublin, which we announced a fortnight ago, has been deferred for the present. We understand that, when the subject comes again before the Council, the legality of also recognising certificates of attendance on a course of operative surgery, in lieu of one of the three courses of surgery now required from candidates for the letters testimonial, will likewise be considered. Apart from the manifest advisability of adopting both courses, we fail to see how the Council can logically avoid recognising certificates of either practical physiology or of operative surgery, as at present, and indeed for some time back, their examinations have embraced both these subjects; so that virtually the College is in the embarrassing position of having held examinations which have been beyond their teaching.

#### OVARIOTOMY AT THE ROTUNDA.

THE Master, Dr. Lombe Atthill, performed the operation of ovariectomy on an unmarried girl, aged 19, on Wednesday week. The patient, who was a strong healthy-looking young countrywoman, had been tapped four times previously. The cyst was unilocular and free from adhesions, and had a long pedicle. Mr. Ormsby administered ether with his new inhaler (*JOURNAL*, April 14th, 1877), which acted most satisfactorily. Barely three ounces of ether were consumed during the operation, which lasted a little over an hour.

#### MORE TRAFFIC IN DISEASED MEAT.

THE collapse of justice which we alluded to last week in the case of the prosecution of an official of the North Dublin Union for selling diseased meat seems, as might have been expected, to have given an impetus to this abominable form of trading under the apparent sanction of nominally sanitary (?) authorities. In the butcher's yard in which the carcass of the diseased cow was previously discovered, one of the metropolitan sanitary police and the sanitary inspector found, last Saturday, the carcass of a cow which the same butcher who had bought the former diseased animal from the valuer of the union was in the act of "dressing". The constable saw that the lungs of the animal were diseased, and sent for Dr. Cameron, the medical officer of

health, who pronounced the animal unfit for human food. The cow had been slaughtered by order of the veterinary inspector, in consequence of having pleuro-pneumonia. As we stated last week, this veterinary surgeon believes that the flesh of such an animal is fit for human food; and considers that he and members of his profession are more competent persons to give an opinion as to the fitness or otherwise of the flesh of an animal for food, even during its life, than medical experts are who have examined the flesh after death. The case was brought before one of the police magistrates, on the application by the Solicitor to the Corporation on behalf of the Public Health Committee for an order for the destruction of the carcass. Dr. Cameron deposed that the animal was in an advanced stage of contagious pleuro-pneumonia; that one lung was completely solidified and full of pus; and that the flesh was, in his opinion, unsound and unfit for human food. The magistrate granted the order sought.

#### GENERAL EDUCATION OF MEDICAL STUDENTS.

THE Rev. Dr. Haughton's letter on the above subject, which we published last week, has evoked a reply from a member of the University Senate, who says:

"I cannot at all regard the actual practice of the University of Dublin as in any way a perfect model, and to this I wish to call attention.

"A student on entering the University is allowed to begin his medical course forthwith, and to pursue his arts and medical studies together. Now, in my opinion, it is simply preposterous to imagine that any one could do justice to both.....Most students, very naturally, show a preference for the professional studies. The arts course is for the greater part of the year altogether neglected, and it is only when overshadowed by the terror of an 'ordinary' that the student quits the dissecting-room, and betakes himself to a 'grinder', who in a fortnight or so manages to pass him on the maximum of marks. Then the University allows the professional student to omit some subjects from his arts examinations altogether; and, further, it is commonly reported, that not only is a medical student allowed to pass in fewer subjects, but actually on a lower average.....It is of course a very desirable thing that every physician should be a well educated gentleman, and if this were the only object of preliminary education, it would be quite immaterial at what period of his curriculum his general education were acquired. But the real object of a preliminary education is to fit the student for his professional studies; and that this is the object recognised by the British Medical Council, is clear from the wording of the minute to which Professor Haughton's letter is a reply. No doubt, the standard ought to be such as to require a proficiency in those subjects which tradition considers every school-boy of sixteen or seventeen ought to be acquainted with. But the scope of an adequate preliminary education ought to be something very different from merely this. The study of disease can be undertaken scientifically only by those who have some knowledge of the normal structure and functions of the body—in other words, of anatomy and physiology—which subjects form the natural basis of the professional curriculum.

"That the University of Dublin does not adequately attain, by her system, the object sought is, I think, self-evident. If, therefore, we admit that such an object is desirable, ought we not to attempt some reform? It will, no doubt, be levelling up, and, therefore, a difficult task; but surely not too difficult to be faced, if we really have the interests of education at heart."

IIASTINGS.—There were 971 births in 1876, against 897 in 1875; but the deaths were less numerous than in 1875, as there were 614 in that year, against 563 in 1876. Mr. Asheden calculated the death-rate to have been 16.08 and the birth-rate 27.74 per 1,000 inhabitants in 1876. There were 232 deaths under five years of age in 1874, whereas only 186 died at that age-period in 1875, and 162 in 1876. The deaths from zymotic diseases were less than usual, having been only 33, against 39 in the year before, owing to a diminution in the number of deaths from whooping-cough and diarrhoea. The disinfecting apparatus and conveyance are in use, and a fair amount of sanitary work has been carried out. There were several cases of abstraction of cream from milk reported, and also three samples of well-water which were unfit for use.



## THE FACTORY BILL.

THE Bill for Consolidating and Amending the Factory and Workshops Acts, introduced by the Home Secretary, is a very comprehensive measure. No fewer than fifteen statutes now in force connected with the regulation of the employment of women, young persons, and children in what is technically known as a "factory" or "workshop", along with Acts dealing with subjects closely connected with, or of the same character, are consolidated.

For the benefit of those not immediately acquainted with the subject, we will, before treating of the provisions of the Bill, refer to the practical analysis of the Surgical Certificate, made by the President of the Certifying Surgeons' Association, a paper which he read before the Social Science Congress last year. The opinion of the surgeon is sought relative "to the ordinary strength and appearance" of the person examined corresponding with the assumed age. Dismissing from view the opinion as to age, of which the "school-book" will in future be sufficient proof, a question is placed before him which naturally comes within the compass of duty of a medical man considered as a student of physiology, of normal development and the departures from it; an instructed judgment is asked whether the child or young person legally qualified by reason of age is also possessed of the "ordinary strength" belonging to the age, and physically competent to perform the task allotted to him. For, if the factory laws are to be protective of the weak, an assurance of the possession of the "ordinary strength" ought to be obtained. The requirement of a recorded opinion on this point is, however, only a prelude in the certificate to queries of a still more pronounced medical character; viz., as to freedom from disease and bodily infirmity. Everyone will allow that "freedom from disease and bodily infirmity" is a most essential prerequisite for work. To put a child to work when suffering from disease producing pain or wasting, or in any way aggravated by labour, is an act of cruelty which no well governed country can tolerate. The same may be said of contagious maladies, even of such as, for example, skin-eruptions, unattended by suffering of importance; for, with respect to these, apart from the evils attaching to the subject of disease himself, there is the greater evil of transmission of disease to others. And, with respect to this class of maladies, a second duty is incumbent on the state; viz., the protection from infection of individuals associated in the operations of manufactures.

Lastly, "bodily infirmity" stands on the same footing as the existence of bodily disease. It includes deformity, infirmity of development, whether of body or mind, and infirmity the result of previous disease. These are the essential parts of a certificate for work, if such certificate be to serve as a protection against the imposition of undue and unfit labour, and they are rightly referred to the opinions of competent medical men.

The last clause of the certificate to be noted is that requiring the statement of the surgeon that the child or young person examined "is not incapacitated" by any previously mentioned disqualification "from working daily in the factory whereat he is entered for the number of hours allowed by the Act". The opinion asked for involves three separate considerations: 1. That the child or young person is capable of pursuing the work he undertakes day by day; 2. That he can perform the sort of work carried on in a particular factory or workshop; 3. That he can perform his task during the hours legally allotted him for labour. The clause, thus interpreted, places in the hands of the examining officer a discretionary power in granting or refusing a certificate according as he estimates the physical powers of the child or young person examined to be equal or not to daily work, to a particular kind of work, and to the legitimate hours of work: a discretionary function, if less directly, is equally logically deduced from the foregoing part of the certificate referring to the absence of incapacitating disease and infirmity. And, in our opinion, it is a power not only to be maintained unimpaired, but extended as we suggest when speaking of Clauses 27 and 28. The possible and occasional abuse of it by injudicious men affords no solid argument against its utility.

We hold that certifying surgeons should be able to refuse the requisite certificate for work, not only by reason of absolutely disqualifying disease and infirmity, but also by relatively incapacitating disease and infirmity; that is, relatively to the sort of work to be undertaken and its duration. The nature of the labour pursued in different manufactures, and often even within the walls of the same factory, is very varied in the amount of physical exertion and endurance required; and with this fact may be conjoined the equally transparent truth, that a child or young person capable of carrying on, without detriment to

his health, one sort of labour may be quite unequal to another. We do not know whether lawyers might find in the wording of the certificate now used that the certifying surgeon has the discretionary power to refuse to "pass" for one sort of labour and to give permission to carry on another; but, whether this power does or does not already exist, we would strongly urge that the examining officer should have some power in the way we shall point out when speaking of Clause 27, not only for the health interests of the children, but also for the pecuniary advantage of the parents.

A surgeon, for example, might say, "I cannot certify to the capacity of this child for every description of labour carried on in this manufactory; and, if I am to have no alternative and be debarred from using my discretion based upon a knowledge of the nature of the several manufacturing processes in operation, and from designating some one or more of them as suitable, or if I have no opportunity of seeing that the labour is not injurious to, and the power of 'stopping' him if it be, allotted to me, I must decline altogether, as a conscientious man, to grant the sought-for permission to work, and, by so doing, inflict in consequence a needless injury on the wage-earning class." On the other hand, if what we have mentioned were entrusted to him, he could grant his certificate with much greater satisfaction to himself. And, although this discretionary power in the hands of the certifying surgeon follows as a legitimate deduction from the consideration of the duties that officer is called upon to perform, and although common sense sanctions it, it may be objected that it places the disposal of the child or young person's labour too much in the doctor's hands, and also interferes with the private rights of the parents of children. This latter part of the objection needs little discussion. The private rights are already surrendered when a child or young person is presented for employment; or, in other words, they are subordinated to the public good and to the opinion of the medical officer whether it shall or shall not be permitted to work. The other portion of the objection has also really little weight; for be it noted that the discretionary power is only required to be exercised in those exceptional cases when the question arises whether the child or young person can be certified *at all*, on account of some measure of infirmity. Moreover, in exercising this power, the judicious medical officer would take into consultation with him the manufacturer or his manager as best acquainted with the conditions of labour.

Some deference to opinion must have its sway on both sides, and an act of defiance ought not to happen; but, even should it perchance do so, it is to be remembered that the surgeon is a responsible officer, and must be prepared to justify his conduct as well to the factory inspector as to the public.

We propose now to consider separately those of the provisions of the new Bill which affect the duties of the certifying surgeon, pointing out in what way we believe they may be practically improved, at the same time giving our reasons in support of our opinions. Clause 25 enacts—

"In a factory, a child or young person under the age of sixteen years shall not be employed for more than seven, or, if the certifying surgeon for the district reside more than three miles from the factory, thirteen working days, unless the occupier of it have obtained a certificate, in the prescribed form, of the fitness of such child or young person in that factory. A certificate of fitness for employment, for the purposes of this Act, shall be granted by the certifying surgeon for the district, and shall be to the effect that he is satisfied, by the production of a certificate of birth or otherwise, that such child or young person has been personally examined by him and is not incapacitated by disease or bodily infirmity for working daily for the time allowed by law in the factory named in the certificate."

We would strongly urge that the word "workshop" should be inserted after that of "factory" in this clause. We believe that such a step would receive the cordial support of all who value the health of those employed who are not sufficiently free agents to take care of it for themselves; and that it would also be regarded as an equitable measure; for it is a well known fact that a very large proportion of those now rejected by the certifying surgeons as unfit for factory work readily find employment in the workshops, and thus subject the occupiers of factories to unfair competition in the labour market. Moreover—to use the words of the Royal Commissioners—"an invidious anomaly and a very fertile source of evasion of the law would thus be effectually removed". Again, why should some kinds of "workshops", such as bookbinding-shops, printing-offices, etc., need to have their hands "passed", while "workshops" where far more laborious and unhealthy processes are carried on, such as nail-shops, rope-walks, etc., do not?

Looking, moreover, at the principle of factory legislation generally, the first conclusion is, that it should be applied equally, unless some



special grounds of exemption can be shown. Such grounds, we confidently assert, cannot be shown in the case of workshops; on the contrary, speaking generally, more irregularity and oppression in work are likely in workshops than in factories. Workshops often compete with factories, and, to enable them to do so, as they necessarily stand at a disadvantage by reason of less capital and less means of industrial organisation, they must secure cheap labour and get the most out of those whom they employ. For the same reason, structures and fittings are likely to be inferior in sanitary details. Workshops, in fact, may be held generally to demand even more complete medical supervision than factories. The evidence taken by the Royal Commissioners corroborates this statement. For instance, one witness states (*Reports*, vol. i, p. 150, 19A): "I have myself seen more than once the hands of gloves—in one instance, nine in a cottage—covered with itch making gloves, into which the children, whilst employed, would have to put their fingers, and thus have the contagion. The system of learners entails the necessity of many children being taught in one room. Thus from three to ten, or even fifteen children are crowded into a small room. Of course, when any infectious or contagious disease prevails, these rooms become, as it were, focuses from whence the disease is readily carried into all their homes and spread all round."

Dr. Littlejohn, the medical officer of health for Edinburgh, remarked (*Report*, vol. ii, c. 19, 767): "That it had been clearly proved that work, especially tailor work, done in houses when epidemics were raging spread the disease, and it was not uncommon to have garments made up in houses where fever was raging; and, not very long ago, when scarlet fever occurred in New Town—the best quarters in Edinburgh—it could be explained in no other way how it had got there but by the garments made up in the fever hot-beds of the poorer classes."

A statement to the same effect was made by the Secretary of the National Association of Tailors at a conference of trade societies, attended by eighty-nine delegates, held in Manchester in February last. He spoke of the danger of allowing the work to be taken to the homes of the men, which were often the haunts of fever and disease. He argued that the employers ought to find healthy workshops for the men; and that the question was one which Parliament should keep in view in the forthcoming factory legislation.

As a corollary to the foregoing remarks, Clause 26 should be struck out, which says: "In order to enable occupiers of workshops to better secure the observance of this Act, and prevent the employment in their workshops of children and young persons under the age of sixteen years who are unfitted for that employment, an occupier of a workshop is hereby authorised to obtain, if he think fit, from the certifying surgeon of the district a certificate of the fitness of children and young persons under the age of sixteen years for employment in his workshop in like manner as if that workshop were a factory, and the certifying surgeon shall examine the children and young persons and grant certificates accordingly."

We are unable to see any utility in the primary insertion of this clause, except the reasoning by analogy of the expediency of such an examination.

Clause 27 enacts: "Where an inspector is of opinion that any child or young person under the age of sixteen years is, by disease or bodily infirmity, incapacitated for working daily for the time allowed by the law in the factory or workshop in which he is employed, he may serve a written notice thereof on the occupier of the factory or workshop, and the occupier shall not continue, for more than seven days after the service of such notice, to employ such child or young person, notwithstanding a certificate of fitness has been previously obtained for such child or young person, unless the certifying surgeon for the district have, after the service of the notice, personally examined such child or young person, and has certified that such child or young person is not so incapacitated as aforesaid."

For the above clause we would recommend the substitution of one to the following effect: "That the certifying surgeon be empowered to visit any factory or workshop in his district and re-examine any child or young person who appears to him to be unfit for the work he is at the time of visit engaged upon, and, if he see sufficient reasons, refuse to grant a fresh certificate."

The inspectors having very large districts allotted to them, it is only once or twice in a year, under ordinary circumstances, that they are able to visit the factories under their supervision. The inspectors of factories admit that "large numbers of establishments under inspection are never visited at all during the year; in fact, one-half visited is considered fair work". At page 12 of the *Factory Inspectors' Report* for the half-year ending October 1872, it is stated that Mr. Redgrave had 63,431 workshops in his division, out of which the whole of his staff, during the year ending the same date, only visited 17,201, leaving 46,230 unvisited (*Report*, vol. ii, c. 488). The certifying surgeons, on

the other hand, constitute a special class of sanitary officers, residing within the town or comparatively small area committed to their charge; and in the performance of their duties, have constantly to visit a greater or less number, sometimes nearly the whole of the places therein situated. Consequently, they not only know well the positions, character, and structural conditions of the manufactories, but also are well versed in the different processes carried on, and are, therefore, more fitting agents to determine how far, or not, a child or young person is suffering from the work at which it is being employed. The system of contracts would relieve the employer from any additional expense. Equity alone to the child or young person and employer would confirm the appointment of the certifying surgeon.

Then, again, the visits of the inspectors only taking place at rare intervals, their advent is made known and due preparations are made to receive them. The visits of the certifying surgeon, on the other hand, are frequent, and he has greater opportunities and facilities for carrying out this duty.

In addition to all this, if the certifying surgeon had some control—as indeed he should have—over a child or young person after he had given him the certificate of fitness for employment, and had the power of "stopping" him if he found the work on which he was engaged to be injurious to his health, he would probably give the certificate to some to whom he might not be inclined to give it under existing circumstances. The result would be, that, if a badly nourished or weakly child were allowed to enter a factory or workshop, and if there were a chance of his removal if the work were too hard for him, his parents or guardians would, for their own interests, take greater care of him, in the shape of food, etc., to keep him at work, and the employer would be more careful as to the character of the work on which he was engaged.

Clause 28 enacts that "all factories and workshops in the occupation of the same occupier, and in the district of the same certifying surgeon, or any of them, may be named in the certificate of fitness for employment, if the surgeon is of opinion that he can truly give the certificate for employment therein".

For this clause we would substitute the following: "In all factories or workshops, each child or young person shall undergo a fresh examination and receive a fresh certificate of fitness for employment as often as it changes the place of employment." The propriety of such an alteration would seem to be specially shown by the compulsory production of a fresh certificate of fitness when a child becomes a young person.

In a former number (October 28th, 1876), we remarked that, "as an essential condition to the complete carrying out of the intention of the Factory Acts, the certifying surgeons contend, after many years' practical experience, that not only is a medical examination and certificate necessary at each factory or workshop, but, in addition, at each hiring at the same factory or workshop"; for symptoms of disease might at any time present themselves, and be rightly prohibitive of work. Clause 28, however, as it stands, suggests a practice which involves an absurd principle—once qualified always qualified; as though the human machine must ever be in working order, and not subject to the morbid results that specially follow upon factory labour.

Even prisoners in gaol are examined, not only before being put to hard labour, but, in addition, once a month, to ascertain that the fitness continues. We can, however, in addition to all this, point out an equal, if not a much greater, necessity for the re-examination of all children and young persons. A child or young person may be passed at a factory, may leave and again return to the same factory; in the interim, he may have contracted an infectious or contagious disease, and thus contaminate all his fellow-workers. Again, a child or young person may be excluded from one factory for such a cause as the above, and may straightway go to another, and, without a fresh examination, obtain admission to it. For evidence in support of this statement, see the *JOURNAL* for October 28th, 1876.

Important as this is in large factories, surely it is doubly important in the frequently overcrowded and badly ventilated workshops, many of which are at the employers' own houses, where infection or contagion may as easily be carried into their own families as we have seen to the public outside; for, say the Royal Commissioners in their *Report* (vol. i, p. 72, c. 793), "nowhere is contagion more likely to be disastrous than in crowded places of work".

The clause goes on to state: "The certificate of birth (which may be produced to a certifying surgeon) shall either be a certified copy of the entry in the Register of Births, kept in pursuance of the Acts relating to the registration of births, of the birth of the child or young person (whether such copy be obtained in pursuance of the Elementary Education Act, 1876, or otherwise), or be a certificate from a local authority within the meaning of the Elementary Education Act, 1876,



to the effect that it appears, from the returns transmitted to such authority, in pursuance of the said Act, by the registrar of births and deaths, that the child was born at the date named in the certificate. Where a certificate of fitness for employment is to the effect that the certifying surgeon has been satisfied of the age of a child or young person otherwise than by the production of a certificate of birth, an inspector may, by notice in writing, annul the surgeon's certificate, if he have reasonable cause to believe that the real age of the child or young person named in it is less than that mentioned in the certificate, and thereupon that certificate shall be of no avail for the purposes of this Act."

This clause is based upon Section 26 of the Elementary Education Act, 1876, and the regulations issued by the educational department pursuant to the powers granted to it by Section 24 of the Elementary Education Act. "On and after January 1st, 1878, the education department will not pay a grant for any child for whom what is to be called a 'child's school-book' is not produced by the managers. This 'school-book' will also be a 'labour pass' (Regulation No. 20). It contains—1. A certificate of the date of birth; 2. A certificate of attendance during each year after the age of five; 3. A certificate of educational proficiency.

The first of these certificates is the one to which the Factory Bill makes reference. The Elementary Education Act, 1876, and the education department for its administration, provide two modes of obtaining the certificate of birth—1. The certificate may be obtained for an individual child from a registrar or superintendent-registrar at a fee not to exceed sixpence; 2. The Local Educational Authority (School Board or School Attendance Committee, as the case may be) may obtain dates of birth of children in the education district from the registrar or superintendent-registrar, at a fee of not more than twopence per head. The Local Educational Authority will then supply the dates of birth for the "school-books" to the managers of schools, parents, employers of labour, and the like, at a fee of not more than fourpence per child.

The foregoing are the provisions of the Act and the Regulations. Every child who attends school—and all (practically) will do so under the new Educational Act—will necessarily have a certified copy of the date of birth entered in its "school-book". When a child leaves school for employment, it receives this "school-book", which readily furnishes to employers of labour, factory inspectors, certifying surgeons, etc., proof that the child satisfies the conditions of age, school-attendance, and educational proficiency which entitle it to be employed, subject, of course, to a favourable decision as to its physical qualifications in regulated occupations. Practically speaking, the recommendation of the Royal Commissioners expressed in their *Report* (vol. i, p. 69, c. 183)—"That a certificate of birth to be a condition of employment"—has been adopted, and a very good opportunity for deception has been effectually removed from the applicants.

Clause 30 enacts: "That when a certifying surgeon receives, in pursuance of this Act, notice of an accident in a factory or workshop, he shall [send a notice to an inspector by the first post after the receipt thereof, and then] with the least possible delay proceed to the factory or workshop, and make a full investigation as to the nature and cause of the death or injury caused by that accident; and shall, within twenty-four hours, send to the inspector a report thereof."

We would suggest the omission of the words enclosed within brackets; for we fail to see of what advantage it will be to the inspector, or any one else, to have immediate notice of the accident, when he is to have an official report on it within the first twenty-four hours.

Lastly, Clause 67 enacts: "With respect to the fees to be paid to certifying surgeons, in respect of the examination of and grant of certificates of fitness for employment for children and young persons in factories or workshops, the following provisions shall have effect:

"1. The occupier may agree with the certifying surgeon as to the amount of such fees.

"2. In the absence of any such agreement, the fees shall be those named in the following scale:

"a. When the examination is at a factory or workshop, not exceeding one mile from the surgeon's residence—2s. 6d. for each visit, and 6d. for each person after the first five examined at that visit.

"b. When the examination is at a factory or workshop, more than one mile from the surgeon's residence—the above fees, and an additional 6d. for each complete half-mile over and above the mile.

"c. When the examination is not at the factory or workshop, but at the residence of the surgeon, or at some place, day, or hour appointed by the surgeon for the purpose, and published in the prescribed manner—6d. for each person examined."

With regard to Section *a*, we think that 2s. 6d. for each visit, and 6d. each certificate after the first one, is little enough, considering the time taken up by such examination.

With regard to Section *b*, we think the fees we have mentioned, and 6d. for each half mile over and above the mile, would not be unreasonable. If a certifying surgeon had to hire a cab to do the work, it would barely pay the cab-hire. The word "complete" should be struck out, as unnecessary and likely to occasion disputes.

With regard to the proposal in Section *c*, that a child or young person may be brought to the surgeon's own house, we would express our most unqualified disapprobation.

Great consideration, responsibility, judgment, and sacrifice of time, on the part of the certifying surgeons, are demanded in honestly and judiciously testifying to the particulars required in the certificates; and we see no reason why a fee, which is unrecognised in the profession—one which no Member of Parliament would think of giving to any of his domestics for the most menial act—should be offered to members of the medical profession. Few veterinary surgeons will give a certificate as to the soundness of a horse under a fee of 10s. 6d. The Factory Act of 1867 brought a large number of smaller works under inspection. The Home Secretary then authorised: "In works where there are never more than five protected persons employed, the said young persons may be examined at the residence of the certifying surgeon, for which he is to receive a fee of 6d. a certificate, and no more, upon condition that a responsible person takes the certificate-book and accompanies the young person to the residence of the certifying surgeon at a time convenient to him."

This is the first time we hear of the sixpenny certificate. The fee used to be 2s. 6d. for a visit at which five might be examined; but if there were only one, the fee was the same. Section *a*, however, proposes to raise the number from five, as at present, to ten; and also to require the certifying surgeon to appoint some regular time and place for the purpose. It would appear that, when the Home Secretary authorised the sixpenny certificate at the surgeon's residence, the condition was "a responsible person was to accompany the applicant at a time convenient to the surgeon". The present section says nothing about the responsible person, and, moreover, requires the time and place to be appointed, expecting of course the surgeon to be always punctual; and thus it acts on the wrong assumption that a professional man's time is always his own.

That the working of this section would be unsatisfactory to all concerned is only too evident: unsatisfactory to the employed, in having frequently to wait for the certifying surgeon, and thus lose so much of their day's work; unsatisfactory to the inspectors, as to the number of complaints that would naturally be made to them by both employers and employed; unsatisfactory to the certifying surgeons, inasmuch as their time being never their own, they could rarely or never keep the appointments as they would wish.

In the long run, this arrangement would prove a much greater source of annoyance to all concerned than the payment of a small yearly fee to have the examination at the works. We regret to have to supplement this with adding, that many of the applicants are not only filthy in their habits and vile in their language, but, in addition, injure the surgeon's property, while waiting to see him, ten times the value of the certificate; to say nothing of the time taken up, and the insolence and abuse he receives if he should dare to refuse it; and at times they altogether forget to bring the sixpence.

The Factory Acts were called into existence to rescue the workers in factories, more especially the youthful ones and women, from physical suffering and degenerescence, disease and premature death, consequent upon overwork, prolonged hours of work, unhealthy places of work; and upon the employment of the too young, the diseased, and the deformed.

As a country foremost in factory legislation, we have the satisfaction of knowing that these Acts have already been productive of much good; and we earnestly trust that our legislators will think well whilst considering the chief sanitary provisions of the present Bill—we may add, profit by our remarks—and, at the same time, bear in mind that, if factory legislation is still to be efficient towards the physical and moral well-being of those engaged in the various manufacturing processes of this pre-eminently manufacturing country, these provisions ought to be extended rather than lessened, lest there be a relapse into similar physical suffering and degradation for the remedy of which they were first called into existence—remembering, as they are bound, that the causes of ill-health among factory operatives are, if diminished in intensity, still of potent activity; and a grateful country will hereafter bear witness to the results of their labours.

THE Bedminster Guardians and Rural Sanitary Authority, Somersetshire, have unanimously resolved to appoint one Medical Officer of Health for the whole district, instead of eight District Medical Officers, as hitherto.



# PENALTY OF PRACTICE: THE HAWARDEN DIVORCE CASE.

*Court of Divorce, Westminster Hall, May 9th, 1877, before Mr. Justice Hannen and a Common Jury.*

FIELD v. FIELD AND MOFFAT.

DR. SPINKS and Mr. C. A. Middleton (instructed by Messrs. Duncan and Co., 45, Bloomsbury Square, London) appeared for the petitioner, and Mr. Torr, Q.C. (instructed by Mr. W. H. Churton, Chester), in the absence of Mr. McIntyre, for the co-respondent.

Dr. SPINKS, in opening the petitioner's case, stated that Mr. Field was a clerk in the National Debt Office, but had been valet for some years to Mr. W. E. Gladstone, M.P., at Hawarden. He was married to his wife in 1870, and in 1871 went to live at Hawarden. Dr. Moffat, the co-respondent, attended his wife during her confinement and up to the time he left Hawarden, in November 1873. He then went to live in London. In 1876, for the first time he was informed by his niece, Emily Smith, who had lived with his wife at Hawarden, as to a fact which tended to show she had committed adultery with Dr. Moffat, when he at once left her, and wrote to Dr. Moffat for an explanation, when he received from him certain letters which went to show that there was some truth in the charge.

EMILY SMITH was called, and said: I am a niece of the petitioner, and went to live with Mrs. Field at Hawarden in 1872, and remained there till the latter end of 1873. I noticed what I thought was an undue intimacy between Dr. Moffat and Mrs. Field; and upon one occasion, about May 1873, I went for Dr. Moffat to see Mrs. Field, as she said she was ill. Mrs. Wyke was then in the house. Dr. Moffat came, and after he had gone upstairs to see Mrs. Field, who was in bed, I became curious, took my boots off, and crept up stairs. Mrs. Field's bedroom door was open, and I looked between the doorpost and the door and saw Dr. Moffat throw himself on the bed. I saw no more, but came down stairs again to Mrs. Wyke, but did not tell her, nor did I tell any one about it till 1876, when I heard that Mr. Field had quarrelled with his wife. I never mentioned what I saw to Mrs. Field.

Cross-examined by Mr. TORR: I continued on terms of friendship with Mrs. Field. Mrs. Field told me she was fond of the doctor, and although I was twenty years of age I stopped with her, thought there was no harm, and did not tell my mother. Mrs. Field was very angry with me in consequence of a groom at the Castle, named Henry Stubbs, having come down to see me, and eventually I had to leave Hawarden in consequence.

Mr. FIELD, the petitioner, was called in support of his case, and the co-respondent's letters having been put in, that closed the petitioner's case.

Mr. TORR, Q.C., said he should call his witnesses first, and address the Court afterwards. He first called

SARAH WYKE, who said: I am a collier's wife, living at Chadsmore Cannock. I lived at Hawarden in the year 1873, and remember distinctly the occasion referred to by Emily Smith. I was sent for to be with Mrs. Field, who was very ill, suffering from flooding. I remember Dr. Moffat coming in and going upstairs. Emily Smith was then with me in the back kitchen. Dr. Moffat was upstairs with Mrs. Field about a quarter of an hour. I swear most positively that Emily Smith never left my presence the whole time Dr. Moffat was upstairs. She did not take her boots off and go upstairs. She never said a word to me about what she has stated to-day.

THOMAS BAILEY: I am a builder, living at Hawarden, and built the house occupied by Mr. and Mrs. Field. I have carefully examined the door of Mrs. Field's bedroom. It fastens with a latch, and there is no keyhole. Unless the door is three-parts open, nothing can be seen between the doorpost and the hinge of the door. When the door is three-parts open, there is then a space of two-sixteenths of an inch, by which it might be possible to see the foot of the bed, but certainly not any other part. The door opens to the bed.

THOMAS MOFFAT: I am a physician and surgeon, living at Hawarden. I am sixty-three years of age, have a wife and nine children living, and have been in practice at Hawarden for thirty-nine years. I was called in professionally to attend Mrs. Field at her confinement, in the year 1871. I attended her and her child, and prescribed for her husband up to the end of the year 1873, when they left Hawarden. I remember when I saw Mrs. Field in May 1873; Emily Smith came for

me, and I walked down to the house with my wife and daughter. I saw Mrs. Wyke in the house, but my wife remained in the garden and my daughter at the gate. I saw Mrs. Field in her bedroom upstairs. She was suffering from flooding, and complained of a pain at her heart. Thinking she had had a miscarriage, I made a careful external examination, and also examined her chest with a stethoscope. I swear most positively I did not get on the bed, nor was I guilty of the slightest act of familiarity towards her. I merely attended her in my professional capacity. I never committed adultery with Mrs. Field, and deny the charge most emphatically.

Cross-examined by Dr. SPINK: I was never personally charged with adultery myself before my letters were written. Mrs. Field had told me in 1872 of my son having been at her house, and of the rumour of impropriety having taken place between them. I wrote the letters to Mr. Field under the impression that my son was charged, and not myself. I was anxious to avoid the name of Moffat appearing in Court, as I thought it might do me harm. I swear most positively that I never walked a yard with the woman in my life, and never sat down in her house but once, and never went to her house except professionally.

Mr. TORR, Q.C., then addressed the jury in a most able and impassioned speech, alluding to the serious nature of the charge against Dr. Moffat, an old man sixty-three years of age, with a wife and family, and who for forty years had practised his profession without a stain upon his reputation. He commented in strong terms on Emily Smith's story, and on the disgusting way in which she, supposed to be a pure girl of twenty, from motives of prurient curiosity, attempted to see what no respectable girl would have dreamt of seeing. He alluded the weakness of the petitioner's case, and of the most miserable attempt by the petitioner to make money out of his wife.

Dr. SPINKS having replied, and the judge having summed up, the jury, after having retired, found that the co-respondent had *not* been guilty of adultery with the respondent.

As soon as the result became generally known at Hawarden, on Thursday morning, there were but very few houses that did not display some token of gladness. Upon the arrival of the carriage containing Dr. and Mrs. Moffat, the horse was at once taken out, ropes were affixed, and many willing hands at once drew the vehicle to the Institute, where the band of the 2nd Flintshire Volunteers were in waiting, and at once struck up "Auld Lang Syne", and at its close three hearty and prolonged cheers were given for Dr. and Mrs. Moffat. Preceded by the band playing a lively air, the carriage was drawn in triumph through the village to the foundry, and back to Fern Bank, the doctor's residence, the occupants being everywhere greeted with hearty cheers. Both the doctor and Mrs. Moffat apparently felt the expressions of kind feeling and sympathy and the reception which had been given them most deeply.

## UNIVERSITY OF LONDON.

THE following is the text of the disclaimer made by Earl Granville at the termination of Mr. Lowe's speech on Presentation Day. We gladly give it insertion, because the argument said by his lordship to have been used in the discussion on the question of medical degrees for women would have implied a peculiarly ungenerous feeling upon the part of the medical graduates who might have brought it forward. And, in point of fact, it never was used at all, or even adverted to in any way. The truth is, that medical men dislike the idea that women should be admitted to the medical profession *only*; though, when the Church, the Bar, the Houses of Parliament, and all professions are thrown open to women, the doctors will be found to welcome them as sister-practitioners with as much warmth as the male members of the other professions will evince in receiving women into their ranks. The opening of all professions to women will undoubtedly be a great experiment in social matters, but will, in all probability, be made not many years hence.

Earl Granville's explanation was as follows: "He had referred to the argument that the admission of women to medical degrees would cause pecuniary injury to medical men who had obtained their degrees. It was an undoubted fact that that argument had been used—he believed quite rashly and incautiously; but he found it was supposed he had said the argument was repeated on Tuesday night at the meeting of Convocation. He was informed that was not the case, and he was delighted to hear that; indeed, that was what he should have anticipated in any serious debate on the subject. He mentioned this, because he was very anxious that there should be no misunderstanding as to what occurred."



## ASSOCIATION INTELLIGENCE.

### SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

THE next and annual meeting of the above District will be held at the County Hospital, Canterbury, on Thursday, May 24th, 1877, at Three o'clock. The Chair will be taken by the President of the Canterbury Medical Society, *ex officio*.

Dinner will be provided at the Fleur-de-Lis Hotel, at Five o'clock precisely. Charge, 6s. 6d., exclusive of wine.

Mr. Rigden of Canterbury kindly invites members and their friends to luncheon, at his residence in Bargate Street, from One to Three.

Notices have been received of the following communications to be read at the meeting.

1. Mr. Wachter: Notes on Two Cases of *Post Partum* Hæmorrhage treated with the Perchloride of Iron.

2. Mr. T. Whitehead Reid: A Case of Poisoning by Yew Leaves.

3. Mr. Raven: On a recent Epidemic of Variola.

4. Mr. Tyson: A Case of Poisoning by Phosphorus.

Other papers are promised, if time should permit.

Gentlemen who intend to be present at the dinner are particularly requested to inform me on or before Tuesday, the 22nd instant.

EDWARD WHITFIELD THURSTON, *Honorary Secretary*.

Ashford, May 14th, 1877.

### BATH AND BRISTOL BRANCH.

THE sixth ordinary meeting of the session will be held at the York House, Bath, on Thursday, May 24th, at 7.15 P.M.: H. F. A. GOODRIDGE, M.D., President.

The evening will be devoted to a discussion on "The restraint of Hæmorrhage during and subsequent to Operations on the Limbs". The subject will be introduced by Mr. Nelson C. Dobson.

R. S. FOWLER, Bath. } *Honorary Secretaries*.  
E. C. BOARD, Clifton. }

Bath, April 24th, 1877.

### SOUTH EASTERN BRANCH: EAST SUSSEX DISTRICT MEETINGS.

THE next meeting of the above District will be held at the Calverly Hotel, Tunbridge Wells, on Friday, May 25th, at 3 P.M.: Dr. JOHN-SON in the Chair.

Dinner at 5 o'clock. Price, 6s., exclusive of wine.

A discussion on Rheumatism will be opened; and a case of Paracæntesis Thoracis narrated by the Chairman.

All members of the South Eastern Branch are entitled to attend these meetings.

Notice of intended communications is requested by the Secretary by Wednesday, the 16th instant, in order that they may be inserted in the regular circular.

THOMAS TROLLOPE, M.D., *Honorary Secretary*.

35, Marina, St. Leonards-on-Sea, May 8th, 1877.

### SOUTH MIDLAND BRANCH.

THE annual meeting of this Branch will be held at the Town Hall, Northampton, on Thursday, May 31st, at 2 P.M.; President, H. W. SHARPIN, Esq.; President-elect, WM. MOXON, Esq.

Gentlemen who intend to read papers, or be present at the dinner, are requested to communicate early to the Secretary.

J. M. BRYAN, M.D., *Honorary Secretary*.

Northampton, May 1st, 1877.

### SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE next meeting is appointed to be held at the Old Falcon Inn, Gravesend, on Friday, May 25th, at 4.30 P.M.: the President of the Branch, Dr. MONCKTON, will take the Chair.

Dinner will be ordered at the Old Falcon for 6.30.

Papers by Frederick Jessett, Esq., of Erith, viz.:—1. A case of Excision of the Knee-joint, with Pathological Specimen and a Splint for the After-treatment. 2. A case of Cleft-palate and Hare-lip in a Child aged 8 years. 3. Two cases of Mechanical Obstruction of the Bowel caused by accumulation of Fæces, reduced by large Enemata and Galvanism.

Also papers by Dr. J. Braxton Hicks (A Case of Hæmorrhage from a Retroflexed Uterus, with remarks); and by the President.

FREDERICK JAMES BROWN, M.D., *Honorary Secretary*.

Rochester, May 14th, 1877.

### STAFFORDSHIRE BRANCH.

THE third ordinary meeting of the Session will be held at the Board Room of the Mines Drainage Office, 22, Darlington Street, Wolverhampton, on Thursday, May 24th, 1877, at 3 P.M.

VINCENT JACKSON, Wolverhampton. } *Honorary Secretaries*.  
RALPH GOODALL, Silverdale. }

Wolverhampton, May 7th, 1877.

### THAMES VALLEY BRANCH.

A MEETING of the above Branch will take place at the Griffin Hotel, Kingston, on June 14th, at 5 o'clock.

Members who may be willing to contribute papers are requested to notify the same to the Honorary Secretary, as soon as possible.

There will be a dinner at the above hotel at 7 o'clock. Charge, 7s. 6d. each, exclusive of wine.

F. P. ATKINSON, M.D., *Honorary Secretary*.

Surbiton Road, Kingston-on-Thames, May 17th, 1877.

### BORDER COUNTIES BRANCH: SPRING MEETING.

THE spring meeting was held at the George Hotel, Penrith, on Friday, May 4th; Dr. BARNES in the chair. There were present nine members and three visitors.

*New Member*.—Dr. Sanderson of Penrith was elected a member of the Association and Branch.

*Representatives in General Council*.—The following gentlemen were elected: J. A. Campbell, M.D.; D. Macgregor, L.R.C.P.Ed.; S. Lockie, M.D.; H. Barnes, M.D.; and S. Grierson, Esq.

*Papers*.—The following papers were read.

1. Notes of a Case in which a Body (False Membrane?) was removed from a Female Bladder, with Specimen, by Dr. SCAIFE, for Dr. ROBERTSON, Penrith.

2. Notes on Biliary Calculi, by Dr. CAMPBELL, Garlands, Carlisle.

3. On Septicæmia and its Treatment, by Dr. MACDOUGALL, Carlisle.

*Dinner*.—The members and their friends afterwards dined together; Dr. Barnes in the chair, and Dr. Lockie in the vice-chair.

## CORRESPONDENCE.

### LUNACY ADMINISTRATION IN SCOTLAND.

SIR,—In your leading article of April 28th, headed "Are Lunatic Asylums Prisons?" there are several statements of facts regarding asylums and lunacy administration in Scotland, which are calculated to cause misapprehension among those who are unacquainted with the facts of the case. My object now is not to reply to the attack that is there made on the Scotch Board of Lunacy, though I hear no one in Scotland acquainted with these matters sympathising with the tone of that attack. The Board is, no doubt, well able to take care of itself. But when you state that "the Board has effectually succeeded in weakening the public confidence in lunatic asylums in Scotland", and that "asylums have been curtailed of their fair proportions" there, an impression is produced which is entirely the reverse of the truth. Where is the proof that our Scotch asylums have not the confidence of the public? It is only my strong feeling that such a statement, appearing so prominently in the BRITISH MEDICAL JOURNAL, does our Scotch asylums a grave injustice, which makes me write you on this matter. The best proofs that our asylums have the confidence of the public are, that they are all full to overflowing; that a great number of private patients are sent to them from England and Ireland, while very few Scotch patients indeed are sent out of this country; that we have here none of those lunatic scares which occur periodically in England; that we have here no lunatics-aid societies; that the physicians of our asylums have far more power given them than in England, to discharge patients, to dismiss attendants, and generally to govern their institutions without interference. Do these things look as if the public had no confidence in us, or that our lunacy affairs were ill-regulated?

In regard to the prison character of many asylums, it is perhaps well that this aspect should have been brought forward by a Scotchman before such a body as the present Select Committee of the House of



Commons, because most of us in Scotland believe that, hitherto, asylums have been made far too prisonlike; that, while the patients have had nearly all their other desires gratified, the instinct for liberty, so strongly engrained in every human breast, has been too little thought of in our arrangements. We all know that very many of the insane are neither dangerous to themselves nor to others, after the more acute symptoms of their malady have passed off; and, until lately, such patients were unnecessarily retained in wards and airing-courts, whose arrangements had been devised to suit those cases in which special restrictions seemed to be required. I am proud to be able to point to the fact that in this asylum, under my predecessor Dr. Skae, as far back as twenty years ago, three of our divisions had no locked doors, and one-third of all the patients in our "East House" enjoyed the liberty of going about the grounds freely on parole. At present, almost every asylum in Scotland is demolishing its airing-court walls, and placing ordinary locks and handles on the doors of some of its wards, so that the harmless patients may not have the old-prison feeling of being locked up. All these things have been actively promoted and promulgated by the Scotch Board of Lunacy; so that, perhaps, it was only natural that this feature of asylums, which he has always earnestly striven to mitigate, should have been referred to by Sir James Cox.

Having been for ten years the superintendent of an English county asylum, and for seven a physician to a Scotch one, I know the working of the lunacy laws in the two countries; I am acquainted with the way the Commissioners of each do their work; and am conversant with the feeling that exists towards the Commissioners among the superintendents of asylums in both countries; and I can bear most positive testimony that, in none of these respects, is Scotland in a worse position than her sister country. Surely this is sufficient to dispose of your assertion, that the Commissioners have been hostile to asylums in Scotland.

I cannot help remarking, in regard to the boarding-out system here, that I have taken some pains to see for myself the state of the patients in various places, from the south of Scotland to the Shetland Islands; and all I have seen made the impression on my mind that the Scotch system of inspecting the insane and imbecile, who live in private houses, is infinitely superior to the English system of having no inspection of those persons at all. For it is to be borne in mind that, in England, there are 6,526 pauper lunatics "boarded out" with "relatives or others," who receive no supervision whatever from the Commissioners. And this state of matters seems likely to acquire larger proportions; for the English Commissioners, in their last reports, say that asylums are full, and that the quiet and incurable cases must be provided for elsewhere. An insane patient, therefore, while living in an asylum, is under constant medical supervision, and receives careful inspection by Government officials; but in England, the moment he leaves the asylum and boards in a private house, the occasional visitation of the parish doctor is all the supervision that is provided for him!

In your article, no account is taken of the differences in the Scotch and English lunacy laws, under which Commissioners and medical superintendents hold their offices, and the provisions of which they must carry out. The Scotch laws make special provision for the discharge from asylums of unrecovered patients who, in the opinion of the medical superintendents, can derive no further benefit from continued residence there, and for the subsequent boarding of them out in private houses specially licensed for the reception of those and such like patients. Surely you cannot blame the Scotch Board for carrying out, perhaps with some enthusiasm, and striving fully to develop this new feature in the lunacy policy of the kingdom. Impartial critics, in this and other countries, have most highly commended the results. This is no time, sir, to decry the boarding-out system, or any other system that seems to afford a means of suitably providing for the chronic and harmless insane, when we in asylums find our wards blocked by an accumulation of incurable and harmless inmates, whose presence prevents us receiving the yearly increasing number of recent cases sent to us. I speak for myself, when I say that it would be a great relief to this asylum if I could get fifty patients boarded-out tomorrow. The Scotch Commissioners never, that I am aware of, advocated the sending of acute hospital cases of insanity to be boarded-out in private houses, as your article would seem to imply. I know that the BRITISH MEDICAL JOURNAL would not willingly do injustice to our lunacy system and policy in Scotland, and would not lend its great influence to obstruct the progress of any attempt to provide humanely for one of the most helpless classes of human beings. Many of us do not believe that the problem of rightly providing for every class of the pauper insane has yet been solved in all its bearings; therefore, we think that honour is due to those who go somewhat out of the beaten track in seeking for its solution, even though we may not find ourselves

able to adopt all their conclusions; and we feel certain that no good can be done by their being misrepresented.—I am, sir, your obedient servant,

T. S. CLOUSTON, M.D.  
Royal Edinburgh Asylum for the Insane, Morningside,  
Edinburgh, April 30th, 1877.

#### F.R.C.S. EXAMINATION.

SIR,—I hardly think that an "Old U. C. H. House-Surgeon" would have been so anxious to make a "measure retrospective", had he been discussing a proposal to make an examination more difficult instead of easier.

The number is probably not large, but no doubt there are some gentlemen situated like your correspondent, whose really hard case would not be met by early admission to examination. The remedy for such is obviously that pointed out by an "Old Member of the College", that the Council should avail themselves of powers, which I believe them to possess, to appoint Honorary Fellows. I had this in view when I last wrote.

The "ten years" arrangement would have answered the same purpose; but it would have opened a permanent back-door to the Fellowship, and depreciated its value as a distinctive degree, which, with all deference to an "Old Member", I shall always regard it to be. It is not a mere qualification for hospital appointments, carrying with it the accidental privilege of the College franchise.—I remain, sir, yours obediently,

C. H. ALLFREY.

St. Mary Cray, May 7th, 1877.

SIR,—I gather from the remarks of the correspondents in your JOURNAL, that some of them appear to think that I, and others who think with me, wish to act in a "dog-in-the-manger" spirit, and keep all others out of the Fellowship. Such are, however, not at all our views. We only wish to maintain the present high position which the diploma holds, and are doubtless as unwilling that it should be lowered as any M.B. of London would be that that degree should be depreciated. I passed the examination after being ten years in practice, and whilst holding several public appointments, besides having a fair general practice; and cannot, therefore, see why others cannot do likewise. For one I must, therefore, protest against the present Honorary Fellowship being continued; for I have seen many senior brethren admitted to the Fellowship who, although doubtless most estimable members of our profession, were decidedly (to put it mildly) not authorities on surgery or anatomy.

Perhaps a compromise might be made: if the College were to take a hint from St. Andrew's, and pass ten a year, out of the seniors of the profession holding hospital or dispensary appointments, at perhaps an increased fee, and a decreased but fairly practical and searching examination, I fancy all parties might be satisfied.

I am, sir, yours, etc.,

JOHN WOODMAN, F.R.C.S.

2, Chichester Place, Exeter, May 5th, 1877.

#### THE UNFOUNDED CHARGE AGAINST DR. MOFFAT.

SIR,—Herewith I enclose a report of the Hawarden divorce case, so-called, reported in the *Chester Chronicle* of May 12th.

The case is a sad one; and may occur to any medical practitioner under such circumstances as are narrated in the evidence. Dr. Moffat has been a practitioner residing at Hawarden, six miles from Chester, for forty years, and has earned the esteem and regard of the profession, not only in his own county (Flintshire), but likewise in that of the city of Chester; and I believe every member of the profession around this district is unanimous with the feeling of the jury, that he was not guilty of adultery with the co-respondent.

He is now labouring under great disadvantages. Mental wear and tear are telling upon him; but he has been cheered from the first, and backed by every patient and friend in and around Hawarden, that he was fighting for a righteous cause—honour. And he won his cause, too; but, long before the trial took place, what did his friends, and patients, and neighbours do? They clubbed together, giving from a shilling to pounds, to raise a fund, which now amounts to £70, to help him to fight and win.

Dr. Moffat now asks the sympathy and aid of the profession in this trying crisis, which I hope he will secure. His expenses will cost him some hundreds of pounds; and how are they to be paid out of a limited practice, with a family and position to maintain? When the facts are known, through your JOURNAL, I am sure no difficulty will be thrown in the way of raising the required amount. Dr. Moffat and his friends, from delicacy of feeling, begged of me not to have a public meeting



held in Chester; so, in deference to their views, I submit, and hope that the plan organised by his friends will attain the desired end. I have only now to say I will, as the oldest friend of Dr. Moffat, be glad to receive subscriptions *in honoris causâ*.

Your obedient servant, W. McEWEN.  
26, Nicholas Street, Chester, May 16th, 1877.

## MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, May 10th, 1877.

**Public Health Act.**—In reply to Mr. A. Mills, Mr. SCLATER-BOOTH said that, having regard to the terms of the Public Health Act, 1875, section 91, the courts had held that it was necessary that injury to health should be proved in order to make valid the summary proceedings under the Sanitary Act. The whole subject of noxious trades and vapours was now under the consideration of the Royal Commission, whose report, it was hoped, would be presented before the close of the Session. When that report had been presented, an amendment of the law would no doubt be practicable.

Wednesday, May 16th.

**Medical Act (1858) Amendment.**—On the motion of Mr. ERRINGTON, leave was given to bring in a Bill to amend the Medical Act (1858). The Bill was brought in and read a first time.

**Inspection of the Mercantile Marine.**—Captain BEDFORD PIM brought in a Bill to establish hospitals for the mercantile marine, along with a system of compulsory medical inspection, supported by a contribution of 5 per cent. from the seamen's wages. It was supported by Mr. Wheelhouse, Mr. Whalley, Mr. Biggar, and Sir J. Wilmot; and opposed as impracticable and oppressive by Mr. Whitwell, Mr. Gorst, Mr. E. Smith, and Sir C. Adderley.—On a division, it was thrown out by 212 to 11.

## MEDICAL NEWS.

**ROYAL COLLEGE OF SURGEONS OF ENGLAND.**—The following gentlemen passed their primary examinations in anatomy and physiology at a meeting of the Board of Examiners on May 14th; and, when eligible, will be admitted to the pass-examination.

Messrs. H. Havelock Sturge and Edward Fielding, students of Guy's Hospital; L. Colman Parkes and George E. Twynam, of University College; Joseph McClelland and A. Appleton Woods, of the Belfast School; E. Tension Collins and Vincent A. Jones, of the Birmingham School; John Allnutt and Geo. H. Broadbent, of the Manchester School; Mabyon Read, B.A. Cantab., of the Cambridge School; Maro Tuchmann, of the Berlin School; Henry Elliott, of the Newcastle School; and C. Herbert Murray, of St. Thomas's Hospital.

Twenty-six candidates were rejected.

The following gentlemen passed on May 15th.

Messrs. George J. W. Flower, R. E. Ricketts Morse, Francis A. P. Knife, Hope W. Gosse, T. Brown Cross, Charles J. Harper, and J. Gay Barns, of Guy's Hospital; William H. Walter, Alexander B. Payne, Alfred Slate, Jas. Higson, and Chas. F. Rudd, of St. Bartholomew's Hospital; Frederick Wilde, of University College; D. Templeton Hoskyn, of the London Hospital; and J. David Davies, of St. George's Hospital.

Eight candidates were rejected.

The following gentlemen passed on May 16th.

Messrs. T. A. J. Howell, F. O. Combe, S. R. H. Mathews, C. H. Downes, A. Scott, E. S. Cockell, J. J. Reynolds, and F. T. Bayes, of Guy's Hospital; H. F. M. Pope, James Edwards, H. G. G. Wilkins, Nicholas Elliott, A. H. Back, and S. Nall, of St. Bartholomew's Hospital; Francis Gotch, of University College; and H. C. Wilson, of the London Hospital.

Eight candidates were rejected.

The following gentlemen passed on May 17th.

Messrs. W. P. Bothamley, E. N. Davies, John Cock, Richard Steele, T. H. Morse, F. B. Bayer, T. J. Elliott, J. E. Viney, Chas. Crossley, W. H. Sercombe, J. S. Smith, and A. P. Lungley, of Guy's Hospital; Andrew Chillingworth, of St. Bartholomew's Hospital; and Edgar English, of the London Hospital.

Eleven candidates were rejected.

**APOTHECARIES' HALL.**—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 10th, 1877.

Beard, Spencer Francis, Norwich  
Hodge, Arthur, Liskeard  
Jervis, Henry Puce, Bombay  
Miller, Richard Shalders, Wisbeach

The following gentleman also on the same day passed his primary professional examination.

Leftwich, Charles Harcourt, St. Bartholomew's Hospital

**UNIVERSITY OF DURHAM.**—The following is a list of candidates who passed the recent first M.B. examination.

Callender, J. H.	Fenwick, Bedford
Coombs, M. L. B.	Morton, Shadforth
Dodd, J. R.	Young, Thomas M.

**KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.**—At the usual monthly examination meetings of the College, held on Tuesday, Wednesday, and Thursday, May 8th, 9th, and 10th, the following candidates obtained the Licences to Practise Medicine and Midwifery.

Andrew, Albert	Knox, Charles
Atkins, Louisa	Peacocke, James Charles Harding
Cox, Michael Francis	Pechey, Mary Edith
Grant, Charles Scovell	Philip, Alexander
Jex-Blake, Sophia	White, Thomas Edward

The Licence to Practise Medicine was also granted to—  
Davies, William Rees

The Licence to Practise Midwifery was also granted to—  
Connolly, William Rogers  
McIvor, Robert

## MEDICAL VACANCIES.

THE following vacancies are announced:—

**ABINGDON UNION.**—Medical Officer for No. 1 District. Salary, £107 per annum. Applications to be sent in on or before the 26th inst.

**BIRMINGHAM GENERAL DISPENSARY.**—Five Resident Surgeons. Salaries to commence at £130 per annum, with furnished rooms, fires, lights, and attendance. Applications to be sent in on or before the 23rd instant.

**CARNARVONSHIRE AND ANGLESEY INFIRMARY.**—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be sent in on or before June 14th.

**CHARING CROSS HOSPITAL.**—Resident Medical Officer and Assistant Medical Officer. Applications to be sent in on or before the 26th inst.

**CHELSEA UNION.**—Assistant Medical Officer and Dispenser for the Infirmary and Workhouse. Salary, £100 per annum, with furnished apartments, rations, washing, coals, and gas. Applications to be sent in on or before the 22nd inst.

**CHESTER GENERAL INFIRMARY.**—Visiting Surgeon. Salary, £80 per annum, with residence, board, and washing. Applications to be sent in on or before the 21st instant.

**DURHAM COUNTY HOSPITAL.**—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be sent in on or before the 30th inst.

**KINGTON UNION.**—Medical Officer for the Huntingdon District.

**NANTWICH UNION.**—Medical Officer for the Audlem District.

**NEW HOSPITAL FOR WOMEN,** Marylebone Road—Junior Physician; also, Resident Medical Officer. Women only eligible. Salary, £50 per annum, with board, lodging, washing, and attendance.

**NOTTINGHAM GENERAL HOSPITAL.**—Resident Surgeon-Apothecary. Salary, £150 per annum, with furnished apartments and board.

**ROTHERHAM HOSPITAL AND DISPENSARY.**—Assistant to House-Surgeon. Salary, £25 per annum, with board, lodging, and washing.

**ROYSTON UNION.**—Medical Officer for No. 5 District. Salary, £50 per annum, and fees. Applications to be made on or before the 22nd instant.

**ST. GEORGE'S AND ST. JAMES'S DISPENSARY.**—Physician. Applications to be sent in on or before the 31st instant.

**ST. PETER'S HOSPITAL,** Berners Street—House-Surgeon. No salary; but board and lodging. Applications to be sent in on or before the 23rd instant.

## MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

\*DAVY, Richard, F.R.C.S., appointed Joint Lecturer on Surgery at the Westminster Hospital, with George Cowell, F.R.C.S.

\*HODGES, Frank H., M.R.C.S. Eng., appointed Honorary Ophthalmic Surgeon to the Leicester Infirmary.

MACPHAIL, Donald, M.B., C.M., appointed House-Surgeon to the Western Infirmary, Glasgow, vice R. B. Macpherson, M.B., C.M., resigned.

MOVES, John, M.B., C.M., appointed House-Physician to the Western Infirmary, Glasgow, vice W. G. Dun, resigned.

ROSS, John, M.B., C.M., appointed House-Surgeon to the Western Infirmary, Glasgow, vice W. G. Owen, M.B., C.M., resigned.

SERVICE, John, M.B., C.M., appointed House-Physician to the Western Infirmary, Glasgow, vice R. Moffat, M.B., C.M., resigned.

\*WARDEN, Charles, M.D., elected Honorary Surgeon to the Birmingham Institution for Deaf and Dumb Children, vice \*Alfred Baker, F.R.C.S., resigned.

**DR. HANDSEL GRIFFITHS** has been elected Foreign Corresponding Member of the Medical Society of Lisbon.

**GUY'S HOSPITAL PHYSICAL REPORTS.**—At the last meeting of the Guy's Hospital Physical Society, the prizes were distributed as follows:—£10 to Mr. R. S. Wainwright, for his paper on "The Sympathetic Nervous System"; £5 to Mr. Horrocks, for his paper on "Hysteria"; £5 to Mr. C. Knox Shaw, for his paper on "Pyrexia and methods of reducing it". The debating prize, £5, was awarded to Mr. Uthoff.

**SIXTY POUNDS** damages have been awarded in the Common Pleas Division in an action brought against the Brighton Aquarium Company by Mr. Blaise, the Surgical Instrument Maker, for injuries received by him through falling down a stoke-hole on the defendants' premises.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 30 P.M.
TUESDAY.....	Guy's, 1 30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1 30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1 30 P.M.—St. Mary's, 1 30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2 30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1 30 P.M.—St. Thomas's, 1 30 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1 30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—Charing Cross, 2 P.M.
FRIDAY.....	Royal Westminster Ophthalmic, 1 30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1 30 P.M.
SATURDAY....	St. Bartholomew's, 1 30 P.M.—King's College, 1 30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1 30 P.M.—St. Thomas's, 1 30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

- TUESDAY.—Royal Medical and Chirurgical Society, 8 30 P.M. Dr. Pearson Irvine, "On the Clinical Conditions of the Heart and Vessels in Chlorosis"; Mr. William Adams, "Contraction of the Fingers, and its treatment by Subcutaneous Division of the Palmar Fascia, and immediate Extension"; Dr. D. Finlay and Mr. R. W. Parker, "Primary Cylindrical Epithelioma of the Lung, with Secondary Deposits in the Pleura, Bronchial Glands, and Liver".
- FRIDAY.—Quekett Microscopical Club (University College, Gower Street), 8 P.M. Mr. W. H. Gilbert, "On the Staining of Vegetable Tissues";—Clinical Society of London, 8 30 P.M. Dr. Farquharson, "A Case of Small-pox originating from the contagion of Chicken-pox"; Dr. Murchison, "A Case of Enteric Fever treated by Salicylate of Soda"; Dr. Thin, "Microscopic Specimens of the Skin of a Case communicated to the Society in 1874 by Mr. Morrant Baker"; Mr. Owen, "A Case of Misplaced Testis (a living subject)".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

OWING to considerable pressure of matter, we print this week a number of important letters in our small type columns. Some of the letters which we have recently printed are of such length, that we are compelled to remind our correspondents that it is necessary that letters should be compressed within moderate limits, in order not to unduly encroach on other departments which require weekly representation, in order to afford the full review of the general progress of medical affairs throughout Great Britain, which the BRITISH MEDICAL JOURNAL aims at presenting.

## TOOTH-FORCEPS.

SIR,—After an experience of more than twenty years with the claw and elevator, I venture to differ from "W. J. M." Properly used, I consider the claw one of the best and most valuable instruments we have. A skilful operator can do with the claw what he cannot do with any other instrument. As the late Mr. Samuel Parker once said, "you have only to get into the knack of using it".—I am, etc.,  
Sheffield, May 1877.

EDWARD BARBER.

## LODGED CORN.

SIR,—I am of a contrary opinion to "Censor" as regards there being a misprint or misrepresentation in the passage quoted from *Macheath*, Act iv, Sc. 1, "Though bladed corn be lodged". In this part of Gloucestershire, the word "lodged" is frequently used in harvest-time to designate the state of the corn when (especially if heavy in the straw) it has been (by heavy storms of wind and rain) beaten flat to the earth, the consequence of which is, that in many cases it is unable to rise, and that the corn in the ears germinates and grows and is entirely ruined. I have heard the term used as long as I can remember anything about agricultural pursuits; I have also asked several people, both farmers and labourers, and they ascribe the same meaning to the word which I have given above.—I am, etc.,  
C. A. B.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

A SUBSCRIPTION is being raised in Glasgow for the wife and children of the late Dr. Dougall of Greenock, who died recently of blood-poisoning, in consequence of a puncture received during a *post mortem* examination. He was a young man who had not yet had time to make provision for his children. He leaves a widow and a family of eight children—the eldest still a boy, and the youngest a baby of five months. Mr. David Macrae, of Ashton Manse, Gourack, has made a local appeal on their behalf, and we shall be glad to receive and forward any funds subscribed by our readers for this purpose.

## A CAUTION TO MEDICAL MEN.

SIR,—May I be allowed to supplement Dr. Edis's warning in reference to the suspicious characters who are endeavouring to prey upon medical men by narrating my own experience? A man, who gave the name of Fullagar, three times called on me to make an appointment for me to see his son. The appointment was not kept; but some time afterwards, he again appeared, wishing to fix another time for his son's visit, giving his engagements in the city as the reason of his having failed to carry out the former arrangement. This was repeated three times, two or three months intervening between each visit. On the third occasion only, after extending his operations over a period of six or eight months, did he allege that he had lost his money, as Dr. Edis describes.

I have no doubt of the identity of this man with the Fullardy or Fuller whom Dr. Edis mentions; and as he is of good address, and carried out his part well, I think it the more needful to put others on their guard against him.—Yours obediently,  
WYNDHAM COTTLE, M.A., F.R.C.S.

3, Savile Row, W., May 12th, 1877.

SIR,—I write to put my brother practitioners on their guard against a man of gentlemanly appearance giving the name of Fullagar, who has been fleecing some of us innocents about this neighbourhood in a most accomplished manner. This is how it is done. He calls, say, on Tuesday, to appoint a consultation for his wife or child, as the case may be, on the Friday following. On the Thursday he calls again to say he is sorry his wife cannot come on Friday—"will Monday do as well?" and at what time?" The consultation being rearranged, and a few pleasantries having passed, he turns to go, but suddenly remembers he has no change, and, facing sharply round, says, "Oh, by the bye, have you any change?" Change for £1 or £5-note at once suggests itself; and the unsuspecting physician, wishing to accommodate his supposed new patient, says, "Yes, what do you want?" Up to this point not a shadow of suspicion has crossed the mind; but when the borrower takes the change for £1 and tenders nothing in return, but walks away, saying he will send it with the fee by his wife on Monday, there is an uncomfortable sense of having been "done". Even so it has been: four of us have been, to my knowledge, so fleeced in one day.

After taking out a warrant and tracing the fellow to Lessness Heath, it turns out that he has left his house with wife and ten children in a hurry by night, without any paying rent, and no one knows where he will next turn up. The following is a description of the man. Fullagar, late of Lessness Heath, S.E., age about forty-five, height five feet ten inches, rather long dull brown hair, little whisker and no beard or moustache, teeth coated with tartar, has a quick manner of speech and movement, and is by birth probably a north countryman. He wore brownish tweed trousers and a greenish black Chesterfield overcoat.

Let all practitioners, especially young ones, beware of such a customer; and if they can hand him over to the authorities, they will earn the thanks of his late landlord, and others besides yours, etc.,  
A VICTIM.

## SAFE EMPLOYMENT OF NITRITE OF AMYL.

SIR,—I am glad Dr. Thompson has drawn the attention of the profession to the dangerous symptoms attending the inhalation of nitrite of amyl to some patients. My little experience will suffice to teach me in future to be very careful, and not to prescribe more than two minims at a time, and that very cautiously.

On March 12th, I was attending a young lady suffering from cerebral anæmia. I ordered one of Messrs. Allen and Hanbury's capsules to be broken and inhaled, which was done at eight o'clock P.M. I was not present at the time, but was informed the next day that the household was so alarmed at the patient's excited condition and the pain complained of, that they were compelled to sit up half the night with her.

The second case was that of a gentleman aged 35, a patient of mine whom I have repeatedly attended for nervous headaches. Last Saturday week, he walked into my consulting-room suffering from one of his old attacks. On his being seated, I broke one of the capsules in a piece of lint and applied it to the nostrils. He had not taken more than three inspirations, when he suddenly sprang from his chair, and in an excited state exclaimed, "Good heavens! what is the matter? what have you done? I am dying." Thereupon he threw off his coat and fell on my couch. I need not tell you I was greatly alarmed. I gave him a stimulant of ammonia and chloric ether, and he was able, after three-quarters of an hour, to walk home, a distance of half a mile from my house, with my assistance. He describes his sensations as if his brain were fixed tightly in a vice, a terrible throbbing in his head, together with a noise of rushing water.

I consider that four grains is much too strong a dose. Probably the safest plan of administration is the one suggested by Mr. Lennox Browne; viz., by previously diluting it with rectified spirit.—I remain yours truly,  
Wanstead, May 12th, 1877.

GEORGE WELLER.

SIR,—In reference to a letter on this subject in your number for May 12th, we desire to state that the capsules alluded to were made by us at the request of an eminent surgeon; that, before allowing them to be sold, we consulted several of the members of the profession best acquainted with the use of the nitrite as to the quantity it was desirable to have in each capsule; and that we have since been assured, on authority which we believe to be the best in the country on the subject, that four minims or more may be used with perfect safety, and that the sensations and appearances produced by such a dose, though sometimes alarming, are not dangerous.—We are, sir, yours obediently,  
ALLEN & HANBURY.

## EXCORIATIONS.

IN reply to Mr. Broadbent, Mr. Crocker of Bingley writes:—As they probably depend on malnutrition, and as that can with difficulty be combated in diabetes, it might be of service to attack the integument. I have found useful a solution of carbolic acid (1 part liquefied acid to 20 of water, with glycerine) brushed over the affected parts. Dry carbonate of bismuth dusted on the sores I have also found beneficial.



## DENTAL REFORM ASSOCIATION.

SIR,—From the date of a letter from Mr. Tomes, which appears in your JOURNAL of this week, the correction of a slight typographical error which occurred in a communication which I addressed to you announcing my resignation of the chairmanship of the Dental Reform Committee, and giving my reason for so doing, could not have come under his notice. I think he will acquit me of the charge he brings against me of making a "grave mistake", now that he has seen it. In that communication I simply gave the spirit of an amendment to a resolution which was proposed by Mr. Tomes, and carried, as he correctly states, by a large majority of those present, the gravity of the situation being that inverted commas were placed inadvertently over the whole sentence, instead of over the words "dental surgeon, surgeon-dentist, dental practitioner, or dentist". My interpretation of the amendment, taking it in conjunction with the other resolutions, was literally correct: it attacks the legal rights of medical corporations, and, if made law, the strange paradox would be resultant, that a surgeon could not call himself a surgeon-dentist or a dental surgeon.

I cannot agree that Mr. Tomes's amended resolution "is based upon and is consistent with two memorials addressed to the College of Surgeons" in 1855 and 1857. The object at that time was to counteract a movement which, if successful, would have separated dental surgery from surgery; and bearing in mind the anomalous position of the profession at the time, and the strongly antagonistic feeling then existing, the Council of the College of Surgeons was petitioned to institute an examination in dental surgery, and to grant a certificate of competency to practise that special branch. This was considered to be the wisest course to pursue in order to enlist the sympathies of the general body of practitioners and of more rational opponents, and also the most feasible scheme for introducing systematic education into the profession, then chaotic in its general character. It certainly was never contemplated to put a veto upon surgeons in special practice, or dentists calling themselves dental surgeons, unless they added the licentiate to their surgical diploma.

Mr. Tomes is not correct in his statement that "Mr. Cartwright and others recently forwarded to the College of Surgeons a memorial praying that the possession of any medical diploma should annul the necessity of the licentiate or special diploma (?) as a qualification for dental teachers and office-bearers". If he have read that resolution, he will see it suggests that the lectures on dental anatomy and physiology, and those on dental surgery, should be given by Fellows or members of the College of Surgeons (of course, in practice as dental surgeons), with or without the possession of the special certificate, but that no mention is made of other special lectures or office-bearers. The reason for the suggestion was, that the subject required more diffused knowledge, as well as an intimate acquaintance with general anatomy and with the functions and diseases of the system, than can be expected of the majority of candidates for the dental licence. It was also, I think, rationally thought that the training necessary for a medical diploma engenders broader views as to the medical aspects of dental complications. There are other reasons, too, for insisting on high qualifications for the lectures specified—to wit, the stimulus which would be given for young men to qualify for those appointments; and it would tend to prevent a very possible evil—namely, the springing up of second-rate schools, founded (in some cases at least) for the sake of individual notoriety.

I cannot conceive what good object can be attained by the endeavour to ignore the higher qualification, or what can be the sense of insisting on a law which, if it could be carried out, would prohibit a surgeon from registering for a branch of surgery, deprive him of the power of recovering at law fees for dental operations, and subject him to penalty if he presumed to style himself a dental surgeon; whilst a person who has not possessed himself of a qualification may be received among the qualified by the plea of being in practice before the passing of the suggested Act, in the face of the repeated opportunities afforded by the College of Surgeons for his doing so. I think that every member of any medical corporate body ought to object to such a scheme, and that every gentleman who has obtained the licentiate should have strong ground for dissatisfaction and complaint.

Mr. Tomes—ungenerously, I think—endeavours to convey the impression that I wish to repudiate special education. For many years longer than I intended, when, at the first starting of the Dental Hospital and School of Dental Surgery, I undertook the duties, at considerable inconvenience to myself, but solely from a conviction that I was assisting in a good work, I lectured and held office as one of the dental surgeons. I think such services should have saved me from such an imputation. Can Mr. Tomes seriously consider "that a person who studies surgery and declines to take a surgical degree" is in an analogous position with a person who has taken a surgical degree and adopted exclusively the special dental branch of surgery? He writes, too, as though he wished it to be thought that I and others repudiate not only special education, but the necessity of special qualifications. I say distinctly that such is not my view. When he says, however, "do not degrade it" (that is, the licentiate) "by a forced association with a less relevant medical degree", I confess I am surprised that one who has associated himself with a medical degree should consider that the College special licence suffers by its contact. Few who have wisely obtained the higher degrees, such as the M.B. of London, and the F. and M.R.C.S., etc., will coincide with such conclusions.

I am ignorant of laying any "heavy charge" at Mr. Tomes's door. He can scarcely place a correct interpretation of his amendment in so serious a light; and to differ from him in opinion hardly warrants such gravity of expression. I am not able to agree with him in all his ideas as to what is best for the social and educational advancement of our branch of the profession, but I am quite sure that his wishes in that direction are as earnest as my own. I regret that differences of opinion should engender hostile feeling; and I must condemn the violent and otherwise objectionable writing which is current in certain journals.—I am, sir, your obedient servant,

May 7th, 1877.

SAMUEL CARTWRIGHT.

SIR,—It is with reluctance I feel myself compelled to criticise the letter of one with whom for many reasons I should prefer to be in perfect accord; but Mr. Tomes's communication of last week fails to convey a correct impression of what took place at the meeting referred to, and which has necessitated my ceasing to continue a member of the Dental Reform Committee. The facts of the case are these. The proposition which Mr. Tomes states "he proposed" was one which had already been adopted by the Executive Committee of the Dental Reform Association, with the inclusion of a certain clause which qualified its exclusive and aggressive character, and freed it, as your readers will clearly see, from interference with the present rights of certain corporations and rights of all future medical practitioners. It was the rejection of this clause, and that only, that Mr. Tomes effected, and with the full understanding, nay, even admission, that in so doing it was interfering with certain vested rights. With many portions of Mr. Tomes's letter I can

happily agree, only they are said to be based on a resolution proposed by the writer, which, I think, is hardly in accordance with the facts of the case. I append the propositions referred to, with the clause (in italics) added by the Executive Committee, but rejected by Mr. Tomes's proposition; also a slightly abbreviated, but otherwise correct, copy of my resignation.—I am, sir, etc.,  
19, Savile Row, May 5th, 1877.

ALFRED COLEMAN.

## Resolutions referred to.

"1. That those persons only who possess the licentiate in dental surgery of the Royal College of Surgeons, with the exception of those by law already permitted to do so, shall be entitled to use the designation of dental surgeon, surgeon-dentist, dental practitioner, or dentist.

"2. That any person using either of the foregoing designations, unless entitled to do so, shall, on conviction before a court of justice, be fined in a sum not exceeding for the first offence, etc.

"3. That a special schedule be added to the Medical Act for the registration of qualified dental surgeons as such only, subject to such general conditions as apply to the registration of qualified medical practitioners in respect to fees, conduct, etc.

"4. That the qualified dental practitioners alone shall be capable of recovering fees for dental operations.

"5. That nothing in this Act shall apply to the prejudice or hindrance of persons in practice before the passing of the Act; but in case of the question being raised, it will be for the individual to prove the date of his entrance on practice."

## Copy of Resignation.

19, Savile Row, April 19th, 1877.

"Dear Sir,—I regret I can no longer consistently remain a member of the Dental Reform Committee. My ground for resignation is the following, viz.: At a meeting of the Executive Committee, held the 3rd November last, certain 'clauses' were submitted which contemplated (unintentionally, I was sure) the depriving of certain corporate bodies of privileges they at present possessed, and I urged how fatal to the cause in hand would be the opposition which would most assuredly be raised by those bodies to any measures purposing a restriction of their legal rights. The Executive Committee admitted the force of the reasoning, and adopted the inclusion of words exempting all by law already permitted to exercise such privileges. This, to my mind, prudent and just course of proceeding the General Committee, at their meeting of the 7th instant, rejected, and avowedly on the grounds, as distinctly stated by the proposer of the rejection, that it was desirable those corporate bodies should be deprived of such rights. Being a Fellow of one such corporation and a Licentiate of another, and having bound myself to uphold the honour and maintain the privileges of each, I can no longer remain the promoter of a movement which now has avowedly as one of its objects the deprivation of those bodies of certain of their legal rights. I cannot and do not believe that the dental reform movement, as it originated in Manchester, had other than pure and disinterested motives; and I most deeply regret this action of its Committee, which, if persevered in, must prove suicidal to that I have elsewhere characterised as the most important movement for good that has ever been attempted by the dental practitioner.—I am, dear sir, yours truly, ALFRED COLEMAN.—To James Smith Turner, Esq., Honorary Secretary Dental Reform Committee."

SIR,—I shall feel obliged if you will insert the annexed copy of a letter sent to the secretary of the Dental Reform Committee.—Yours very truly,  
May 7th, 1877.

CHARLES GAINES.

Edgar Buildings, Bath, May 7th, 1877.

"Dear Sir,—I have just read some of the absurd clauses proposed by the Dental Reform Committee, and as I (as a member of that body) have been no party to the framing of such a code, must request you will be good enough to remove my name from the list of members.—I am, dear sir, yours faithfully, CHAS. GAINES.—J. S. Turner, Esq."

DR. JOHN SMITH of Edinburgh has also sent in his resignation.

SIR,—There is an old adage that there are "always two sides to a question", which I think applies strongly to Mr. Tomes's letter in your JOURNAL of May 5th.

1. The surgeon, by his qualification, is entitled by law to perform operations on any part of the body; and it would indeed be an anomalous state of affairs were operations on the mouth excluded from this category, in favour of those who have taken an inferior degree to the exclusion of those who have gone through the higher curriculum and taken the full College diplomas. The Court of Examiners are, however, fully alive to this fact, as I find in a recent examination paper for the membership questions relative to the changes of the temporary and permanent teeth were asked, and which, if I judge correctly, according to your correspondent's views, were quite out of place in that examination. Moreover, it does not hold good, logically, that what was required twenty years ago must necessarily be demanded in the present day, when science in every branch is making such rapid strides. The dental degree has doubtless done an immensity of good; but to affirm that the "L.D.S." is "the only needful, significant, and truly relevant qualification", is an insult both to the College and those who possess its full degrees, as well as the medical profession at large; and it is on these grounds that so many have severed their connection with the dental reform movement.

2. With regard to the relative value of the "L.D.S." from a dental and from a medical or surgical point of view, there can be but one opinion amongst most members of the medical profession, and requires but little comment; the former tending to let matters remain *in statu quo*, and leaving dental surgery as a specialty apart from surgery proper, of which it forms an integral part; the latter in raising it in the eyes of both the profession and the public to the position it undoubtedly ought to occupy, and from which it has unfortunately fallen, by demanding a higher standard, both morally, socially, and intellectually, and which we find is fully understood by men possessing only the L.D.S. degree, by causing, their sons in nearly every instance to take the higher qualification; or why should they do this if the "L.D.S." be "the only needful, etc." qualification?—I am, sir, faithfully yours,

13, Portland Place, W., May 7th, 1877.

J. HAMILTON CRAIGIE.

## MEDICAL TITLES.

SIR,—Whilst the vexed question of an L.R.C.P. calling himself "Doctor" has been before the profession, there is, I venture to think, one matter which, to the practitioner and the public generally, is of paramount importance—I refer to the fact that many men holding only the licence from the Apothecaries' Company style and sign themselves "Surgeon". It seems to me obviously unfair that an individual who has never passed an examination in surgery in his life, who has seen very little hospital practice, having got in through a modified examination at the "Hall", should palm himself off as an M.R.C.S. Eng., to the disadvantage and loss of men who have spent some of the best years of their lives in obtaining a surgical diploma.—I am, etc.,

RUSTICUS.



CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

HAYDOCK LODGE ASYLUM.

The following letter has been addressed by Mr. E. Lister, medical proprietor of the Haydock Lodge Retreat, to the *Liverpool Mercury*.

Sir,—In your issue of the 24th March, under the title of "Mysterious Death at Haydock Lodge Asylum," you published a paragraph relating to the death of Miss Kean at this asylum on the 15th of March last; and under the same title, on the 25th ultimo, another paragraph appeared in your paper containing, among other statements, a quotation from a letter on the subject from the Commissioners in Lunacy. From the nature of the statements contained in both paragraphs, the source whence they have been derived is obvious—viz., from the friends of the deceased. The occurrence was one of a sufficiently unfortunate and painful character to induce me, reluctantly, to abstain from public comment on the highly coloured and inaccurate statements of the first paragraph; but the repetition of these in the second paragraph compels me, in justice to myself, to request you to give equal publicity not only to the version of the facts as reported to the Commissioners in Lunacy and sworn to on oath at the inquest, but also to my contradiction of certain parts of your story which have no foundation in fact.

Below is appended a *certified* copy of the report of my assistant medical officer to the Lunacy Commissioners, and also of the coroner's notes of the evidence at the inquest, which, I submit, disprove the accusation of neglect, the attention paid to the case having been exceptionally diligent for a patient of this class. It is, however, unfortunate that the assistant medical officer did not report the condition of the patient to me after making his night visit at eleven o'clock, as I certainly should have ordered her to be visited during the night; the omission to do so arose from an error of judgment of my assistant, who, having injected morphia, considered he had secured the patient's repose.

I deny the statements in the paragraph of March 24th, that there was any specific arrangement that she should receive every attention necessary to her comfort (in the sense as apparently implied that expense was no object), and that a nurse should be with her night and day. Mr. Kean said that he could not afford more than twenty shillings per week, and I would have declined to take the patient at that rate on terms of such continuous exclusive attendance as alleged.

I deny most positively the statement that there were bruises on the body mentioned as the discovery of Mr. Kean's medical man in the paragraph of March 24th, and most improperly repeated as a fact in the paragraph of April 25th, with an additional allegation of "indications of violence." I am able to state of my own knowledge that this, if not an invention, is at least founded in mistake; and in support of this I point with confidence to the fact, that it would have been the bounden duty of the coroner and jury to have traced the cause of such bruises or marks, had any such existed.

Another matter of pure invention, is the statement that Miss Kean was heard calling for her mother at five o'clock, no such calls having been heard.

The last point to which I have to refer is the complaint, whereby so much prejudice has been imported into the case, that no notice was given to Mr. Kean of the inquest. The facts in relation to this are as follow. When Mr. Kean was at the asylum on Thursday (the day of the death), some discussion took place between him and my clerk as to the arrangements for interment, especially in reference to the fact that an inquest must be held, though the date was uncertain. Mr. Kean was told that the inquest would probably be held on the following Saturday morning; and it was agreed that he should send a hearse and coffin about five o'clock on the Saturday afternoon, but that if the inquest had not taken place before noon on Saturday, he (Mr. Kean) was to be informed by telegram, in order that the preparations for removal of the body might be postponed. The inquest was held on the Saturday morning, as expected, and the remains were removed, as arranged, in the afternoon. The impression on the mind of my clerk was, that Mr. Kean had no desire or intention to attend the inquest, and hence no message was sent to him of the actual hour fixed.

I venture to think that these facts at least qualify the ground of complaint on this head. There was certainly no desire to exclude the friends from the inquest. I am, sir, yours obediently,

EDWARD LISTER, Medical Proprietor  
Haydock Lodge Retreat.

NIGHTMARE.

Sir,—Will any of your correspondents kindly suggest a remedy for frequently recurring attacks of nightmare? They occur in an old lady of more than seventy years of age, who suffers from partial paraplegia, and is obliged to lie constantly supine. There is much acidity, with flatulence. I have given alkalies, soda, and aromatic spirit of ammonia, etc., and, when roused, she always complains of the same unpleasant dream—viz., that robbers have effected an entrance. Any suggestions as to medicine or diet will greatly oblige.—I am, etc., M.D.

April 21st, 1877.

GOETHE ON WINE.

GOETHE (*Reise am Rhein, Main, und Neckar*), being at the celebration of the festival of St. Roch, relates that, the question having arisen at table whether it were possible that there were people in the district who could drink sixteen bottles of wine a-day, one of the company stood up and called to remembrance a Lenten sermon of their suffragan bishop, in which he had set forth the frightful evils of drunkenness in their darkest colours, and had wound up thus:

And be persuaded of this, my pious hearers, who are already inclined to atonement and repentance, that he commits the greatest sin who in suchwise misuses the noble gifts of God. But the misuse of a thing is no hindrance to its proper use. It stands written that wine rejoices the heart of man! From this it is clear that we, to cheer ourselves and others, may and are bound to partake of wine. Now, there is probably no one among my manly hearers who does not take his two quarts of wine a-day, without being in the slightest degree forgetful, that he mistakes his wife and children, and injures them with taunts, blows, and treats them under foot, and treats those who are dearest to him as if they were his deadliest enemies. They as quickly as possible get out of the way of such excess; and he thus renders himself detestable to God and man, and contemptible to his equals.

He who after the enjoyment of four quarts, yea of five or six, still remains so composed and steady that he can take his Christian neighbour under the arm, can

order his household, and finds himself in a condition to carry out the commands of his spiritual and worldly superiors, let him enjoy his assigned portion and be thankful. But let him beware, without much trial, to go wider, because to weak men there is usually a line that they cannot overpass. But the case is very rare that the exceeding bounty of God has bestowed such grace on any person as that with which He has favoured me His servant, so that he is enabled to drink eight quarts. And now who can say of me that I have ever given way to unjust anger; that I have neglected my household and relations; or have in any way neglected my spiritual duties or offices? Further, you can all bear witness that you have found me at all times ready for the praise and glory of God, and that I am always active for the help and profit of my neighbours: so I may well henceforth, with a good conscience and with thanks, enjoy this trusted gift.

And you, my pious hearers, take everyone, according to the will of the Giver, so that his body may be refreshed and his soul rejoice, his appointed portion. And that this may be so, and all superfluity forbidden, proceed according to the text of the holy apostle, who says: Prove all things, and cleave to that which is good.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Scarborough Daily Post; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Western Daily Mercury; The Macclesfield Courier; The Birmingham Daily Post; The North Wales Chronicle; The Broad Arrow; The Sunderland Daily Post; The Irish Times; The Australasian; The North and South Shields Gazette; The Liverpool Daily Post; The Bradford Observer; The Western Mail; The Leeds Mercury; The Hull Criterion; The Glasgow News; The Crewe Guardian; The Liverpool Critic; The St. Pancras Gazette; The Worcester Chronicle; The Oswestry Advertiser; The Glasgow Herald; The High Peak News; The Metropolitan; The West Middlesex Advertiser; The Rock; The St. Derbyshire Advertiser; The West Cork Eagle; The Portsmouth Times; The Tunbridge Wells Gazette; The North British Daily Mail; The South London Press; The Chatham and Rochester Observer; The Redditch Indicator; The Colonies; The Londonderry Sentinel; The Lincolnshire Chronicle; The Liverpool Daily Courier; The Salford Weekly News; The Northern Echo; The Home Ruler; The Warrington Express; The Croydon Chronicle; The Northampton Herald; The Edinburgh Courant; The Bridport News; The Liverpool Medical Enquirer; The Hampshire Telegraph; The Birmingham Daily Gazette; The Scotsman; The Dudley Herald; The Shrewsbury Chronicle; The West Surrey Gazette; The Richmond and Twickenham Times; The Western Morning News; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; The Manchester Free Lance; The Belfast News Letter; The Malvern News; etc.

\* \* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. Wm. Rutherford, Edinburgh; Dr. J. Hughlings Jackson, London; Dr. Tripe, Hackney; Dr. Herbert Tibbits, London; Dr. Norman Kerr, London; Dr. Garland, Yeovil; Dr. George Johnson, London; Mr. J. E. Ingpen, Putney; Dr. Stephen Mackenzie, London; Mr. Sinclair Kennedy, Fort William; Dr. R. Zimmermann, Toronto; Mr. W. R. Smith, Sheffield; Dr. Braidwood, Birkenhead; Mr. Harry Leach, Blackheath; Dr. Henry Muscroft, Pontefract; Our Dublin Correspondent; Dr. Aveling, London; Dr. Lefour, Bourdeaux; Mr. J. N. Radcliffe, London; Commune Bonum; Dr. Ogston, Aberdeen; Dr. Edis, London; Dr. McCall Anderson, Glasgow; Dr. J. Milner Fothergill, London; The Registrar-General of England; Mr. James White, Wigan; A Victim; The Secretary of Apothecaries' Hall; Dr. J. P. Bramwell, Perth; Mr. A. J. Bond, West Bromwich; X.; The Registrar-General of Ireland; Mr. R. J. Pye-Smith, Sheffield; Mr. W. P. Branson, London; Dr. Strange, Worcester; The Secretary of the Quekett Microscopical Club; Dr. W. Fairlie Clarke, Southborough; Dr. F. Warner, London; Dr. Joseph Bell, Edinburgh; Dr. J. W. Moore, Dublin; Mr. G. Eastes, London; The Secretary of the Clinical Society; Mr. J. C. Smith, Great Yarmouth; Dr. J. F. Baldwin, Ohio; Dr. J. C. Steele, London; The Ladies' Sanitary Association, London; Dr. J. F. O'Ryan, Tipperary; An Associate; Dr. de Pietra Santa, Paris; Dr. John Williams, London; Mr. B. Blower, Liverpool; Dr. Michael Taylor, Penrith; Dr. F. J. Brown, Rochester; Mr. W. F. Teevan, London; Mr. Thurston, Ashford; Dr. J. Gibbs Blake, Birmingham; R. E. F.; Mr. Wyndham Cottle, London; Mr. T. M. Stone, London; The Secretary of the Obstetrical Society; The Secretary of the Royal Medical and Chirurgical Society; Dr. F. P. Atkinson, Kingston-on-Thames; Dr. Silver, London; Mr. J. Bailey Denton, London; Dr. Bourneville, Paris; Mr. H. Hugh Hardy, London; Dr. Foster, Birmingham; Dr. Hitchcock, Lewisham; Mr. Weiler, Wanstead; Dr. J. Smith, Edinburgh; Mr. Charles Sedgwick, Hellingbourn; Dr. Warden, Birmingham; Mr. Hamilton Cartwright, London; Dr. Syson, Huntingdon; A Member; Mr. Godfrey, Woburn; Dr. G. V. Heath, Newcastle-on-Tyne; Mr. Pitman, London; Dr. Caulfield, Cork; Mr. Kerr, Preston; Mr. Warren, London; Dr. Pearson Irvine, London; Mr. Henry Morris, London; Mr. Furneaux Jordan, Birmingham; Dr. Dowse, Highgate; etc.

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Modern Society in its Religious and Social Aspects. By Peyton Blakiston, M.A., M.D., F.R.S. London: Macmillan and Co. 1877.  
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Year-Book of Pharmacy and Transactions of the British Pharmaceutical Conference (1876). London: J. and A. Churchill. 1877.  
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## CLINICAL LECTURE

ON A

## CASE ILLUSTRATIVE OF THE CIRRHOTIC FORM OF BRIGHT'S DISEASE.

By T. MCCALL ANDERSON, M.D.,

Professor of Clinical Medicine in the University of Glasgow, etc.

IN the investigation and in the treatment of patients, it is of the utmost importance that we should carefully discriminate between the affection and the disease. The difference between the two will be at once apparent if I give you an illustration. Two patients are labouring under painful affections of the joints; but in one case the pains are due to the presence of an excess of uric acid in the blood, while in the other they are dependent upon a syphilitic taint. In each, the lesion of the joints is the affection; while in the one the disease is gout, and in the other syphilis.

The patient whose case is the subject of to-day's lecture was labouring under a variety of affections; but we shall see how beautifully they all fit into and harmonise with one another, and are dependent upon one and the same disease. He was forty-one years of age, a shoemaker, unmarried, and was admitted into Ward 2, Bed 2, on January 5th, 1876, complaining of palpitation with pain in the præcordial region of eighteen months'; of loss of flesh, irritability of stomach, giddiness, pain in the head, and dimness of vision, of eleven weeks'; and of cough, with expectoration, of two weeks' duration.

The family history could not be satisfactorily ascertained; but his father died at the age of seventy-seven, and his mother at sixty; while, of eight brothers and sisters, only two survived.

At the age of fourteen, he had scarlet fever; at seventeen, gastric fever; at nineteen, typhus; and at twenty, rheumatic fever. About fifteen years prior to admission, he had a gonorrhœa, which soon disappeared; and he seems never to have had any other form of venereal disease. He was a man of extremely irregular habits, sometimes drinking for a week at a time; but more recently he limited himself to a "break out" on Saturdays. He also smoked to great excess, sometimes using more than a quarter of a pound of tobacco in a week; but of late he had been more moderate in his dissipations.

About eighteen months before admission, he began to complain of palpitation, associated with uneasiness in the præcordial region, especially on exertion; and, some months afterwards, to these symptoms was added dyspnoea. About thirteen weeks before I first saw him, while undressing at night, he had a severe attack of vomiting; and a few minutes afterwards, having gone to bed, his breathing became stertorous, and he could not be roused. Along with the insensibility, which continued until six o'clock the following evening, the whole of the left side became completely paralysed. The paralysis was decidedly less by the following evening, and, on his admission, had in great measure disappeared. About the same time, he first noticed that he was passing a great deal of urine; and, several weeks afterwards, slight dimness of vision set in, which in a day or two suddenly increased, so much so that he was unable to recognise faces, although he could count the number of fingers held up before him. From that time, his vision did not further deteriorate. Along with the impairment of sight, irritability of the stomach came on, to such an extent that he could seldom retain food for any length of time, especially if he got up and walked after a meal. About an hour after food, he complained of heartburn and brought up sour mouthfuls; and this terminated in vomiting the contents of the stomach. Latterly, he suffered from pain in the head during the day, particularly in the occipital region; and from giddiness. To these symptoms must be added pallor, increasing emaciation, and debility.

In this case, there was hardly a single organ of the body whose functions were not more or less interfered with; and this, as we shall see, was the result of a wide-spread tendency to alteration or degeneration of tissue.

Let me first of all direct your attention to the eye-affection, which began three months before we saw him, with, as the report says, slight dimness of vision, which in a day or two suddenly increased, so much so that he was unable to recognise faces, although he could count the number of fingers held up before him. On his admission into the Eye Infirmary, he was barely able to read No. 20 (Jäger); the right eye being, however, a little better than the left. Dr. Thomas Reid,

under whose care he then was, made the following report. "Pupils dilate only partially, though regularly, with atropine. Ophthalmoscopic examination: Fundus of each eye occupied by the characteristic white deposit of albuminuric retinitis, interfering with the definition of the optic disc, which appeared to be somewhat atrophied. Retinal vessels greatly reduced in calibre. In the left eye, a considerable portion of the choroid below and outside the disc had an atrophied look; and scattered pigment-granules were seen in this situation." In a letter which Dr. Reid kindly sent me, he thus faithfully describes the characters of retinitis albuminurica.

1. Almost all cases of this disease are chronic, dimness of vision being generally the first symptom complained of.

2. The essential cause of the dimness of vision is fatty degeneration of the retina in the neighbourhood of the optic nerve-entrance and macula lutea: parts of the retina most used in direct vision.

3. The fatty degeneration is said to be preceded, and in some cases is certainly accompanied, by congestion and hæmorrhage from rupture of the arterioles of the retina. When the congestion and extravasation are considerable, there may be loss of vision from this cause in the early stages of the disease; but the vision improves as the congestion diminishes and the blood is absorbed. The sight is never perfectly restored in chronic cases, but the amount retained is determined by the extent and position of the fatty deposit. In no case is the vision entirely lost.

4. In the advanced stages of the disease, and probably also during the whole course of the more chronic forms, congestion and hæmorrhage are never present. The fatty deposit occurs primarily in the retina, but may also involve the choroid, as would appear from the thinning of this membrane observed when it is partially absorbed.

5. The origin and course of the disease are obscure, but are evidently connected with the blood-vessels, being due either to some condition of the system affecting the retina and kidneys equally, or to the diseased condition of the kidneys which, by altering the character of the humours, initiates the pathological changes observed in the blood-vessels.

6. The patients, in the chronic cases, never recover, but may live for a year or two after the first symptoms have been recognised.

(See Figs. 1, 2, and 3, showing (1) the healthy retina, (2) the disease in its early stage from the case of a patient who, at the time, was in the Infirmary, and (3) in its advanced stage from the case under consideration.)

The state of the eyes, then, as a matter of course, led us carefully to investigate the condition of the kidneys. As you are aware, there are three forms of chronic Bright's disease: 1. The chronic inflammatory form, that which specially affects the uriniferous tubules; 2. The amyloid, which, in the first instance, attacks the blood-vessels; and 3. The contracted, granular, cirrhotic, or gouty form, which specially involves the interstitial tissue. Any one of these may be complicated with albuminuric retinitis, but the last with much greater frequency than the others. Let us, therefore, run over the main features of it, and see whether they correspond with those observed in our patient.

It is for the most part a disease of adult males. It is not uncommon between twenty and thirty (Grainger Stewart), but is more frequently met with in older persons, as is apparent from the statistics of Dickinson, who found that the average age of 250 patients examined by him was 50.2 years. Our patient was a male aged 41.

The subjects of it gradually lose flesh and strength, become pallid, and frequently complain of headache and of giddiness just as our patient did. The cause of the headache has been variously stated: many hold that it is due to defective elimination by the kidneys and consequent accumulation of poisonous excrementitious matters in the blood; while others suppose that it is dependent upon the anæmia, and point, in corroboration, to the relief sometimes experienced by the administration of ferruginous preparations. In all probability, sometimes the one condition, sometimes the other, gives rise to it. For similar reasons, they are very liable to catch cold, and more or less bronchitis is a pretty uniform accompaniment; so that it was not surprising to note, in the case under consideration, the presence of cough with mucous expectoration and slight bronchitic râles, especially at the base of the lungs. You have learned, no doubt, that one of the most striking symptoms to look for in cases of Bright's disease is dropsy, but in the contracted form it is absent in from one-quarter to one-half of the cases, and, when present, it is slight and usually transient; so true is this, that if you meet with a patient labouring under the cirrhotic kidney who is markedly dropsical, you may be pretty sure that it results from some complication. Our patient has had no dropsy at all, and his urine presented the characters which we might have expected. It was passed in large quantity (over one hundred ounces in twenty-four hours), was pale, its specific gravity was low (100), and it contained a fair amount



of albumen (one-third). On leaving it to stand, a scanty deposit was thrown down, in which the microscope detected a few structureless and finely-granular tube-casts.

Again, he had stomach-symptoms such as frequently occur in connection with the contracted kidney. On referring to the history of the case, we find it stated that, "along with the impairment of sight, irritability of the stomach came on, and to such an extent that he could seldom retain food for any length of time, especially if he got up and walked after a meal. About an hour after food, he complained of heartburn, and brought up sour mouthfuls, and this terminated in vomiting the contents of his stomach." This irritability of the stomach is sometimes indicative, as *post mortem* examinations have proved, of chronic gastritis, but it often, I believe, results solely from defective excretion by the kidneys, and consequent retention of poisonous ingredients in the blood—is, in fact, uræmic; and it is right you should know that for long it may be the most striking symptom called forth by the disease of the kidneys. Some years ago, a medical man, himself a distinguished teacher of medicine, began to complain of sickness which always set in if he fasted for more than two hours. This symptom continued for months without either himself or his medical advisers suspecting its cause, but at last his urine was examined and found to be albuminous, and about two years afterwards he died with all the symptoms of uræmic poisoning.

There can be no doubt, then, that our patient was suffering from the effects of granular degeneration of the kidneys; but, if further proof be wanting, it is to be found in the discovery of lesions of the circulatory and nervous systems. On reference again to the history of his illness, we note that "about eighteen months before admission he began to complain of palpitation associated with uneasiness in the præcordial region, especially on exertion, and some months afterwards to these symptoms was added dyspnoea".

On making a physical examination of the heart, we found that there was slight fulness in the præcordial region; the apex-beat was displaced somewhat downwards, and carried decidedly to the left (half an inch to the left of the nipple-line); its area of visible impulse was preternaturally great, and it was strong and heaving in character. On percussion, too, there was an increased area of dulness in a downward direction and to the left, and the sounds of the heart, though pure, were unusually loud and strong. All this shows that the left ventricle was the seat of hypertrophy. Now, why should such a condition arise in connection with the granular kidney? The explanation is obvious. The blood being poisoned by the excrementitious matter which ought to be excreted by the kidneys, the minute arteries throughout the system, arterioles as they are termed, are irritated and contract, and their muscular coat, as pointed out by Dr. George Johnson, becomes hypertrophied. There is thus an obstacle to the onward flow of arterial blood to the capillaries, to overcome which the left ventricle contracts with unusual vigour, and, as a consequence, it becomes hypertrophied. This excessive action of the heart on the one hand, and the state of contraction of the arterioles on the other, produces, as was noted in this case, a full hard prolonged pulse, a pulse of high arterial tension. This is well shown by the sphygmographic tracings which were kindly taken by Dr. McVail; the first being the normal tracing from the radial artery of our esteemed resident medical officer Dr. Sewell, the second from the patient whose case we are considering.

Another feature in this case—a very common one it is, and one which in part explains the attack to which I shall immediately refer—was, that the superficial arteries pulsated very visibly, were tortuous, and felt like firm cords; that is to say, they were atheromatous, leading one to suspect that the delicate vessels in the brain were atheromatous and brittle too. And now let me refer once more to that part of the history wherein it states that one night, while undressing, "he had a severe attack of vomiting, and a few minutes afterwards, having gone to bed, his breathing became stertorous, and he could not be roused. Along with the insensibility, which continued until six o'clock the following evening, the whole of the left side became completely paralysed. The paralysis was decidedly less by the following evening, and on his admission had in great measure disappeared". The paralysis was supposed to result from the rupture of a cerebral vessel in the neighbourhood of the right corpus striatum, for there was everything to favour such a lesion. This will be apparent when I remind you that, on the one hand, the hypertrophied ventricle was driving the blood with violence into the cerebral vessels, while, on the other, the arterioles were in a state of contraction, and obstructed the onward flow of the blood; an extra strain was thus put upon the larger cerebral vessels, which we suspected to be brittle and atheromatous, and nothing could be more likely than that one of them should give way.

These cases of contracted kidney are very insidious in their onset and course, and are extremely apt to be overlooked both by the pa-

tient and medical attendant, because often there is no very prominent symptom for a long time, only a gradual loss of flesh and strength, with more or less pallor. On this account, medical advice may not be sought until the disease is far advanced, and when some striking disturbance of function has supervened, such as obstinate irritability of the stomach, failure of vision, an attack of convulsions, or a paralytic seizure. In our patient's case, advice was only asked for when the eyesight became impaired, and yet the disease must have been going on for long, because albuminuric retinitis only occurs in an advanced stage of the disease, and because the history points to the existence of hypertrophy of the left ventricle eighteen months before the vision became dim, and hypertrophy itself does not ensue until the disease has made some progress, and has induced long continued contraction of the arterioles from the poisoned blood passing through them.

This patient was sure to die, and that at no very distant period. I need not dwell upon the treatment, further than to say that we gave him whatever light nourishment he could take, and, along with it, a course of iron in effervescence,\* as it is then more readily tolerated, and, in combination with hydrocyanic acid and bismuth, to soothe, if possible, the irritability of the stomach.

For some days there was some improvement in this patient's state; but soon the irritability of the stomach reappeared and became uncontrollable. Suppression of urine gradually set in, followed by coma and death, on January 20th, fifteen days after admission.

The *post mortem* examination was made by Dr. Joseph Coats, Pathologist to the Infirmary, and the microscopic examination of the eyes and kidneys by Dr. Thomas Reid, with the following result.

**Brain.**—There was considerable oedema of the pia mater all over the convexity, the sulci being filled up with a clear fluid. The ventricles did not contain an excess of fluid. In the left occipital lobe there was a pretty extensive softening of the brain-substance involving almost the entire bulk of three or four convolutions, the cavity caused by the softening being covered almost directly by the pia mater of the surface. The convolutions involved were situated on the external aspect, and at the extreme posterior portion of the hemisphere. The cavity contained a turbid fluid of a brownish-yellow colour, and the wall of the cavity had a yellow colour, and was composed of softened brain-substance. In the right corpus striatum there was a distinct cyst as large as a hazelnut. This was situated in the most external part of the corpus striatum, involving a portion of the most external part of the nucleus lenticularis, the external capsule, and nucleus tæniæformis. The cyst was pretty far back, its anterior margin nearly corresponding to the anterior margin of the thalamus opticus. The cyst was lined by a distinct vascular membrane, and had one or two septa running through it. It was separated from the neighbouring brain-substance by the membrane mentioned. The larger arteries of the brain were the seat of numerous patches of atheroma, this condition extending to vessels of the third or fourth order. On microscopic examination of the wall of the cysts of the corpus striatum, and of the cavity in the occipital lobe, there were found multitudes of compound granular corpuscles, as well as a few blood-crystals and granular pigment. The blood-pigment was not abundant, but still present in every part; otherwise the brain-substance appeared normal.

The woodcut (Fig. 5) shows the microscopical appearances of a section of the retina and choroid.

**Chest.**—The pericardium contained several ounces of a straw-coloured fluid. The heart was enormously enlarged, weighing twenty-three ounces. The enlargement involved chiefly the left ventricle, whose walls were very thick; the muscular tissue was rather pale. There was no thickening of the valves. The mitral orifice was slightly dilated, admitting three fingers. The lungs were slightly oedematous, and their margins were emphysematous.

**Abdomen.**—The liver was enlarged, and showed evidences of chronic congestion, viz., nutmeg markings. The spleen was also enlarged, being about double its usual size. The mucous membrane of the stomach was slightly thickened and irregular. The left kidney weighed two ounces and a quarter. The capsule was firmly adherent. The surface was finely granular, but there were no deep cicatrices. On section, the tissue was seen to have a generally red tint, but not dark red. The tissue was firm. The cortex was not distinctly thinner than usual as compared with the pyramids, but its normal markings were obscured.

The woodcut (Fig. 6) gives a better idea of the microscopical appearances of a section of the kidney than any verbal description can convey.

\* R. Ferri citratis ʒiiss; acidi citrici ʒvj; aque dest. ad ʒvj.—R. Acidi hydrocyanici dil. ℥lxxij; potassæ bicarbonatis ʒvi; liquoris bismuthi, syrupi aurantii, sing. ʒiij.—M. ʒʒs. A dessertspoonful of the contents of each bottle in a glass of water three times daily.



## ILLUSTRATIONS OF TREATMENT IN ARRESTING PHTHISIS.

By JOHN C. THOROWGOOD, M.D., F.R.C.P.,

Physician to the Victoria Park Hospital for Diseases of the Chest, etc.

THE following cases are selected with a view to illustrate the influence of medicinal treatment in arresting pulmonary phthisis, and the value of certain hypophosphites in contributing to this arrest. When phthisical disease is confined to one lung, and is of the catarrhal pneumonic kind, then it appears to me that a favourable prognosis may be very reasonably given, even if a cavity be already developed. When the disease, after existing in a chronic state in one lung, appears to spread to the other, then it too often gets out of the reach of treatment; the chances being that, on the lung secondarily affected, true grey granulations are forming in the adenoid tissue, and over these formations treatment does not exercise the control that it does over catarrhal pneumonia. Not long ago, I had under treatment, in Victoria Park Hospital, a man who had chronic catarrhal pneumonia in his left lung, with numerous cavities; he died of hæmoptysis, and we found, at the *post mortem* examination, that a vessel had given way into one of these cavities, and so caused his sudden death. The left lung was strongly adherent, and full of caseous deposits and excavations; the right was voluminous, non-adherent, and free from all pleural thickening; on squeezing it in the hand, granular masses were felt, and, when the lung was cut through, masses of grey granulation were found, but no trace of pneumonia or caseation or excavation was found in this right lung. Had this man not been cut off suddenly by hæmoptysis, the prognosis in his case was, as I had said some time before his death, most unfavourable. The cases which are here recorded had symptoms pointing pretty decidedly to disease in one lung; and it is in these cases of catarrhal pneumonia where I have met with such very satisfactory results from the use of the hypophosphites of soda and lime. In the year 1863, I first began to employ these salts, and since I have learned more exactly to understand the nature of pneumonic phthisis and catarrhal pneumonia, I have been able more clearly to recognise the cases in which the hypophosphites come in as valuable remedial agents. Contrasted with many other remedies, such as mineral acids, quinine, and steel, the hypophosphites appear to much advantage, and may certainly stand side by side with cod-liver oil in antipthisical powers. As to steel, I believe it often does more harm than good, and tends to promote the increase of temperature, which may herald the development of true tuberculosis in the lung.

CASE I.—James R. E. was an out-patient at the Victoria Park Hospital May 9th, 1867. He was a pale thin young man; had been ill, with more or less cough, for the last five years. He dated his illness from a sudden spitting of blood. The left side of his chest was flattened, with impaired percussion resonance and abundant crepitant *râles* in inspiration. The right side of the chest was resonant; expiration was prolonged. Cod-liver oil always made him sick. On the previous day he brought up blood. He was ordered to take five grains of hypophosphite of soda in camphor-water three times daily. May 16th. The medicine agreed well, and he felt much better. On May 23rd, the cough was much better. Pulse 104. There was a cooing sound with expiration in the right lung. The left side was dull at the upper part, and here a dry creaking was replacing the crepitant *râle*. He was ordered to take five grains of hypophosphite of lime in place of the soda salt. On May 30th, he was much amended; there was very little sputum now. On June 13th, he felt himself well, though respiration was not normal in the left lung. He could now take some cod-liver oil, and, at his own desire, left to go to his home in Wales.

CASE II.—Benjamin D., a labourer, aged about 35, from Acton, was seen on June 27th, 1867. He had had a bad cough since March, with frequent spitting of blood. Pulse 104, feeble. The bowels were inclined to diarrhoea. The tongue was clammy. His breath was very short. Both sides of the chest were somewhat flattened. The respiratory sound was generally weak. Crepitant *râles*, to a slight extent, were heard over the left upper third. The liver was enlarged and tender. Cod-liver oil, he said, "always ran through him". He was ordered to take five grains of hypophosphite of lime with ten minims of saccharated solution of lime in infusion of calumba three times daily. He took this till August 8th, when he was discharged, stating that he could now walk a long distance without fatigue; his cough also was "nothing worth speaking of". Dry creaking noises could be heard still at the upper part of the left lung.

CASE III.—Robert H., aged 34, a fine healthy looking man, had had a bad cough for the last five months, coming on from no known cause. The sputum was often streaked with blood, and he sweated

profusely at night. The chest resonance was good. Respiration was weak at the left apex. From May 20th to June 5th, he took five grains of hypophosphite of lime three times daily, and five grains of Dover's powder every evening. On June 5th, 1873, he was let go at his own request, having entirely lost all cough and sweating.

CASE IV.—William L., aged 14, was a patient at the Victoria Park Hospital in 1872, in consequence of rather free hæmoptysis, which subsided under treatment. On June 5th, 1873, he came under my care, having a hot skin, pulse 100, and rapid wasting. The left side of the chest was resonant, and respiration was full and strong. On the lower part of the right side resonance was impaired, and crepitant *râles* were very audible. He was ordered hypophosphite of soda, with citrate of iron and cod-liver oil, and by July 10th was discharged, having lost his cough and with strength much increased. Breathing was bronchial at the right base, with some sonorous *râle*. In this case, at his first attendance, a distinct "cracked pot" note on percussion was observed at the third costal cartilage on the right side. As he recovered, this subsided. The case was apparently one of chronic pneumonia; but the hæmoptysis a year previously, made me regard the lung symptoms with some suspicion. The "cracked pot" note, of temporary duration, is a well-known phenomenon in many of these cases of pneumonia in children, and is by no means a sign of a cavity in the lung. These cases of chronic pneumonia in children often do much better than one might expect. About the time that the case just reported was under treatment, a lad, aged 6, came for examination prior to admission into the Victoria Park Hospital. He had been ill six weeks with cough and wasting of flesh, and crepitant *râles* were very distinct over the left lung, with impaired resonance. Three months later, I chanced to see him in the hospital and hardly knew him, he had become so robust and strong. A very few crepitant sounds were still to be heard in the left lung. In the case of a little girl, who had right basic pneumonia after measles, a consolidation remained very persistently for full twelve months, though the child had every advantage in the way of frequent visits to the seaside and very careful attention. There was never any hæmoptysis, though the family tendency inclined to phthisis, and at the present time the child is perfectly well and respiration normal. Hypophosphite of soda seemed to me very useful in the treatment of this case, but I believe the chief remedial agent was sea air.

CASE V.—Henry W., aged 34, a plasterer, came to Victoria Park Hospital April 1st, 1876. He had had a bad cough for twelve months, and during the last two had often spat blood; he had lost flesh considerably. He had been under medical treatment, and had taken much cod-liver oil. There was very distinct crepitation, limited to the left apex. He was ordered to take five grains of hypophosphite of soda in alkaline infusion of calumba three times daily, and to continue the cod-liver oil. This treatment was continued to May 6th, when he stated that he had lost all cough, save a little hack when he rose to go to work at 4 A.M. Before he came to the hospital, he was coughing and spitting all day, and he could not carry three bricks; he could now carry a sack of cement easily. There was feeble breathing now, but no crepitation at the left apex. Pulse 80. His habits had always been remarkably temperate; he rarely took any form of alcohol.

In the case of a young woman, very exactly corresponding, in symptoms, treatment, and termination, to the above, I believe that abstinence from all forms of alcohol certainly promoted her recovery.

## A CASE OF HYDROPHOBIA.

By S. WILSON HOPE, L.R.C.P., Petworth.

ON August 21st, 1876, a sturdy-looking little boy of four years old was brought to my surgery, supposed to have been bitten by a mad dog a quarter of an hour previously. There was a large wound under the left eye; a tooth displaced upwards; a contused lip; and a wound in the calf of one leg; besides scratches acquired in a struggle on the ground. I cauterised the wounds, perhaps half-heartedly, and after a few days the child appeared to have returned to his usual health. On October 9th, I was asked to see him; and on my arrival his mother gave me the following history of him. He had seemed quite well until Saturday, October 7th, when he complained of feeling sick. His nose ran as if he had a cold. He took his breakfast on that day but nothing afterwards, and stayed in bed the whole day. On Sunday, he complained of his throat, and his mother thought the cold was taking the usual course with him. He ate nothing all day but a small piece of potato, and drank nothing but a little tea in the afternoon. On Sunday night, he kept wanting to pass urine. He had no sleep, and frequently asked for something to drink, but never tasted it when brought to him. I found him on Monday morning seated on a table



with nothing on but his shirt, quite quiet, having a cup of tea by his side, and playing with the spoon in the tea. He held his head down somewhat, and had a sullen, sulky look about him; but beyond that he seemed hardy and well. He complained of pain and showed me where it hurt him by putting his hands to his throat and epigastrium. The tongue was coated except at the tip and edges. The fauces looked normal; but, on the approach of a spoon to depress the tongue, he drew back his head and cried as if in pain. The skin felt cool; the pulse was quickened. The cicatrices seemed healthy, and were in no way discoloured or painful. There was no drivelling of saliva. The voice was altered as if from cold, and he seemed sparing of his words. There was a good deal of secretion in the nasal passages. There was no marked spasm. At 8 P.M. I saw him take some tea from a spoon. He took it hastily, making a loud, sucking noise, as one has heard people temporarily oblivious of manners over a bowl of hot soup. After a while he appeared to doze for a few moments and wake with a start, and this was repeated several times. The breathing was interrupted at intervals but the spasms were not severe. Micturition was frequent. The tongue was coated.

On October 10th, 10 A.M., his mother and the nurse told me that he had not slept all night. He had taken a little milk and tea. He had screamed out about every five minutes through the night, until it became light. He had seemed at times as though he could not get his breath. He had passed urine frequently. The bowels had been moved. I found his condition much the same as on the previous night; but the breathing was often broken as if he were sobbing, or sometimes as if sighing. At 8.30 P.M. I found him breathing with a croupy noise, and making frequent quick-drawn sighs. There was much secretion about the air-tubes and nostrils. He seemed, I thought, to swallow the phlegm. There was not much saliva about the mouth. He said, "If I could spit I should be better", and again, "My mouth just do hurt", and again, "Oh, my mouth", three times. He asked for some tea, and licked the tea and spoon more than once without inducing spasms; but, on trying again, he had several catches in his breath; turned his back quickly on the cup held by his mother; and seemed about to jump out of the other side of the bed. He asked that his cup—a feeder—might be filled up. He spoke more clearly than yesterday. Micturition was still frequent. The tongue was still coated.

On October 11th, 10.45 A.M., his mother told me that he had not lain down, nor slept, nor eaten, nor tasted drink through the night. He had not screamed. There had been much catching in his breath, and one convulsion which seemed to throw him out of bed. He had taken a piece of linen off a chair and beaten it furiously. He had told his mother not to come near him, or she would have a cold like him. He had seemed about to bite his father's hand. He had asked for the door of his room to be kept closed, and for a large chair to be placed between the wall and his bed, so as to partition off a corner of the room for himself. He had rambled much about his little school-fellows. Urine was not passed so often. The bowels were not moved. I found him seated on a low stool in his corner of the room, with only his shirt on. His face was pale, and the scar of the bite showed very plainly, perhaps in consequence. He sat with his head on one side, his eyes turned upwards and to the left, apparently at nothing, and his tongue hanging out of his mouth. He looked mad. He remained in this attitude for two or three minutes. There was much less mucus in the air-tubes. The spasms of the respiratory muscles were not so frequent. He dipped his finger in milk, and put it in his mouth frequently without spasm. He would not drink from the spoon, because he said it got up his nose and made him bad. He sat for a long time quite quiet with his face to the wall, then lifted a porringer as if to spit in it; but being seized with a spasm, he staggered to his feet, dropping the porringer, and caught hold of some piece of furniture, while his legs seemed stiffened under him; then he uttered a low moan, and began to dip his finger in the milk again; then rambled, saying "Em'ly, Em'ly, I want to play horses"; but soon roused on being spoken to. At 8 P.M., the nurse and his mother told me he had been biting the chair and striking it furiously. He had appeared not to know them. He had retched two or three times. I found him going about the room on his hands and knees. I put him in bed. There were several spasms of the respiratory muscles as the bed-clothes were drawn over his legs. He had frequent paroxysms of mixed terror and rage, during which he would strike any object near, and cry as if half in passion and half in fright. The paroxysms seemed like a sort of nightmare, and one had to speak several times to him before his dreaded fancied surroundings gave place to confidence in what was. He was not pale, nor was he flushed. He dipped a crust in milk and took several bites, slowly chewing and accumulating the bread in his mouth, and finally swallowing it. At 9.30 P.M., he grew drowsy, and at 10

P.M. was soundly asleep. At 10.45, he died; the heart failing before the respiration.

*Treatment.*—On October 9th, at 10.30 A.M., with the hope of lowering the sensibility of the tongue and mouth, and thereby of lessening the tendency to spasms of the respiratory muscles, I gave one of Savory and Moore's morphia discs, one-sixth of a grain. He put it in his mouth, but in a short time spat it out again, along with much tenacious saliva. At 2.45 P.M., on an hypothesis of resemblance between strychnia-poisoning and rabies, coupled with vague hope in a comparatively untried remedy, I injected subcutaneously ten grains of hydrate of chloral. At 8.30 P.M., food having been swallowed, I was led to repeat the injection. On the 10th, at 10.30 A.M., as the night had been unquiet, as the puncture was inflamed, and as there was great terror of an injection, I did nothing. At 8.30 P.M., the mouth being much complained of, I gave one drop of a solution of sulphate of atropia (two grains to the ounce), to be taken up with the finger and put on the tongue, using it as a local sedative, and thinking perhaps to feel my way towards bringing him under the influence of the drug. On the 11th, at 10.45 A.M., I repeated a drop of solution of atropine. At 8 P.M., determining to feed him, I began to administer chloroform, with the idea of giving nourishment and stimulants, through a small funnel, either by the nose or mouth, when a sufficient degree of anaesthesia should have been reached; but his distress, on the mere approach of the lint to his face, led me to desist. Again, with this object, I injected subcutaneously one grain of morphia at 8.30 P.M., thinking to get food given before the stage of sleep should have been reached, and desiring also to insure sleep for its own sake. At 9.30 P.M., he grew drowsy. At 10 o'clock, he slept soundly. At 10.45 P.M., he died. At the last, I deepened his inspirations artificially as long as there seemed to be any use in doing so. Now, indeed, I regret I gave so large a dose of morphia. Perhaps the spasms might have been controlled and sleep procured with a smaller dose, and at least it might have been tried. I suspect, too, that the difficulty of making up my mind as to how much of his worst symptoms should be put down to the poison of the disease itself, how much to the want of sleep, and how much to the want of food, led me to turn aside at the last from my purpose, and leave unutilised the very opportunity for giving food which I had been at pains to seek for, and had obtained.

In connection with this case, a point arose which practically would seem of some importance, and may be stated thus. On August 21st, 1876, a farmer was told that a mad dog had bitten some of his pigs, and in about six weeks one of his pigs was taken ill and destroyed. Soon afterwards, he asked my opinion whether he was justified in selling others of the drove to kill for food. As he did not know himself whether they had been infected with the disease or not, I was unable to state the effects which might be expected to follow from eating the flesh of an animal killed when hydrophobia was developed, much less the effects when the disease was latent only.

## SPECULA MADE OF GLASS.

By JAMES MURPHY, M.B., Sunderland.

AMONG the gynæcologists of the present day, the cylindrical speculum has passed almost completely from the department of diagnosis into that of therapeutics; but, as a therapeutic agent, it still holds a foremost place as an instrument by means of which we can most effectually apply local remedies for the treatment of the various diseases of the vagina, the os, and cervix uteri. I wish, therefore, to draw the attention of the profession to certain advantages which specula, made of glass alone, possess over those made of other materials. I am the more anxious to do this, as in none of the text-books with which I am acquainted are they recommended, though I feel confident they only require to be tried to become generally used.

The first advantage they possess is cleanliness, for there is no ridge as is usual at the inner end of metallic, or crevice which often forms at the end of coated, specula after a little use, where syphilitic or other virus may lodge. A source of danger which it is needless to dilate upon.

Glass specula are easily washed, and, as they are transparent, one may see at a glance if they are perfectly clean; and this I consider a most important property, as by it the slightest particle of foreign matter may at once be detected. Secondly, the walls of the vagina may be seen through the glass, and fistulae or other morbid conditions recognised; and in anteversion of the uterus, the cervix can easily be discovered and readily brought into the lumen of the speculum. And, finally, they give a very good light, are not acted upon by medicinal agents, and cost much less than the specula now in use.



The shorter they are made the better, provided they answer the purpose. The glass should be pretty thick, and smoothly bevelled at each end. The diameter should be the same throughout—no tapering, except the usual funnel-shaped expansion at the outer end. The inner end should be cut obliquely in some, as easier to manipulate a displaced cervix with; and straight in others, for use when it is desired to produce an ectropion of the lips of the os, so as to gain a view of the cervical canal.

I have been much pleased with some that Messrs. J. Wood and Co., surgical instrument makers, York, have made for me, but I hope soon to be able to get them made up of De la Bastie's toughened glass, which will render them less liable to be broken.

## GENERAL COUNCIL

OF

### MEDICAL EDUCATION AND REGISTRATION.

SESSION, 1877.

Thursday, May 17th.

DR. ACLAND, President, took the chair at 2 P.M.

*Report of the Medical Acts' Committee.*—On the motion of Mr. SIMON, seconded by Mr. TURNER, it was resolved that the Report of the Medical Acts' Committee be received and considered; and the Council resolved itself into a Committee for its consideration.

*Territorial Range of Titles to Practise.*—The section of the Report which treated of this subject was first read. It was as follows.

"1. The first subject on which the Committee has to report is that of various questions which have arisen as to the proper territorial range of certain licences and honorary titles, British and foreign, relating to rights or rank in the medical profession.

"2. Remonstrances have come from the dominion of Canada against the exclusion of legally qualified Canadian practitioners from recognition under the medical law of the mother country, and particularly as to the detriment and offence which they suffer in their relation to the Merchant Shipping Acts of the home legislature. And, in respect of British India, an application is made by Sir Joseph Fayrer, on behalf of the licentiates and graduates of the Universities of Calcutta, Madras, and Bombay, that they may be admitted to the privilege of registration under the Medical Act of the mother country. The points thus raised are two particular cases of a large general question; and the principles on which they must be dealt with are, in the opinion of the Committee, not exclusively applicable to India and Canada. The grievance (stated in general terms) is, that medical degrees or licences which have been conferred under due authority in British possessions outside the United Kingdom, and which respectively entitle to practise in the particular imperial province in which they are granted, give at present no professional status in other parts of the British empire; and the question of principle which the Council has to determine is that of admitting such degrees or licences to be registered as qualifications under the Medical Act. The Committee regards this question as one which urgently needs to be decided by the Council.

"3. Again, an important issue has been raised in France as to the privilege under which the medical practitioners of other countries (including our own) have hitherto been allowed to settle there for professional purposes; and the Committee, while considering this question in its relation to British interests, has found itself confronted with the fact that British law affords no recognition to the medical licences of foreign countries. The Committee is of opinion that, under the circumstances, the Council would do well to deliberate and decide, in its present session, whether or not it will move the legislature to relax—and if so, to what extent, the present non-recognition of foreign licences and degrees.

"4. The Committee, in preparing to submit its opinions to the Council on the two abovementioned questions, would remind the Council of previous occasions on which those questions have been more or less under discussion. In 1870, on occasion of Lord Ripon's Bill of that year, the Council appears to have assented to the principle that 'colonial' and foreign diplomas, respectively valid as titles to practise in the British possessions or the foreign countries in which they are granted, should under conditions entitle their holders to rank as legally qualified medical practitioners in the United Kingdom. Two years ago, however, on occasion of Mr. Cowper-Temple's Bill (which aimed at procuring registration under the Medical Act for women holding foreign diplomas) the Council appears to have taken, at least in regard of the foreign diplomas, a position somewhat different from that of

1870: the position of 1873 being, that the Medical Act 'very properly' refuses foreign degrees the privilege of registration in this country, because 'the Council have no means of exercising that supervision and control over the education and examinations required for foreign degrees to which the licensing bodies of this country, whether universities or corporations, are, by the Act of 1858, subjected'. And on two occasions, in 1876, the Council expressed itself to the same effect as in 1875: first, with regard to a renewed proposal of Mr. Cowper-Temple's Bill; and secondly, in answering the memorial in which a large number of registered practitioners, being also graduates in medicine of foreign universities, had prayed the Council to obtain power to insert in the *Medical Register*, as additional qualifications, foreign degrees conferred after examination on duly qualified registered practitioners.

"5. As regards these previous conclusions of the Council, the Committee is of opinion that, so far as the conclusions expressed in 1875 and 1876 differ from the conclusion expressed in 1870, the conclusion of 1870 is that which ought to prevail; provided always that the 'conditions' under which the extrinsic licenses would be admitted to register in this country shall be such as fairly to represent the essential intention of the Medical Act—that persons requiring medical aid should be enabled to distinguish qualified from unqualified practitioners'.

"6. In regard to such 'conditions' as are here in question, the Committee would distinguish between qualifications granted in the outlying possessions (Indian and Colonial) of the British empire, and, on the other hand, qualifications granted under foreign governments.

"7. As regards the former, the Committee is of opinion that qualifications granted under legal authority, in any part of Her Majesty's dominions, ought to be regarded by the Council as presumptively entitled to legal recognition in the mother-country. It is true that the Council would be unable in general to judge the value of these qualifications as accurately as it can judge those for which the Medical Act holds it directly responsible. But the Committee is of opinion that sufficient allowance for this consideration would be made by providing that, in the *Register*, there should be a distinct alphabetical section for 'persons practising in the United Kingdom under qualifications conferred in the other parts of Her Majesty's empire'. And, in the opinion of the Committee, it would of course also be desirable that the right of Indian and Colonial qualifications to be registered as above under the Medical Act should, in case of abuse, admit of being suspended by some such process as that which applies under Sections xx and xxi of the Medical Act to qualifications which are granted within the United Kingdom. It is the opinion of the Committee that the Council should recommend to Her Majesty's Government to promote, at the earliest opportunity, legislation to the above effect. But if it should seem that such legislation (as perhaps opening some large questions under the Medical Act) could not at once be provided, the Committee would recommend that meanwhile at least the urgent grievance of the Canadian practitioners should be removed by the required small amendment of the Merchant Shipping Acts.

"8. As regards qualifications granted under foreign governments, the Committee is of opinion that there are many which, in international courtesy, ought to be admitted as conferring on the foreigners who seek to practise under them in British territory a claim to be recognised at law as properly qualified medical practitioners: cases, namely, where the degrees or licences are known not to be conferred except after all due education and examination. It is, of course, evident in regard of foreign qualifications, that the Medical Council cannot ever pretend to judge their value as accurately as it judges the value of qualifications conferred in the United Kingdom under its own superintendence and visitation; and no doubt there may be particular foreign qualifications regarding which the Council, after inquiry, would not approve that they should have any legal recognition in this country. But cases of the latter description ought, in the Committee's opinion, to be dealt with as exceptional. And, considering that foreigners who desire to practise here under legal sanction would be practising chiefly, if not exclusively, on their own countrymen (who could here, just as when at home, judge for themselves as to the value of the diplomas of their own countries), the Committee would recommend to the Council, as principles for legislation, that the General Medical Council should have authority to establish, under conditions, in the *Medical Register*, a distinct alphabetical section for 'foreigners practising in the United Kingdom with qualifications granted in foreign countries, and entitling to practise in those countries respectively'; and that the Council should have authority to cause to be registered in this section of the *Register* such qualifications as it may in its discretion (having regard to the conditions under which they are granted) judge to be reasonable guarantees of professional skill.

"9. The Committee does not propose that British subjects holding foreign qualifications should be dealt with under the above general rule.



Freedom of choice as to places of study ought of course to be open to all; but the Committee would think it inadmissible that British students, intending to practise in the United Kingdom, should have the option of undergoing in any other country than their own the examinations which are to test their fitness for practice. Individual cases may no doubt occur in which a British subject, having received his education and diploma in a foreign country with *bonâ fide* intention to practise in that country, and having perhaps spent many years in practice abroad, may eventually wish to take professional status at home, and to do so without submitting himself to the ordinary home-examination: but cases of this sort would in all be very few; and still fewer would be those in which the claim to be exempted from this examination could be deemed legitimate. Such almost solitary cases can hardly be thought to require a special notice in the law; but cases (if any) of extreme hardship might probably be best dealt with under some general exempting power with which the Council might be entrusted (as was proposed in Lord Ripon's Bill), in favour of persons unpossessed of registrable qualifications, but long established in practice, and of indisputable character and attainments.

"10. The Committee does not propose that any foreign qualification should be registrable, as an 'additional qualification' under the Medical Act, by persons primarily registered under British qualifications. It is one thing to approve that, in regard of foreigners, the foreign degrees and licenses should (under conditions) be admitted as reasonable evidence of qualification to practise: it would be quite another thing to approve that such degrees and licenses should take rank in the *Register* as special qualifications (which in effect would be titles of honour) for the already qualified practitioners of the United Kingdom; and the Committee is of opinion that to accord this privilege to the foreign diplomas would tend to perpetuate, and would very greatly and most seriously increase, the difficulty which general readers of the *Register* must at present experience in any endeavour to understand what, if any, of the qualifications there recorded are to be deemed higher qualifications.

"11. As regards the proposal which has been made by M. Roger-Marvaive in the French Chamber of Deputies, to alter the present French law relating to foreign practitioners in France, and by the alteration to discontinue the usage under which many of our countrymen have from time to time been authorised to practise in that country, we are glad to believe that the proposed law is not likely to be accepted; and we, therefore, do not at present think it requisite to recommend that the Council should take steps, in addition to those which the President on its behalf has already taken, with reference to M. Roger-Marvaive's Bill. Lest, however, this sort of endeavour should at any future time be renewed, we would submit to the Council that the right with which this country could protest against it, as injurious to the reasonable interests of British sojourners in France, will materially depend on the legislation which may meanwhile have been made in this country in respect of the privileges which can be claimed among us by persons practising under foreign qualifications. It is true that the consequences which attach to not having a recognised professional status are more severe in France than in this kingdom; since in France no one without such status is allowed to settle in practice; whereas in the United Kingdom he may, if he chooses, settle in practice, though he cannot by process of law recover payment for any services which he claims to have rendered, nor can enjoy any other of the advantages which attach to registration under the Medical Act. But, on the other hand, the professional status is conceded exceptionally in France to foreigners who (as having the proper credentials of their own countries) can show reason for the exceptional privilege; whereas no such exceptional grace can be obtained by foreigners who are practising in England on their foreign diplomas; and in this respect M. Roger-Marvaive's Bill would only assimilate in principle the French to the present British law. That this state of British law is one which ought to be amended is, however, an opinion already expressed by the Committee; and the Committee is not prepared to believe that, if the British law were relaxed into the more liberal form which has been suggested, treatment of a less liberal kind would be accorded to British practitioners who may desire to exercise their profession in other civilised countries.

"In conclusion, the Committee would propose that, if the Council approve of the suggestions of the above Report, representations to that effect be at once addressed by the Council to Her Majesty's Government, and that, before the end of the present Session of Council, the Executive Committee be authorised to take such steps as in the absence of the Council may be necessary to promote the legislation which has been suggested."

Mr. SIMON moved:

"That the Council would approve of amendments of the Medical Act to the following effect, viz.:

"a. That medical qualifications granted under legal authority in any part of Her Majesty's dominions outside the United Kingdom, and entitling to practise in such part, should be registrable within the United Kingdom on the same terms as qualifications which are granted within the United Kingdom, but in a separate alphabetically arranged section of the *Register*."

Dr. STORRAR seconded the motion.

Dr. ANDREW WOOD asked Mr. Simon if he was aware that medical men registered under the Act of 1858 were not allowed to practise in Canada unless examined there.

Mr. SIMON had heard that there was such a regulation; and, if it existed, it ought to be swept away.

Dr. A. SMITH said that reciprocity of practice ought to be established between the United Kingdom and the colonies.

Mr. SIMON said that this question should be the subject of a separate resolution, if entertained at all. There could be no doubt as to what was the right and dignified course for England to pursue.

Dr. PITMAN called attention to the Section of the Medical Act (xxxii) entitling registered persons to practise in any part of Her Majesty's dominions.

Dr. ANDREW WOOD believed that an act of justice towards the colonies would lead them to do justice to British practitioners. He must take the opportunity of congratulating the Chairman of the Committee (Mr. Simon) on the excellence and clearness of the report. He had long held that it was wrong that, when the colonies established schools and universities, little, if at all, inferior to those at home, they should be treated as foreign countries. He had no doubt that the proposal of Mr. Simon would be accepted by Government, and believed that its acceptance would increase the attachment of the colonies to the British Crown.

Sir DOMINIC CORRIGAN objected to placing the colonial diplomas in a separate section of the *Register*, as being invidious. He moved as an amendment:

"That the words 'but in a separate alphabetically arranged Section of the *Register*' be omitted."

Mr. LISTER seconded the amendment.

Mr. SIMON said the object was to make the *Register* as completely truthful as possible. The reason for proposing a separate *Register* was that the colonial degrees were in a different position from those granted in the United Kingdom, over which the Medical Council had a direct control. There was no question as to the goodness of the colonial qualifications; although in some parts of the colonies they might not be so high as those in the United Kingdom.

Sir WILLIAM GULL said that the question of a separate *Register* had been much discussed in the Special Committee; and it was thought scarcely fair to mix up the colonial qualifications with those which were under the superintendence of the Council. The *Medical Register* was not published for the Council, but for the public. He did not think that the distinction proposed was invidious.

Sir DOMINIC CORRIGAN thought that the distinction had an invidious character. He did not think it fair, after taking a comprehensive view of the question, to put anything on the *Register* which might be misrepresented by the public. When colonial practitioners were put on the *Register*, they would be entitled to all the privileges and immunities of ordinary registered practitioners. To place them in a separate section would indicate that they were inferior. If they were received at all, they should be received into the enjoyment of full rights, as in every respect qualified.

Mr. TURNER said that the various bodies whose qualifications were now registered were subject to visitation and inspection, so that the Council could be satisfied of the character of the examinations. But the Council had no means of inspecting the colonial examinations; and, therefore, it was thought that there should be another mode of registration.

Dr. ALLEN THOMSON thought that some distinction should be made between the bodies which were inspected and those which were not inspected. It was only after much deliberation that the Medical Acts' Committee had come to the conclusion that there should be a separate *Register*. At the same time, it had been suggested that some other plan might be adopted, such as a different type; but this was considered not so good as a separate *Register*.

Dr. ANDREW WOOD asked if it was intended to have a "Schedule (A)" to include the colonial universities and schools.

Mr. SIMON said that it was proposed to admit all colonial examining bodies having legal rights; and to give to the Council power to deal with those found insufficient by some such process as that provided for in Sections xx and xxi of the Medical Act.

Mr. LISTER expressed his sympathy with Sir D. Corrigan's view. If colonial practitioners were registered, it would show that they were



entitled to the confidence of the public; and it would be invidious to make a distinction. It would be sufficient to mention the source of the diploma in the *Register*.

Dr. STORRAR objected to mixing up the qualifications together in the *Register*. Whatever vigilance the Council might use, the character of the colonial qualifications could not be guaranteed in the same way as the British ones. He desired to open up the greatest facility for practice to the colonial graduates; but there were sufficient grounds for placing them in a separate list.

Dr. QUAIN opposed the amendment. The Council had taken care to insure an efficient system of education and examination; and all that could be done with colonial graduates was to register them in a separate list.

Mr. SIMON said that there was no intention of casting a slur on colonial degrees. Many of these were well known to be of high order; while regarding others less was known. The Council could not speak of them with the same responsibility as of home qualifications.

Dr. HUMPHRY said that the *Medical Register* was for enrolling qualifications granted by the bodies named in Schedule (A) of the Medical Act; and these bodies were amenable, through the Medical Council, to the Privy Council. He did not think the colonial bodies would be in the same position; but power should be given to deprive colonial bodies, if necessary, of the right of registration.

Dr. ROLLESTON asked whether, if Sir D. Corrigan's amendment were adopted, the colonial bodies would refuse to receive certificates of attendance of lectures in England. It might happen that a candidate failing at home might go to a colony and pass an examination; and the colonies could not all be expected to keep up to the standard of the United Kingdom. It had been well said that educational solidarity would bind the colonies to the mother country; but to place all the qualifications indiscriminately on the *Register* would be incorrect.

Mr. MACNAMARA asked if a man registered under the circumstances described by Dr. Rolleston was to be regarded as capable of holding public appointments.

Dr. A. SMITH said that it was a notorious fact that candidates rejected in one part of the United Kingdom could pass their examinations in another.

Dr. ANDREW WOOD said that in Canada and Australia there were Medical Acts and Medical Councils. He did not think that the colonial qualifications should be put in an inferior place on the *Register*. No qualification would be registered except such as the Medical Council could approve. He hoped that the Council would grant an act of justice in a graceful manner.

Sir WILLIAM GULL said that to place the colonial qualifications in the ordinary *Register* would be misleading to the public. No one would think it invidious to be put on the Colonial *Register*.

After some remarks from Dr. Fleming and Mr. Lister,

Mr. SIMON said that the Committee had to meet the fact that the colonial graduates were under a legal disqualification which it was sought to remove; and the only available way in doing this was to make them registrable. And, if so, should they be registered in the same class with practitioners at home? The Council could not offer the same guarantees for the value of the qualifications. An appeal to generosity had been made; but it was not the generosity of sentiment, but the generosity of practice that should guide the Council. He thought that the Council was bound to draw a distinction between British and colonial degrees.

The amendment was lost; seven members voting for it. The original motion was carried.

Mr. SIMON moved, Dr. STORRAR seconded, and it was agreed:

"b. That the General Medical Council should have authority to establish, under conditions, in the *Medical Register*, a distinct alphabetical Section for 'foreigners practising in the United Kingdom, with qualifications granted in foreign countries, and entitling to practise in those countries respectively'."

"c. That the Council should have authority to cause to be registered, in this section of the *Register*, such qualifications as it may in its discretion (having regard to the conditions under which they are granted) judge to be sufficient guarantees of 'the possession of the requisite knowledge and skill for the efficient practice of the profession'."

Mr. SIMON, referring to paragraph 9 of the Report, said that it was proposed to admit to the *Register* by a special act of grace British subjects who obtained their qualifications in foreign countries, and after practising abroad for a number of years might desire to return to the United Kingdom and practise there. The Committee had thought that the Council should have the power of registering such men. But it was not thought right that all foreign degrees obtained by practitioners in the United Kingdom should be registered. It was right that

British students should improve their education abroad; but those intending to practise in the kingdom should obtain their licences at home. He moved:

"That the Council would not approve, as a general rule, that British subjects should be allowed registration in the United Kingdom on the basis of foreign qualifications; but the Council would approve the granting of a limited authority to the Council to permit, in particular exceptional cases, and by way of special grace, the registration of persons long established in practice in foreign parts, and of proved character and attainments, but not possessed of registrable qualifications."

Dr. STORRAR seconded the motion.

Dr. ALLEN THOMSON thought that there were other cases requiring exemption; namely, those of British subjects ordinarily resident abroad, who, after going through a course of study and obtaining a foreign degree, desired at once to practise in the United Kingdom. He would discourage British subjects from going abroad to get degrees; but to those ordinarily resident abroad the same privileges should be granted as to foreigners, without reference to their having been established in practice abroad.

Mr. SIMON said that, when the examination rules came under consideration, the Council could make provision for such cases. If a young man, being a British subject, wanted to practise here, he ought to be prepared to pass some kind of examination. Nothing ought to be done to endanger the general principle that British subjects should be examined in the United Kingdom.

After some remarks from Sir W. Gull and Mr. Turner, the motion was carried.

Mr. SIMON moved:

"That the Council would not approve that foreign qualifications should be registrable, as 'additional qualifications' under the Medical Act, by persons primarily registered under British qualifications."

The subject of the registration of foreign degrees by British practitioners had been one of great difficulty, and had been carefully discussed in the Committee. The degrees were obtained because of the additional importance supposed to be attached to them. But the Council could not sanction this. They knew the value of a degree in medicine from an English or Scotch or Irish University; but foreign degrees, if admitted, would be mixed up with the others. The object of those who sought the privilege of registering the foreign degrees was to obtain a higher qualification in the eye of the public. But it should be known that the title of doctor in foreign countries was a minimum title to practise; and, to sanction it as comparable with the higher titles on the *Register*, would be misleading to the public. The Council could not affix a real value to such titles.

Dr. STORRAR seconded the motion, which was agreed to.

Mr. Russell Gurney's Act: and the Royal College of Surgeons Act (1875).—On the proposal of Mr. SIMON, seconded by Dr. STORRAR, this portion of the Report was read.

"1. On the question which was referred to this Committee for consideration and report, as regards the second proviso in Russell Gurney's Act, the Committee has to report as follows.

"The recommendation of the General Medical Council in 1876 (*Minutes*, vol. xiii, p. 239), was: 'That the qualifications conferred should not, except at the further discretion of the bodies, carry with them any right to take part in the government of the universities or corporations or any right or privilege beyond that of registration with a view to the practice of the medical profession.'

"The Act 39 and 40 Vict., cap. xli, Clause 1, contains, as its second proviso, the following: 'Provided always that no person who but for this Act would not have been entitled to be registered, shall by reason of such registration be entitled to take any part in the government, management, or proceedings of the universities or corporations mentioned in the said Medical Act.'

"This proviso appears to be open to serious objection in respect of the two groups of words which are put in italics: in respect of the first group, because much needless contention might arise under them as to what 'but for this Act' would be the entitlements to registration; and the second group, because of the assumption that it is 'registration' which gives power to take part in the government, etc., whereas the right to take such part arises, not from the registration, but from the degree or qualification which the university or corporation confers. And thus the proviso appears to the Committee to be such that only a court of competent jurisdiction can determine what construction is to be put upon it.

"It appears quite certain to the Committee that the intention of the legislature was to carry out the recommendation of the General Medical Council; and the Committee is of opinion that a representation should be made to Her Majesty's Government with a view to the amendment of the Act in this respect.



"It would be desirable that the new proviso, which should be substituted for that which is at fault, should be as completely as can be unambiguous; and the Committee would suggest that in its amended form the proviso should be to the following effect: 'That if any university or medical corporation, which has not before the passing of the Act examined women for qualifications as aforesaid, shall at any time after the passing of the Act see fit so to examine women, no woman obtaining such qualification shall, in respect of it, except at the further discretion of the university or medical corporation granting the same, be entitled to take any part in the government, management, or proceedings of the university or corporation.'

"2. As regards the legal difficulty which the Royal College of Surgeons of England has brought under the notice of the Council, as preventing the College from arrangements which it would wish to make with other authorities for a joint examination of women desirous to obtain the midwifery licence of the College, the Committee, having, as desired by the Council, considered this difficulty, has to report that, in view of its parity of matter with the previously mentioned difficulties under Russell Gurney's Act, it would, in the opinion of the Committee, be desirable that, whenever legislation shall be proposed for removing the difficulties under Russell Gurney's Act, such legislation should (if the College of Surgeons approve) extend to the College of Surgeons Act, in order to relieve the College from the difficulty which now stands in its way.

"In the summer of 1875, when the Bill for the College of Surgeons Act was under consideration, no question had yet arisen as to the College's granting its midwifery licence to women; and the possibility of its perhaps desiring to take this course, and to take it by means of joint action with other authorities, was not in view of the framers of the Bill. The effects of this oversight are represented in the first section of the Act, where not only no special provision is made for the granting of the midwifery licence by way of joint action, but where also the difficulty is created that, if the College, under the general (but very inadequate) enablement of Clause 19 of the Medical Act, took joint action distinctively in regard of women-candidates in midwifery, the question might arise whether the women passing this joint-examination could be excepted from the general effect of section first of the College of Surgeons Act, under which all persons who pass such joint-examinations as are therein described become of right members of the College.

"In order to define more exactly the amendment of law which seems requisite, the Committee, subjoining copy of the first section of the College of Surgeons Act, inserts (within square brackets) certain additional words, which, if they had been in the section, would apparently have obviated the difficulty which is described; and the Committee would suggest that the present law should, by suitable amendments, be brought to express the meaning which the subjoined section, with the inserted words, would convey.

"*Section First of the College of Surgeons Act.*—1. If in pursuance of the principal Act the Royal College of Surgeons of England unites or co-operates with any of the colleges or bodies in that behalf mentioned in the Medical Acts, in conducting the examinations required for qualifications to be registered under the principal Medical Act, then, notwithstanding anything in any statute or charter contained, it shall be lawful for the Council for the time being of the said College to prescribe by a by-law under the common seal of the said College, that no person shall become a fellow, or member, or licentiate in midwifery of the said College, unless (in addition to passing such examination (if any), and complying with such other conditions (if any) as may be prescribed by any by-laws in force for the time being, made in pursuance of any charter of the said College), he shall have passed such examinations, hereinafter called the joint-examinations, for qualification to be registered under the Medical Act, and complied with such conditions relating thereto as may be agreed upon between the said College and the college or body, colleges or bodies, with whom the said College may be united or co-operating as aforesaid; and every person who shall have passed such joint-examinations and complied with such conditions as aforesaid, shall be entitled to receive letters testimonial of his qualification to practise the art and science of surgery [or, as the case may be, a certificate of fitness to practise midwifery] under the common seal of the said College, on obtaining which [letters testimonial or certificate] he shall become and be constituted a member [or, as the case may be, a licentiate in midwifery] of the said College, subject to all the regulations, provisions, and by-laws in force for the time being of the said College: provided—etc."

It was moved by Mr. SIMON, seconded by Dr. STORRAR, and agreed to:

"That, with regard to the legal difficulties under Act 39 and 40 Vict., cap. xli, Clause 1 (Russell Gurney's Act), the Council would

recommend that the proviso in Clause 1, beginning 'Provided always', should be amended as follows, viz.:

"That if any university or medical corporation, which has not before the passing of the Act examined women for qualifications as aforesaid, shall at any time after the passing of the Act see fit so to examine women, no woman obtaining such qualification shall, in respect of it, except at the further discretion of the university or medical corporation granting the same, be entitled to take any part in the government, management, or proceedings of the university or corporation."

"That the Council concurs with the Royal College of Surgeons of England in the opinion that the Royal College of Surgeons' Act of 1875 requires amendment, and that the Council, if so desired by the College, would be ready to concur with the College in recommending to Her Majesty's Government that the amendment of this Act should be undertaken by Government in connection with the amendment of Russell Gurney's Act."

Dr. HUMPHRY moved, Sir JAMES PAGET seconded, and it was agreed to:

"That so much of the Report as relates to the legal difficulties of the Royal College of Surgeons of England be referred to the President and Vice-Presidents of that College, and the representative of the College on this Council, for their consideration; and that their opinion be requested upon the proposals made, before this Council continues the further discussion of the Report."

*Application of Penalties accruing under the Medical Act.*—The section of the Report relating to this subject was as follows.

"The Committee has given its attention to representations which have been made to the Council relating to the recovery of penalties from persons convicted of illegal practice. By Clause 42 of the Medical Act, it is provided, and in the opinion of the Committee reasonably so, that all penalties shall be paid to the Treasurer of the General Medical Council; and so far as this payment of penalties is made, the Council is enabled to meet the applications, which persons who have undertaken the charges of prosecutions often make, for contribution of the whole or a part of the penalties towards the expenses of such prosecutions. But Clause 42 is so far imperfect that it does not repeal, in regard of its subject-matter, the provisions of the Police Courts (Metropolitan) Act and other local Acts; and under these provisions another destination is given to such penalties. It is, therefore, very desirable, in order to give effect to the evident intention of the legislature, that a remedy should be applied to Clause 42; and the Committee suggests that the Council should move Her Majesty's Government to procure the required change in the law.

"The addition to Schedule 42 of such words as these would, in the opinion of the Committee, meet the case, viz.: 'anything to the contrary contained in any Act passed before the passing of this Act notwithstanding'."

Mr. SIMON moved, Dr. STORRAR seconded, and it was agreed to:

"That the Council approve the recommendations of Section (C) of the Report, and that the Council should promote such an amendment of law as would enable the Council to receive all penalties accruing under the Medical Act, anything to the contrary contained in any other Act, local or general, notwithstanding."

The Council then resumed.

It was moved by Mr. SIMON, seconded by Dr. STORRAR, and agreed to:

"That Sections (A), (B), (C) of the Report of the Medical Acts' Committee be now received and entered in the minutes, and adopted by the Council, and that the resolutions adopted this day by the Council in Committee on the matters of these Sections of the Report be communicated, together with the Report, to Her Majesty's Government."

The President, Mr. Simon, Dr. Andrew Wood, and Dr. Hudson were appointed as a deputation for the abovementioned purpose.

Friday, May 18th.

Dr. ACLAND, President, took the Chair at 2 P.M.

*Deputation to the Lord President of the Privy Council.*—The following communication was made by the PRESIDENT as to the result of the deputation to the Lord President of the Privy Council.

"Before we proceed to the business of the day, it is my duty to lay before the Council the result of a deputation to the Duke of Richmond (the Lord President) which has just taken place. In conjunction with Mr. Simon (the Chairman of the Medical Acts Committee) and Dr. Andrew Wood, I waited upon the Duke of Richmond. With His Grace the Lord President were Viscount Sandon (Vice-President of the Council) and Mr. Charles Lennox Peel (Clerk of the Council). I am sorry that, from circumstances which were unavoidable, Dr. Hudson was unable to be present. I stated to the duke and to Lord



Sandon that the Council had had under their consideration during the present session the various matters relating to the amendment of the Medical Acts which were referred to it by the Lord President. I observed that these were, the subject of colonial and foreign degrees, the action of the French Government in respect of British practitioners, and the education of midwives. It seemed right to add, for the information of the Lord President, that, besides these which had been referred to us by the Government, the following topics had been, or were about to be, under our consideration: (1) Dr. Lush's Bill to amend the Medical Acts; (2) a proposed amendment of Mr. Russell Gurney's Act of last year; (3) a Bill by Mr. Errington to amend the Medical Act of 1858, which was introduced into the House of Commons the night before last, and which will be laid before the house as soon as it is printed, orders having been given for its printing; (4) a proposal to amend the College of Surgeons' Act of 1875; and (5) an amendment of the Lunacy Acts, which, although not immediately connected with our own Act, is intimately connected with some of the duties that we have to discharge in relation to that Act. It seemed right to draw attention to the fact that the President had already been desired to put himself in communication with the Chairman of the Committee of the House of Commons on the subject. It was pointed out to the Lord President that there were thus under the consideration of the Medical Council eight distinct subjects either requiring legislation or requiring attention for the contingent purpose of legislation. Having made that general statement simply in the way of enumerating the business in this direction that was before us, I laid before the Lord President the conclusions to which the Council had come thus far while in session. The Report that has been just read and confirmed was then officially handed to his Grace for the consideration of the Government. I added that the Council would no doubt send to his Grace the conclusions at which we should arrive either to-day or on subsequent days of the session. According, I believe, to the wish of the Council, I then requested the President to inform us whether the Government would be willing to assist the Medical Council in procuring what they judged to be necessary amendments in the law; and, if so willing, whether the Government would undertake this during the present session of Parliament, or at what time they would do it. It is easy enough to recite what it was my endeavour to state under your instructions. If I have stated anything incorrectly, the Chairman of the Medical Acts Committee, or the Chairman of the Business Committee, will be able to correct me. It is not so easy to represent on behalf of another, without authority, his answer; but I think—speaking under the reserve with which one must speak for another person—that the following is substantially the information which we received.

“With regard to the private Bills already before the House, such as Dr. Lush's and Mr. Errington's, the Lord President—speaking with the necessary caution of a Minister—said there was very little chance, in the present state of public business in the Houses of Parliament, of a private Bill on any subject not of first-class importance passing during the remainder of this session. Then, setting aside those two Bills, the President said that the subjects which we had mentioned to his Grace were certainly, severally and collectively, of great importance, but that their present importance could not be put exactly on the same level, some being more and some less urgent. He was not of course able to give any answer as to the action of the Government, even with regard to those which are more urgent. On a subject of this kind, that is, with regard to the introduction of a Government Bill, he could not speak without conference with his colleagues in the Cabinet; therefore, practically, no definite answer could now be given. The Lord President then said that he should be anxious to receive from the Medical Council, at the close of their session, the fullest expression of their opinion on the points referred to them by the Government, and also their suggestions and advice as to any other matters which they think require legislation: further that, if such a memorandum were transmitted to his Grace, he would undertake to lay the matter before the Cabinet at the most convenient period, and then to consider, not only whether the Government would take the subject up, but also whether they would take up the most urgent points at one time, and the less urgent at another; or take up all at one and the same time. I think I have stated pretty exactly what the Lord President said upon this essential point. Perhaps it is not improper that I should here say that the Duke pointed out that the Government has now Bills which must claim precedence of any newly introduced Bill. There is the Universities Bill, which was in Committee last night in the House of Commons—and the House, as we know, has broken up for the Whitsuntide recess—there are pages of amendments upon that Bill; it has not yet passed the House of Commons, and, therefore, has yet to go up to the House of Lords. Then there is the Prisons Bill,

brought in by the Home Secretary at the early part of the session, which still blocks the way, and has afterwards also to go to the House of Lords. These Bills, his Grace stated, must necessarily have precedence, as Bills of the first order, and being already before Parliament. He named also the Factory Bill. That is the substance of what took place; and I will only repeat what the Lord President repeated, summing up the whole matter, that he desires that we should furnish to the Government a statement of all the conclusions at which we have arrived, distinguishing between those matters which we considered to be urgent, and those which we regarded as of more general consideration.

“There was one suggestion which was not made by the Lord President himself, but which was made at the time—with respect to perhaps the most pressing subject, the hardships complained of by colonial practitioners. It might very probably be possible to remedy the particular evil which affects medical men registered in Canada, and made a matter of representation to this country, by altering a clause or two in the Merchant Shipping Act and Passenger Act, without raising the question of any alteration or amendment of Medical Acts. I should not perhaps conclude without saying that a full statement was made in illustration of the various points, by the Chairman of the Medical Acts' Committee, and by the Chairman of the Business Committee in answer to questions from his Grace. The Chairman of the Business Committee desires me to add that which I have much pleasure in adding—which, however, I did not state, because it did not bear directly upon the short recital which I had to make—that incidentally the Lord President observed, what the Council will be happy to hear, that he himself and the Government generally feel that a body constituted like the Medical Council is in full possession of the knowledge of what is necessary in relation to medical questions, whether viewed professionally, or in a more complete national sense. I think I do not overstate the case, when I say that it was his Grace's conviction, that it was essential, as well as desirable, to confer with the Medical Council on all subjects affecting the progress of medicine before undertaking legislation.”

Mr. SIMON said that, while acknowledging the courtesy and kindness with which the deputation was received, he must express his regret that the Lord President was not accompanied by any functionary belonging to the medical profession. Although such a defect might sometimes be compensated by zeal or interest on the part of members of Government, no continuity of attention from successive Governments could be insured unless the record were kept up by the civil servants of the Government.

*Report of the Medical Acts' Committee.*—The Council resolved itself into Committee for the consideration of this Report.

*Dental Surgeons.*—Mr. SIMON read the report on the memorial of the Royal College of Surgeons of Edinburgh (see page 618 of last week's JOURNAL), and moved, in terms of the Report:

“That a copy of the memorial of the Royal College of Surgeons of Edinburgh in regard to dental surgery be sent by the Council to the Royal College of Surgeons of England for the information of that College.”

Dr. ANDREW WOOD thought that the Council ought to be called on to express an opinion. There was great agitation at present in the dental profession; some members of which desired that no one should be allowed to call himself surgeon-dentist unless possessing the licence of the Royal College of Surgeons of England—no other College being mentioned; also, that a special Schedule for the registration of dental surgeons should be added to the *Medical Register*. It might put an end to much agitation if the Council would declare that special registration was not expedient. He moved as an amendment:

“That, having considered the memorial of the Royal College of Surgeons of Edinburgh as to the question of dental surgeons, in the opinion of the Council it is inexpedient that a special Schedule should be added to the Medical Act for the registration of dental surgeons as such.”

Sir WILLIAM GULL seconded the amendment.

Mr. SIMON said that it would be proper to consider the question of a special Schedule if it were laid before the Council by the College of Surgeons. But it was taking unnecessary trouble to treat every request to any of the licensing bodies as a reason for passing abstract resolutions.

Sir JAMES PAGET said that the question had been entirely misunderstood, and therefore misrepresented, by the memorialists. He was not aware that the question of special registration of dental surgeons had ever been brought before the Council of the College of Surgeons. The question had been brought before the College, whether certificates in dental surgery must be signed by the licentiates in dental surgery alone or by others; and the Council had not yet considered it. The College



had not in contemplation any scheme for the special registration of dental surgeons.

Dr. STORRAR agreed with Mr. Simon, that it was not advisable to pass an abstract resolution in the present case. He gathered from what he had heard, that it was not intended that the College of Surgeons of England should take up a position different from that of other Colleges. The Council had better wait until something more distinct came before it.

The amendment was lost. The original motion was carried.

*Dr. Lush's Medical Acts Amendment Bill.*—The section of the Report relating to this Bill was read.

"On this Bill, first brought under notice of the Council by the East London Defence Association, and subsequently introduced into the House of Commons by Dr. Lush, the Committee has to report as follows.

"1. As regards Clause 1, the Committee need hardly observe that, in common with the whole body of the medical profession, it regards with extreme regret the injury occasioned to the general community by the unskilled practice of unqualified persons. But the Committee cannot recommend to the Council to give approval to Dr. Lush's Clause 1 as it stands. The Committee does not believe that a clause of such stringency, even if it could be recommended by the Council, would have any chance of being accepted by the legislature. And, supposing even that this clause were modified into the comparative mildness of Section 23 of Lord Ripon's Bill, the Committee would suggest that endeavours to strengthen the Medical Acts in their penal relations to medical imposture may probably best be postponed till such time as those Acts shall have received all essential amendments in the provisions relating to the profession itself, and shall then be in readiness for consolidation.

"2. As regards Clause 2 of Dr. Lush's Bill,\* the Committee has already submitted to the Council a recommendation that Her Majesty's Government should be moved to promote the amendment of law for which this clause would provide.

"3. As regards Clause 3,† the Committee has already reported to the Council the course which it would recommend to be taken by the Council in regard to the various University degrees to which this clause refers."

Mr. SIMON moved, Dr. STORRAR seconded, and it was resolved:

"That, in the opinion of the Council, the consideration of the question of introducing more stringent penal clauses into the Medical Act should be postponed till such time as those Acts shall have received all essential legislative amendments in the provisions relating to the profession itself, and shall then be in readiness for consolidation."

The Council having resumed, it was resolved that Sections (D) and (E) of the Report of the Medical Acts' Committee (Dental Surgeons and Dr. Lush's Bill) be received, entered in the minutes, and adopted by the Council, together with the resolutions thereon adopted by the Council in Committee.

*Education and Examination.*—The Council resolved itself into Committee for the further consideration of Dr. Humphry's Report.

Dr. HUMPHRY moved:

"That it is desirable that an examination in the earlier subjects of professional study should take place before the end of the first year of professional study."

He said that the present resolution differed from that which had been negatived on a previous day, in not having the final clause; it went no further than to recommend that there should be an examination in the first year.

Mr. TEALE seconded the motion.

Dr. ROLLESTON thought that students ought to have more than one chance of examination in the first year. He moved as an amendment:

"That it is desirable that more than one opportunity for passing in the earlier subjects of examination should be afforded to students before the end of the first year of professional study."

Sir WILLIAM GULL seconded the amendment, which was negatived.

Mr. SIMON moved, and Dr. STORRAR seconded, a second amendment, consisting in the substitution of the words "be passed" for "take place" in the original motion. This amendment was also negatived, and the original motion was carried.

Dr. HUMPHRY withdrew a proposal which at first formed part of the motion, that the first year's examinations should be held in the medical schools.

*Visitations of Medical Schools.*—Dr. HUMPHRY proposed:

"That it is desirable that visitations of the several medical schools,

the certificates of which are received by any of the licensing bodies, should, from time to time, be made by this Council."

He said that hitherto the Council had, very rightly, directed its attention to the visitation and improvement of the examinations. The good effect produced by the examinations had not been the result of pressure, but of the quiet working of the representations of the Council and of the conferences between the visitors and the licensing bodies, and the consideration by the examiners of the reports of visitations. He now desired that the same process should be carried out in the case of the medical schools; and that these should be inspected with regard to their working, the proportion of the staff to the number of students, the means of instruction, and the methods in which instruction was conveyed. Teaching had become a very important science. At present, the Universities of Oxford and Cambridge had under consideration a proposal from the congress of schoolmasters, that the Universities should regulate the entire work of teaching; and he thought that the Medical Council should undertake the same duty with regard to the medical schools. Among the members of the Council were some of the most eminent of living teachers; and if they were asked on what their success depended, they would reply that it was on taking pains and making due preparation for their work. Want of success in teaching arose from entering on the work without due preparation for it and without a sense of the responsibility involved. It might be objected that the Council had not the power to visit the schools. But if it confined itself strictly within what was mentioned in the Medical Act, it would have little to do but to keep the Register, to visit examinations, and to make representations to the Privy Council. The Council had no legal power to issue recommendations; but it had not gone beyond the limit of moral force, which had enabled it to do the work which it had done. He thought that this moral force gave the Council power to visit the schools; and there was no instance in which it could more properly exceed its strictly legal powers. He thought that the schools would thankfully and cordially receive the visitors in a spirit of co-operation, and take counsel with them how medical education was to be best conducted, and how the defects in it were to be remedied. And representations regarding the defects would be more likely to receive attention, if they came before the managing bodies of the schools with the force of the Medical Council added to that of the teachers. As a teacher in a medical school, he would thankfully receive visitors from the Council. It might be said that the visitation should be left to the licensing bodies which recognised the schools. But the Council ought not to relegate the work to others. The licensing bodies had not more power in the matter than the Council; and the task of visitations would be an invidious one on their part. A proposal for the visitation of schools had been brought forward in the College of Surgeons by Mr. Quain, and a resolution in its favour had been passed, but had not yet been acted on. The subject had also been referred to in a former report on the visitation of examinations. He thought that nothing would tend more to the improvement of medical education than the carrying out of his proposal.

Sir JAMES PAGET seconded the motion.

Mr. SIMON said that the inspection of the medical schools was a function of the licensing bodies which recognised them. Visitation by the Council would be an excellent act, but it would not have the practical meaning of visitation by the recognising bodies. He did not approve entirely of the system of recognition; but if it must exist, the recognising bodies ought to inspect. Recognition of medical schools ought to be founded on a thorough knowledge of their capacity for teaching. In the long run, the value of the schools must be determined by their results. If a school sent out well prepared candidates it would prosper; and this representation was obtained through the pass and pluck lists of the licensing bodies, to which he attached more importance than to inspection.

Mr. TURNER wished that more precise data had been submitted to the Council, as to the number of schools to be visited, and to the expenditure of time and money required. In all, there were thirty-three organised schools, and about sixteen extramural teachers in Edinburgh. The visitations of the examinations of the nineteen licensing bodies had cost about £2,300; and the visitation of the schools would cost much more. It would take much time to inspect a school thoroughly; two visits in each year would be required. The visitors would also have to inquire into and report on the individual merits of the teachers; and this would be a very invidious task. Although the visitation of schools might be a desirable procedure, there were so many practical difficulties that he much doubted whether the Council should undertake it.

Dr. ANDREW WOOD agreed that it was desirable that the medical schools should be visited; but it was not feasible. The expense must be taken into account. He thought, however, that the Council might

\* Relating to Appropriation of Penalties.

† Relating to Registration of Colonial and Foreign Degrees.



exercise an influence on the schools by requiring the licensing bodies to send up the names of the schools with the lists of rejections; and when, after some years, the Council found from what schools most candidates were rejected, a visitation of them might be made. He proposed as an amendment:

"That the Council recommend to the licensing bodies that they take note of the schools of medicine which have been attended by every candidate for their licence or degree; and that the returns of the rejections of candidates made annually to the Council be accompanied by a statement of the schools which have been attended by each rejected candidate, distinguishing the first, second, and third examinations."

Dr. HALDANE seconded the amendment.

Sir WILLIAM GULL said that it had been represented to him by some of the teachers at Guy's Hospital that the pass and pluck lists had a demoralising effect on the students.

Sir DOMINIC CORRIGAN objected to both the motion and the amendment. The amendment would lead to no good result: students often did not attend the same medical school throughout the course of study. As to the original motion, he thought that Dr. Humphry's argument was extraordinary—that, because the Council had already done something which was illegal and *ultra vires*, it should do more. The Treasury would not sanction the payment for the visitation of schools. As regarded moral suasion, he thought that the Council had not done much by it, and that the licensing bodies would have done as much as they had done without the influence of the Council. Could anything be more ridiculous than the proposed visitation of lecturers? How could he (Sir D. Corrigan) inspect and report on the lectures of Dr. Apjohn, or Dr. Allen Thomson, or Sir James Paget? And the visitations would give no guarantee of what was done in the intervals. Again, when he was a lecturer, nothing would have caused him more indignation than that visitors from the Council should criticise his lectures. How would any of the lecturers in the Council like to have visitors attending to ascertain how they were lecturing? The visitations, too, would be of no use unless very frequently made. Another objection to the proposal was, that the visitation of schools by the Council would be an infringement of the rights of the licensing bodies.

Mr. MACNAMARA said that the College of Surgeons in Ireland visited all the schools and tested their capabilities before sanctioning them. He himself had to give a probationary course of lectures before he could be recognised. Similar steps were also taken by the University of Dublin.

Sir JAMES PAGET did not see what harm could arise from Dr. Humphry's proposal. At the College of Surgeons, the plan of issuing pass and pluck lists had been followed for some years; and the result had been, that the apparent results from the good and the bad schools were nearly equal. The test was a very fallacious one. In the bad schools, a third person—the grinder or coach—intervened between the school and the examination more frequently than was the case in the good schools.

Mr. LISTER said that the amendment said nothing of returns of the successful candidates from the various schools.

The amendment was negatived.

Sir JAMES PAGET said that the objections against the visitation of schools might as well be made against the visitation of examinations. Great good had been produced by these; and the visitation of schools, although doubtless causing much expense and trouble, would be attended with advantage. With regard to the proposal that the schools should be visited by the licensing bodies, the proceeding would be attended with much invidiousness. The licensing bodies, too, had only the power of refusing certificates—a very serious punishment, and therefore very rarely inflicted. They had no power of producing an influence by expression of opinion in the same way as the Council had.

Dr. QUAIN said that there was no analogy between visitations of examinations and of schools. In the latter case, the expense would be much greater, and there would be greater difficulty in concentrating attention on courses of lectures than on examinations. Besides, the schools might refuse to admit the visitors. He thought that the Council should not attempt a duty which it had no right to undertake.

Sir WILLIAM GULL did not think the visitation of medical schools desirable. It was the duty of the Council to see that the examinations were fit for their purpose. At present, there was much that was useless in the examinations; students obtained through the grinders their knowledge of what was required. The proposed visitation of medical schools was illegal, and might lead to animadversions and even to actions at law. He doubted whether the motion could be safely carried.

On the motion of Mr. LISTER, the debate was adjourned.

Saturday, May 19th.

Dr. ACLAND, President, took the Chair at 1 P.M.

*Visitation of Medical Schools.*—The Council, having resolved itself into committee, resumed the discussion of the following motion, proposed by Dr. HUMPHRY and seconded by Sir JAMES PAGET:

"That it is desirable that visitations of the several medical schools, the certificates of which are received by any of the licensing bodies, should, from time to time, be made by this Council."

Mr. LISTER said that it had been assumed by some of the members of Council that the visitation of schools would involve the visitation of the teachers. The proposal, however, was simply that the schools should be visited in order to ascertain the sufficiency of their means of instruction. This could be done with very little expense both in London and in Edinburgh. The argument as to the invidiousness of the examination was untenable; visitation of the teachers was out of the question. It had been said that the visitation of the schools could be done without invidiousness by the licensing bodies; but Sir James Paget had suggested that the visitations by the Council would be the less invidious.

Dr. ROLLESTON said that the visitation of medical schools would, no doubt, do much good; but it was necessary to examine whether the good would not be counterbalanced by the evil. The Council must consider how many changes it would entail, and how far it would disturb the previously existing solidarity. There were practical difficulties in the way of visiting the schools. It was impossible to separate the *personnel* from the *matériel*. If the schools were visited, the teachers must be visited; but their status would be lowered if they were interfered with while *en rapport* with their pupils. The inspection of the material was futile; the object was to ascertain how the opportunities were used. He objected also to going beyond the boundaries of the Medical Act. The Council should allow teachers to teach as they like and the students to get their knowledge as they could. There should be a recognition of what the Germans call *lehrfreiheit* and *lernfreiheit*—freedom of teaching and of learning. He approved of unification of examinations, but of competition in teaching. The Council had not to inquire into the mode of teaching and learning, but into what was taught and attained. Many had obtained their knowledge under most unfavourable circumstances. The acceptance of the policy proposed would lead to the extinction of the small schools, and to centralisation in London affecting even the schools north of the Tweed. Visitation of schools might do good; but it would check rivalry and individual enterprise.

Dr. HUMPHRY said that it seemed generally allowed, except by Sir D. Corrigan, that the visitation of schools would do good. The question to be considered was that of its legality. If the Council had constricted its action within the letter of the Act, its work would have been very small. It had been said that the schools might refuse to admit the visitors; but, if the licensing bodies closed their doors (which they had not done) against the visitors, who could prevent them? It was not contemplated that the schools should be visited against their wish, but he believed that none would refuse. As regarded the expense, he said that, if the Council stored up money, a question would be raised as to what was to be done with it. The Council was one of "education and registration", and it had to inquire into the courses of study as well as into the manner in which the examinations were carried out. Mr. Turner had compared the number of licensing bodies with that of the schools. But, while there were nineteen licensing bodies, nearly fifty examinations were held by them, each of which, lasting at least two days, had been visited. Moreover, there was, in addition, the cost of the journeys to Edinburgh and Dublin, six or seven of which were necessary in the year. To visit the schools in either place, one journey would be sufficient. As to the period required to visit the schools, the object was not to visit all the lectures, nor to sow seeds of dissension between the teachers and pupils. One or two days' inspection would be quite sufficient to ascertain the character of the apparatus and the general plan of teaching. He thought that the cost had been overrated, and that the schools might be visited for less than one-half the cost of visiting the examinations. He believed that even more good would be done by visiting the schools than by visiting the examinations.

Mr. SIMON opposed the proposal for visitation of schools, as he thought it would lead to a division of responsibility. If the Council undertook the visitation of schools, it would relieve the licensing bodies of an essential duty. The course of the Council was clearly pointed out in the statute. It was entitled to know from the licensing bodies what were the courses of study which they required; and it was through a system of superinspection that the Council had to visit schools, just as, in sanitary matters, the Government did not inspect



nuisances, but inspected the nuisance authorities. The Council inspected the schools through the licensing authorities.

Dr. HUMPHRY asked how the Council could know that the licensing bodies were recognising proper schools unless it ascertained something about the schools.

After some remarks from Sir D. Corrigan, the motion was put to the vote and negatived.

Mr. BRADFORD required that the names and number of those who voted for and against the motion, and of those who did not vote, be taken down. *Majority, 18*:—Dr. Pitman, Mr. Bradford, Dr. Rolleston, Dr. Pyle, Dr. Storrar, Dr. Haldane, Dr. Andrew Wood, Dr. Fleming, Mr. Turner, Dr. Thomson, Dr. Aquilla Smith, Mr. Macnamara, Dr. Leet, Dr. Apjohn, Sir Dominic Corrigan, Dr. Quain, Mr. Simon, Dr. Hudson. *Minority, 4*:—Sir James Paget, Dr. Humphry, Mr. Teale, Mr. Lister. *Absent*: Sir W. Gull. *Did not vote*: The President.

The Council having resumed, the adoption of the several resolutions passed in committee of the whole Council was proposed by Dr. Humphry, each resolution being put separately and carried.

*Recommendations of the Council.*—It was agreed, on the proposal of Dr. ANDREW WOOD, seconded by Sir JAMES PAGET:

"That the two reports of the Committee on Recommendations—viz., that of June 5th, 1876, and that of May 18th, 1877 (on Clauses 5, 6, 10, 11 of Dr. Humphry's report)—be considered together."

The following recommendations were agreed to without discussion on the motion of Dr. ANDREW WOOD, seconded by Dr. HUMPHRY:

"1. That no person be allowed to be registered as a medical student unless he shall have previously passed a preliminary examination in the subjects of general education as hereinafter provided."

"2. That it be delegated to the Executive Committee to prepare annually, and lay before the Council for recognition, a list of examining bodies, whose examinations fulfil the conditions of the Medical Council as regards general education."

Dr. ANDREW WOOD moved, and Dr. HUMPHRY seconded:

"That Recommendation 3 of the report be adopted"; viz.: "3. That, for the present, testimonials of proficiency granted by educational bodies, according to the subjoined list, be accepted; the Council reserving the right to add to or take from the list."

Dr. AQUILLA SMITH moved, as an amendment:

"That the nineteen 'Colonial and Foreign Universities and Colleges', of which the examinations as regards preliminary education are recognised by the General Medical Council, be struck out of the list of examining bodies for preliminary education."

The preliminary education was unsatisfactory and, in many instances, very insufficient. There was strong evidence of this in several instances as regarded the examinations in the United Kingdom. In objecting last year to Mr. Cowper-Temple's Bill, the Council had stated that it could not register foreign degrees, because it could not supervise the education and examination; and it would be inconsistent to recognise foreign preliminary examinations.

Sir D. CORRIGAN seconded the amendment.

Sir W. GULL said that the Council had two days previously decided that colonial degrees ought to be registered.

Mr. TURNER said that Dr. Smith was himself a member of the committee which recommended the registration of colonial degrees.

Dr. ANDREW WOOD believed that some of the colonial preliminary examinations were as good as any that the Council could devise. The Council should encourage young men to come from the colonies and foreign countries to the English schools.

Dr. SMITH did not question the value of the colonial examinations. He allowed that many were very good.

The amendment was negatived, and the original motion was carried.

The list of bodies whose examinations are recognised was then considered, and some corrections in arrangement, etc., were made.

With reference to the "entrance examination" of the University of Dublin, the following correspondence was read.

"Royal College of Surgeons in Ireland, Dublin,  
March 16th, 1877.

"Reverend and dear Sir,—I have it in direction from the President and Council of this College to draw, through you, as senior lecturer, the attention of the Board of Trinity College to the following facts. A Mr. X. presented himself as a candidate to pass the preliminary examinations conducted in this College upon the following dates:—October 20th, 1875, April 19th, 1876, July 19th, 1876, and October 18th, 1876; upon all of which occasions he was rejected. In the month of November 1876, through means of a private entrance examination, and upon the payment of a fee of fifteen pounds, he was matriculated as a junior freshman of Trinity College, and thereby, in accordance with the existing arrangements of the General Medical

Council, so far as preliminary education and examination are concerned, qualified to enter the medical profession. The President and Council of this College desire to direct the attention of the Board of Trinity College to the difficulties thus thrown in their way, of securing that which they look upon as a matter of primary importance—the enforcement of a good standard of preliminary education on the part of students seeking their licence.

"(Signed) J. STANNUS HUGHES, *Secretary of Council*.

"To the Rev. J. H. Jellett, Senior Fellow and Senior Lecturer,  
Trinity College, Dublin."

"Trinity College, Dublin.

"Dear Sir,—I have looked into the details of the case of Mr. X., and find that the marks which he received in Greek and Latin, Algebra, and English composition would not have justified me in rejecting him at an examination which is only intended to ascertain whether the candidate possesses sufficient knowledge to enable him to take advantage of the instruction given here. An examination having such a purpose is never a severe examination, nor ought it to be regarded as indicating the amount of general knowledge required for a learned profession. I have to observe that we do not regard this examination as a sufficient test of the general knowledge required of those who seek our Licence in Surgery. On the contrary, we require of candidates seeking that licence that they should complete a two years' course in arts. (Signed) JOHN H. JELLETT, *Senior Lecturer*.

"J. Stannus Hughes, Esq., M.D.

"P.S.—I should add that I laid your letter before the Board, and write by their direction."

"Royal College of Surgeons in Ireland, Dublin, April 5th, 1877.

"Dear Sir,—I am directed to inform you that, at a meeting of the President and Council held this day, the following resolution was passed by them:—'That this Council, having taken into consideration the letter of their secretary, addressed by their order to the Senior Lecturer of Trinity College, Dublin, bearing date March 16th, 1877, and the reply thereto (undated) of the Senior Lecturer, hereby adopt the following ordinance: That, for the future, no certificate of preliminary education, emanating from Trinity College, Dublin—unless it go to prove that its presenter is of junior sophister standing—shall be accepted by the Inspection Committee as an equivalent to the preliminary arts examination of this College.'

"(Signed) J. STANNUS HUGHES, *Secretary of Council*.

"To the Rev. J. H. Jellett, T.C.D."

Dr. APJOHN said that the public entrance examination of the University of Dublin was very high, and included a great variety of subjects. There was also a private entrance examination, held for the purpose of ascertaining whether the student had sufficient education to enable him to attend the arts courses. This was a very old institution, and it was not at all designed as a preliminary examination such as was required by the Council. Degrees in medicine were not given by the University except to men who had graduated in arts or had gone through a full arts course. It was the opinion of the authorities of Trinity College that a single examination was not a sufficient test of general education. The public entrance examination was for students entering any of the faculties, and was conducted by persons unconnected with the medical faculty of the University.

Dr. ANDREW WOOD moved:

"That, under the head 'Dublin', for the words 'entrance examination' be substituted 'public entrance examination'."

Dr. APJOHN seconded the motion.

On the motion of Sir D. CORRIGAN, the consideration of the subject was adjourned.

Monday, May 21st.

Dr. ACLAND, President, took the chair at 2 P.M.

*Recommendations of the Council.*—The Council resolved itself into a Committee of the whole Council for the adjourned consideration of the Reports of the Committee on Recommendations. [The Recommendations proposed were voted *seriatim*; some of them being discussed, and others passing without discussion. To save space and prevent confusion, we defer the publication of the Recommendations until they have been finally agreed on by the Council; giving an account of the discussions on some special points only.]

*Preliminary Examinations.*—The Committee of the whole Council resumed the discussion of the motion proposed at the meeting on Saturday by Dr. ANDREW WOOD, and seconded by Dr. APJOHN:

"That, under the head 'Dublin', for the words 'Entrance Examination' be substituted the words 'Public Entrance Examination'."

Sir DOMINIC CORRIGAN said that there were three modes of entering on the study of medicine in Trinity College. One was the examination



called in the motion public entrance examination; another was the private entrance examination, for which a fee of £15 was paid; and a third mode was matriculation by payment of a fee of five shillings, after which the student could go on with his medical studies. The University of Dublin also adopted an extraordinary course with regard to its licence. It gave this after a two years' course in Arts; and the holder of the licence was entitled to all privileges under the Medical Act. After being in practice for some years, the licentiate came back, and, after going through a further course of Arts, received his degree without being further examined in professional matters.

Dr. ARJOHN said that the education and examination for the licence were precisely the same as for the degree of Bachelor of Medicine; the only difference was, that two years of Arts' studies were required in the former case, and four years in the latter. The matriculation was in obedience to an old Act of Parliament, passed at a time when there was scarcely a medical school in Dublin, in order to enable students to pursue their medical studies in Trinity College. No one could now get a degree without being duly registered as a medical student after passing a preliminary examination. The public entrance examination was intended for all students of the College.

Dr. HUDSON said that the matriculation in Trinity College was instituted for the benefit of persons who did not intend to graduate in the University, but to go on to other Universities, such as Edinburgh or Glasgow. It was not applicable to those intending to graduate in the University of Dublin.

Dr. AQUILLA SMITH said that the matriculation examination gave to Trinity College power of discipline over students who attended the courses.

Mr. MACNAMARA said that, for example, a student who had passed his preliminary examination at the Royal College of Surgeons of Ireland, if he desired to study in Trinity College, would have to be matriculated. With regard to the preliminary examination, he had been instructed by the Council of the College of Surgeons in Ireland to ascertain on what ground various examinations were accepted as evidence of general education. It was the duty of the Council to visit these examinations and see whether they were sufficient. Of the sufficiency of some, such as the matriculation of the University of London, there could be no doubt; the others might be good, but the Council did not know enough about them.

*Duration of Professional Study.*—Dr. ANDREW WOOD moved, and Dr. HUMPHRY seconded, the following recommendation:

"That the course of professional study required for a licence shall comprehend attendance during not less than four winter sessions, or three winter and two summer sessions, at a school recognised by any of the licensing bodies mentioned in Schedule (A) to the Medical Act."

Mr. TURNER thought that the time required to be spent at a medical school was inadequate. He moved as an amendment:

"That the course of professional study required for a licence shall comprise attendance during not less than four winter and two summer sessions, at a school recognised by any of the licensing bodies mentioned in Schedule (A) to the Medical Act."

Mr. LISTER seconded the amendment. He did not deny the value of apprenticeship; but it should not count as a portion of the four years' professional study, which ought to be passed at a medical school.

Mr. TEALE doubted whether it was advisable to lay down so strict a rule as that proposed by Mr. Turner.

Dr. FLEMING said that few could get an adequate amount of knowledge in less than four winter sessions. After the first two years at a medical school, two summer sessions might be spent in pupilage.

Sir JAMES PAGET had commenced the study of medicine as a pupil of a practitioner in the country. No education given in the London schools was better than that given in many parts of England and Wales. There were many men in country practice who taught very well; and he could not think of any better mode of beginning professional education than in a provincial hospital. In the London schools, the first six months of the student's career were almost lost in learning simple things which he ought to have known before. He thought that the Council should encourage the commencement of professional education in the provincial hospitals.

Mr. SIMON asked where Sir James Paget would draw the line between recognised and unrecognised teaching.

Dr. ALLEN THOMSON suggested that the Council, after fixing the limit of school study, should state what other study might accompany it.

Dr. QUAIN said that it must be remembered that medical men in practice had not always hospital patients to treat. Some young men who had been educated altogether in hospitals could not write prescriptions for private patients.

Sir D. CORRIGAN had been two years an apprentice and two years a pupil in a medical school; and had learned most from his apprenticeship.

Dr. HUMPHRY thought that it might be left to the student to spend a portion of the period of professional study either at a medical school or in pupilage. He looked with no small estimation on the value of the information to be obtained from country practitioners. Many of these attended carefully to the instruction of their pupils in elementary subjects, and gave them the best preparation for entering on the work of the schools. Men thus prepared did better than those who came to the schools for four years, and spent a great part of their time in loafing about and in what was called walking the hospitals. Again, the education of their pupils tended to improve the information of the practitioners themselves.

Dr. ANDREW WOOD was some years ago opposed to apprenticeship, but had changed his opinion. He had himself been an apprentice, and was glad of it; and he was so convinced of the value of this mode of instruction that he had apprenticed his own son.

Mr. SIMON said that the Council could not dispense with some evidence of opportunities of education.

Sir JAMES PAGET said that many things which it was important to know could only be learned in private practice. In a London school, a student was at first, in most cases, thrown very much on his own resources. He had learned his elements of osteology during apprenticeship to a practitioner in Norfolk.

Mr. TURNER was not opposed to apprenticeship; but thought that four years should be spent at a medical school.

The amendment was lost.

Mr. SIMON moved as a second amendment, and Dr. ROLLESTON seconded:

"That the whole required course of professional study shall be at schools, or under teachers, recognised by the licensing bodies which accept the certificates of the education."

This amendment was negatived.

Mr. MACNAMARA moved as a third amendment, and Sir JAMES PAGET seconded:

"That the course of professional study required for a licence shall occupy not less than four years, of which at least three winter and two summer sessions shall be passed at any school recognised by any of the licensing bodies mentioned in Schedule (A) of the Medical Act."

This amendment was carried, and, being put as a substantive motion, was agreed to.

The Council then resumed, and adjourned.

*Tuesday, May 22nd.*

Dr. ACLAND, President, took the chair at 2 P.M.

*Recommendations of the Council.*—The Council was occupied during nearly the whole sitting in discussing, in Committee, the reports of the Committee on Recommendations.

Much discussion took place on the question of requiring evidence of education in Natural Philosophy and in Chemical Physics (Heat, Light, and Electricity).

Mr. SIMON moved, and Dr. ROLLESTON seconded, the addition, to the optional subjects of preliminary examination in subjects of general education, of "Physics—meaning thereby Heat, Light, and Electricity". This was agreed to; but a further motion of the same proposer and seconder to add to the same list "The Elements of Chemistry, including the laws of combination and decomposition", was negatived. [At a subsequent stage, the decision regarding Physics as an optional subject of Preliminary Examination, was reversed.]

In discussing the recommendations as to the necessary subjects of professional education, Mr. LISTER insisted on the importance to the medical practitioner of some knowledge of Natural Philosophy, and moved that one of the subjects be "Natural Philosophy—meaning thereby Mechanics, Hydrostatics, Hydraulics, and Pneumatics; unless an examination in those subjects shall have been previously passed." This proposal was seconded by Sir DOMINIC CORRIGAN, and supported by Mr. SIMON, but was negatived.

The last recommendation brought forward for consideration was the following:

"That it is not desirable that any University of the United Kingdom should confer any Degree in Medicine or Surgery, whether that of Bachelor, Doctor, or Master, upon candidates who have not graduated in Arts, or passed all the examinations required for the Bachelorship in Arts, or passed the examinations equivalent to those required for a Degree in Arts."

After a few remarks from Sir James Paget, Sir W. Gull, Dr.



Thomson, Mr. Simon, and Mr. Lister, the debate was adjourned on the motion of Dr. APJOHN.

*Executive Committee.*—A ballot having been taken, the following members of Council were declared to be elected as the Executive Committee for the ensuing year: Sir James Paget, Dr. Humphry, Dr. Quain, Mr. Simon, Dr. Andrew Wood, and Dr. Aquilla Smith.

*Wednesday, May 23rd.*

Dr. ACLAND, President, took the chair at 2 P.M.

*Recommendations of Council.*—The Council continued the discussion, in Committee, of the reports of the Committee on Recommendations; and, having resumed, concluded the day's proceedings by adopting the amended code of recommendations, the publication of which we must defer to next week's JOURNAL.

Respecting the recommendation proposed at the end of the previous day's sitting, the consideration of which was deferred, a discussion took place, in which Dr. Apjohn, Mr. Lister, Dr. A. Smith, Dr. Storrar, Sir D. Corrigan, Mr. Simon, Mr. Turner, Mr. Macnamara, Dr. A. Wood, and other members of the Council took part. Sir WILLIAM GULL moved as an amendment, and Dr. ROLLESTON seconded, that the recommendation should stand as follows:

"That it is not desirable that any University of the United Kingdom should confer any Degree in Medicine or Surgery, whether that of Bachelor, Doctor, or Master, upon candidates who have not graduated in Arts, or passed all the examinations required for the Bachelorship in Arts, or passed, after due course of education, examinations such as are, *bonâ fide*, academically equivalent to those required for a Degree in Arts."

The amendment was carried.

Sir DOMINIC CORRIGAN required that the names and numbers of those who voted for and against the motion, and of those who declined to vote, be taken down.

*Majority, 9:* Dr. Rolleston, Dr. Pyle, Dr. Haldane, Dr. Andrew Wood, Dr. Fleming, Mr. Macnamara, Dr. Apjohn, Sir W. Gull, Dr. Hudson. *Minority, 7:* Dr. Humphry, Dr. Storrar, Dr. Thomson, Dr. Smith, Dr. Leet, Sir D. Corrigan, Mr. Lister. *Did not Vote, 8:* The President, Dr. Pittman, Sir James Paget, Mr. Bradford, Mr. Turner, Dr. Quain, Mr. Simon, Mr. Teale.

The amendment was then put as a substantive motion and carried.

Mr. SIMON moved as an additional recommendation, and Dr. PYLE seconded:

"That, in the opinion of the Council, it would be desirable, as a general rule, that none of the higher degrees or qualifications in Medicine or Surgery should be conferred on persons who have not shown evidence of higher general (as well as higher professional) education, unless such persons be of at least twenty years' standing in the profession."

Sir WILLIAM GULL moved as an amendment, and Dr. ROLLESTON seconded:

"That, in the opinion of the Council, it would be desirable, as a general rule, that none of the higher degrees or qualifications in Medicine or Surgery should be conferred on persons who have not shown evidence of higher professional attainments."

The amendment was carried; and, being put as a substantive motion, was agreed to.

*Definition of Extent of Subjects.*—Dr. ANDREW WOOD moved, and Sir JAMES PAGET seconded, the adoption of the following recommendation:

"That it be recommended that, in the examination on the subjects of Chemistry, Chemical Physics, Physiology, and Materia Medica, and, as far as practicable, other subjects of examination, the licensing bodies should limit and define by Schedule the extent of examination."

Dr. A. THOMSON moved as an amendment, and Dr. HALDANE seconded:

"That it is desirable that, in the examinations on several of the subjects of the curriculum—such, for example, as Chemistry, including Chemical Physics and Materia Medica—the licensing bodies should limit and define by Schedule the extent of examination."

The amendment was carried, and was then put as a substantive motion; whereupon the following amendment was moved by Mr. SIMON, and seconded by Sir JAMES PAGET:

"That it is desirable that, in the examinations on several of the subjects of the curriculum—such, for example, as Chemistry, including Chemical Physics, Physiology, and Materia Medica—the licensing bodies should limit and define by Schedule the extent of examination."

This amendment was carried; and, being put as a substantive motion, was agreed to.

*Practical Study.*—Dr. ANDREW WOOD moved, and Mr. TURNER seconded, the following recommendation:

"That it be recommended that candidates for the final professional examination be required to give evidence that they have had opportunities of practical study with care of patients as pupil, assistant, clinical clerk, or dresser in hospital, dispensary, or elsewhere."

An amendment, moved by Sir DOMINIC CORRIGAN, and seconded by Dr. A. SMITH—"That it is inexpedient that this motion should be adopted"—was negatived.

A second amendment was moved by Sir WILLIAM GULL, and seconded by Dr. ROLLESTON:

"That candidates for the final professional examination be required to give evidence of practical experience in the treatment of diseases in one or other of the following capacities: of assistant, clinical assistant, or dresser."

This amendment was also negatived; and the original motion was put to the vote and carried.

*Practical Examination in Anatomy and Surgery.*—Dr. ANDREW WOOD moved, and Sir JAMES PAGET seconded, the following recommendation:

"That it is desirable that, in examinations in Anatomy, candidates should understand that they may be called upon to perform actual dissections, and that candidates in examinations in Surgery should understand that they may be called upon to perform one or more operations on the dead subject."

Mr. MACNAMARA moved as an amendment, and Sir WILLIAM GULL seconded:

"That it is desirable that, in examinations in Anatomy, candidates should be called upon to perform actual dissections, and that candidates in examinations in Surgery should be called upon to perform one or more operations on the dead subject."

The amendment was negatived; and the original motion was put to the vote and carried.

ON Thursday, the Reports of the Finance and Pharmacopœia Committees were brought up by Dr. Quain, and adopted. The Report of the Finance Committee contained a recommendation that the sum of two hundred guineas should be presented to the late Registrar, Dr. Francis Hawkins, in recognition of his long and faithful services. This was opposed by Dr. A. Smith and Sir Dominic Corrigan, on the ground that such an application of the money of the Council was illegal; but the opposition was overruled by a large majority.

A resolution of the North of England Branch of the British Medical Association, that it was the duty of the General Medical Council to prosecute unqualified practitioners, was considered; and a resolution was passed calling attention to former decisions of the Council on the subject.

Sir JAMES PAGET moved a resolution approving in general terms of the conjoint examination scheme for England; which, after discussion, was adopted *nem. con.*; and the proposal for the scheme (which has been published in a recent number of this JOURNAL) was ordered to be entered on the minutes.

A report from the Medical Acts' Committee on the proposals of the Obstetrical Society with regard to the education and registration of midwives, was ordered to be entered on the minutes, but was not formally adopted; and a resolution was passed to the effect that the necessity of legislation on the subject should be represented to the Government.

A letter from Dr. Gerald Yeo, on behalf of the Physiological Society, calling attention to the refusal of the Secretary of State in several cases to grant certificates authorising the performance of experiments on animals, was read; and, on the proposal of Mr. Simon, who mentioned nine cases in which certificates had been refused to well-known physiological inquirers, the matter was referred to the Executive Committee with power to take action thereon.

A resolution proposed by Mr. Lister, recommending that attendance in one course only of lectures on any one subject should be required from students, was carried after discussion.—After the transaction of some formal business, including votes of thanks to the Chairman of the Business Committee (Dr. Andrew Wood), the Treasurers (Dr. Quain and Dr. Pittman), and the President, the session was closed.

A HOMŒOPATHIST named Thomas Howard has been sued in the Accrington County Court, at the instance of the Society of Apothecaries, London, to recover the penalty incurred by defendant in visiting and prescribing for patients. The defendant was ordered to pay £20 and costs.

DONATIONS.—E. D. has given £100 to Mercer's Hospital; Lady Olive Guinness, £21 to City of Dublin Hospital; "In Memoriam," £50 to Hospital for Incurables. The Medical Officers of the Adelaide Hospital have contributed £75 towards the Building Fund of that Institution.



## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, MAY 26TH, 1877.

### THE FAMINE MINUTES OF SIR RICHARD TEMPLE AND THE MADRAS SANITARY COMMISSIONERS.

SIR RICHARD TEMPLE, to whom much credit was justly given for his energetic management of the Bengal famine, was charged by the Government of India with a general supervision of the operations for the relief of the sufferers from the famine now unhappily prevailing over an immense area in the Madras and Bombay Presidencies. In a minute, dated January 19th in this year, published in the *Gazette of India* of February 3rd, Sir Richard Temple thus expressed himself in regard to the quantity of food necessary to sustain the health of persons employed on famine-relief works in the Bellary district.

"The present rate of wages is fixed at two annas *per diem* for an adult, and proportionately lower for women and children. This rate is upon the supposition that it will purchase one pound and a half of grain *per diem*, a quantity which is deemed essential for a man while at work. There might, indeed, be a question whether life cannot be sustained with one pound of grain *per diem*, and whether Government is bound to do more than sustain life. This is a matter of opinion; and I myself think that one pound *per diem* might be sufficient to sustain life, and that the experiment ought to be tried. Possibly, the gangs might not perceptibly fall off in condition. After a week or a fortnight of experience, it would be seen whether they so fell off or not; if they were to seriously fall off, then the point could be considered."

Surgeon-Major Cornish, F.R.C.S., the able Sanitary Commissioner for Madras, "as the adviser of Government on public health questions" in the South of India, at once deemed it to be his duty to record his protest against "opinions" which, although emanating from so eminent an official as Sir R. Temple, "are in direct contradiction to the accumulated testimony of scientific observers in every country in which this question of the quantity and variety of food, essential to keep a labouring man in health and strength, has been the subject of investigation". Accordingly, the Sanitary Commissioner addressed to his Government a vigorously written letter, in which he demonstrates that sixteen ounces of cereal grain is insufficient to maintain a labouring adult in health, supporting this view of the question by the scientific evidence of the most eminent authorities who have investigated it, particularly that of Sir Robert Christison, and by an array of facts drawn from the recorded experience of various dietaries in the prisons of India, and an inquiry into the nature and quantity of food of the various classes of the people of India. The evidence of the district medical officers in the Madras Presidency, submitted, be it observed, to Government before this controversy arose, establishes the fact "that the minimum grain allowance of a man in health and in work is not less than twenty-four ounces; while from twenty-four to forty-eight ounces *per diem* is very commonly consumed by the natives of Southern India. Mr. Cornish adduces the well known physiological facts, as to the expenditure of nitrogen when the body is at rest, and under great physical exertion, which it is not necessary to repeat here; and, after showing the varying amount of nitrogen in sixteen ounces of the different kinds of grain used in India (rice from sixty-eight to eighty grains, *raggy* or *cholum* about one hundred, wheat one hundred and sixteen grains), adverts to the well-known fact that, with a view to supplement this

low amount of nitrogen in rice and *cholum*, the grains in common use, the natives use "flesh-meat, milk, cheese, etc., and the vegetable feeders *pulses*, which are highly nitrogenous in their composition".

The Commissioner then turns to the experience gained in the Indian jails, and shows that three things are essential to the health of prisoners other than the bare allowance of one pound and a half *per diem* of cereal grains. These are (1) pulses; (2) meat or fish; (3) oil and condiments; (4) fruit or vegetable; and (5) salt. "With a regulated minimum of these articles, we are enabled to keep the prisoners in fair health," but, "if this minimum of food, from any cause, is withheld or lessened for a time, the jail inmates begin to drop off from the very same causes that tell so severely on the famine-stricken people in our relief-camps".

After exposing the fallacy, that a diet which will barely keep a man alive who is at rest, will sustain him when employed on work requiring physical exertion, Mr. Cornish arrives at the obvious conclusion that with one pound of grain *per diem*, and half an anna in cash, the labourer on the famine-works cannot make his daily ration equivalent to two hundred grains of nitrogen: that, in short, sixteen ounces of grain is insufficient for the maintenance of a labouring man; and he warns the authorities that an attempt to feed men on Sir Richard Temple's famine-ration will end in great loss of life—not, indeed, by immediate starvation, but from the diseases that tread in the footsteps of famine.

The Madras Government immediately forwarded this letter to the Government of India, and to all the medical officers in any way concerned with the relief-works, and directed the sanitary commissioner himself to inspect some of the working gangs on the famine relief-works. The letter, of which we have given an abstract, quickly drew from Sir Richard Temple two elaborate minutes in defence of his famine-ration, to which the sanitary commissioner promptly replied. The minutes and the reply are worthy of careful examination. It is a noteworthy fact, that Sir Richard Temple, in dealing with the famine in Bengal, and even in the Bombay Presidency, calculated the quantity of grain required to keep not only an adult male in health, but even women and children, at one pound and a half of grain. It was only when he began to deal with the famine in the Madras Presidency that he took up the "pound a day" theory, and acted on it.

Mr. Cornish, in a very effective way, prints in parallel columns the views of Sir Richard Temple in 1874 and 1877, leaving their author to reconcile them if he can. Sir Richard defends his pound a day on the ground (1) that it is sufficient for the amount of work given in return; (2) that Government cannot afford more, and cannot pretend to prevent all forms of distress; and (3) because, as a result of his inspection, he found the physical condition of the labourers as good as in ordinary years. Sir Richard declines to discuss this question on scientific grounds, and concludes this part of his argument, or reply to Mr. Cornish, by the assertion that the labouring poor in rural localities do not get more than a pound a day for a male adult in ordinary times. In his minute of the 7th of March, Sir Richard Temple declines to enter into Mr. Cornish's "purely professional arguments", on the curious ground that the natives of India have lived for centuries in disregard of the "abstract scientific theories on public health", which he admits to be of great value. He does not pause to note how the population of India die by thousands through ignorance of these "theories". Mr. Cornish's reply to this is simply that he put forward no "scientific theories", but merely stated a *fact*; that as the human frame in every race and climate disposes of a certain amount of nitrogenous matter every twenty-four hours, a like amount must be taken into the body in food to restore that waste, otherwise the tissues of the body will gradually disappear; and that one pound of rice, containing from sixty-eight to eighty grains of nitrogen, and a small money payment of six pice (= three farthings), would not suffice to enable a labourer to provide a sufficiency of nitrogenous food to restore his daily expenditure of tissue.

Whenever an argument based on scientific data is urged on a ques-



tion of public health, the invariable reply is, as in this particular case, that it is "a medical theory", which "practical men" may safely disregard. This was the view taken of the lime-juice ration by Sir George Nares, with what result we know and Sir George Nares knows. "Practical men", however, like the commander of the Arctic Expedition and Sir Richard Temple, are not above framing theories of their own and acting on them. What Sir George Nares's "theory" was we know, and the results we know. Sir Richard's is, that sixteen ounces of rice, with the aid of three farthings in money to supplement it, can maintain a man—a *labouring* man—in health. Sir Richard Temple is satisfied, from his hurried inspections of the people on the relief-works, that his dietary is sufficient; not so the sanitary commissioner, who does not, like Sir Richard, pass by the subject of the actual mortality of the famine-stricken. Mr. Cornish gives the following terrible figures to show the mortality amongst this class of the population in the Madras camps for ten weeks ending March 31st.

Mean Strength.	Total deaths.	Annual ratio per 1,000.
11,005	1,971	930.8

"This enormous mortality", adds Mr. Cornish, "simply means an annual death-rate equivalent to 930.8 *per mille* of the population constantly under observation, and, in fact, is a death-rate which wipes out nearly the whole of the living within a year. The excessive death-rate going on in Madras is going on in every relief camp in the country. I find but little difference in the proportion of deaths, whether in North Arcot, Cuddapah, or Madras; and it must not be supposed that this excessive death-rate is due to cholera or small-pox; for the Madras camps have been singularly free of the former, and, by means of vaccination, the small-pox epidemic has been controlled. The deaths are almost entirely due to diseases which invariably, in India, attack underfed and starved people; viz., extreme wasting of tissue and destruction of the lining membrane of the lower bowel."

Here we must pause, as we have already exceeded our limits, but not without, in the name of his profession, thanking the Madras sanitary commissioner for his courage in challenging the opinions and acts of one of the highest, ablest, and most trusted officials backed by all the influence of the Government of India. Nor must we withhold from Sir Richard Temple the praise which is his due; he might have invoked the Government to rebuke the presumption of a health-officer for daring to call in question his "theories" and the fatal acts founded on them; but, instead of this, he descends into the arena and defends himself, if not with success, at least with skill. The combatants on such ground were unequally matched, but Sir Richard Temple must at least feel that there is no disgrace in being worsted in such an argument by so consummate a master of his subject as Mr. Cornish.

We must not omit to notice one important concession which the sanitary commissioner wrung from his antagonist. Sir Richard Temple, in the first instance, directed that, on the famine-works, even the one pound of rice was to be withheld on Sundays, on the principle of no work no food. Mr. Cornish has convinced him that, even if a man do not work, he must eat, and the Sunday restriction is abolished, and, what is more, provision is now made to prevent the daily dole from being shared with the starving women and children of the family; additional help for them is conceded.

#### VISITING PHYSICIANS TO PRIVATE ASYLUMS.

IN the additional evidence which Dr. Lockhart Robertson was called upon to give on the 17th instant before the Select Committee on the Lunacy Laws, he strongly recommended that a visiting physician should be appointed by the Commissioners to every private asylum, on the ground that such appointment would be a great safeguard against undue detention and improper treatment. Dr. Tuke, a previous witness, had remarked upon the great advantages which patients in well-managed asylums derive from the concurrence of opinion of the medical men by whom they are seen and their treatment agreed upon; leaving the inference to be drawn that in asylums where the patients

are only seen by one medical man, they cannot enjoy all the advantages which a system not obviously imperfect ought to provide for them.

It is quite true that, in a private asylum of the best class, a considerable number of the inmates are from time to time visited by outside medical men, in addition to the medical proprietor of the institution, and that it is in the highest degree improbable that any patient so visited can be either wrongly treated or wrongfully detained. But, out of the hundred and four private asylums which exist in England and Wales, twenty-nine are licensed to non-medical persons, and in twenty-one the licencees are women; and, of the remaining seventy-five asylums, not more than twenty-five can, upon the most liberal computation, be said to be licensed to medical men whose names are much known beyond the precincts of their own walls. In thinking of a private asylum, the mind naturally reverts to some well known institution, ignoring the far greater number of obscure places which are not typified by the asylum which Dr. Tuke correctly described, and in which the foot of an outside medical man rarely passes the threshold. But is it a satisfactory arrangement that British subjects should be detained in any asylum, even if the proprietor be a medical man, without that guarantee of proper treatment which the concurrence of medical opinion can best provide? In private practice among free and sane men, who can change their medical attendants at their own will, few medical men would think themselves justified in treating very serious disease without consultation with their compeers, if they could get it; and in general hospitals the minds of many men are brought to bear upon every important case. Why should the treatment of disease so serious that it enforces the loss of liberty be secluded not only from the eye of the public, but from that of the profession? The Commissioners, it is true, visit the asylums in their district six times in the year; and, as half of them are medical men and all of them are experienced and diligent public servants, the official visitation of asylums is as thorough as it well can be. But the Commissioners neither do nor can undertake the responsibility of the slightest interference with medical treatment, seeing that the conditions of it are ever changing, and that they cannot possibly follow it up. They may, indeed, sometimes suspect that chloral or bromide has something to do with the exceptional quietude of an asylum, and feel some misgivings that Dr. Maudsley's theory may be no crotchet—namely, that chemical restraint of the brain-cells is now largely substituted for mechanical restraint of the limbs; but it would be rashness for them to interfere either with active therapeutics or with that want of them which is the more general rule; for it must be admitted by all who are conversant with the subject that, in many private asylums, medical treatment is, like the justice of the Turks, exceedingly inert except when it is directed to the repression of revolt. The existing law (8 and 9 Vict., c. 100, s. 57) enacts that a resident medical man shall be required only for a private asylum which contains one hundred patients or more. If there be fifty patients or more, then a daily visit from a medical man will suffice; and, if fewer than fifty patients, a medical man is only required to visit once a week. The legislature could scarcely have made a more contemptuous comment upon the relations of medicine and lunacy. In the hundred and four private asylums of England and Wales, the law requires a resident medical man in only seven, and the daily visit of a medical man in only nine others; in the remaining eighty-eight asylums, the law will be satisfied with the visit of a medical man twice a week. Practice, however, is better than precept; and in the metropolitan district at least the Commissioners not only require a resident medical man in comparatively small asylums, but they have already initiated the arrangement which Dr. Robertson proposes to make general, by the appointment of visiting physicians to some of the most important private asylums under their control. Dr. Blandford is visiting physician to the Sutherland Asylums, Dr. Maudsley to the Stilwell Asylums, and Dr. Tuke to Northumberland House. Therefore it would seem that the principle has already been adopted by the Commissioners that an independent medical man appointed by



themselves should be attached to each private asylum, to consult and advise as to the treatment; and, if the Select Committee should, as seems probable, recommend periodical recertification of patients, such a medical man would undoubtedly be the proper person upon whom this responsible duty should be imposed, seeing that a stranger to the patients would be very apt to be misled, and the position of the proprietor would render him liable to mistrust.

#### KING'S COLLEGE HOSPITAL AND SCHOOL.

THE profession is aware that, after the lamented death of Sir William Fergusson, the majority of the staff and the authorities of King's College Hospital and Medical School resolved that it was extremely desirable that the vacancy occasioned by the loss to that institution of the services and of the reputation of the leader of British surgery should be, if possible, compensated by obtaining for King's College the services of Professor Lister, the great surgeon of Edinburgh, whose clinical teaching and brilliant successes in the field of antiseptic surgery have made him illustrious in all civilised countries, and have become the basis of new methods of practice throughout the world. It is well understood that, in listening to these proposals, Professor Lister has from the first shown a willingness to sacrifice, in the interests of scientific duty, personal considerations of the greatest weight, as the Surgeon to the Queen in Scotland. As the successor of Syme in the Chair of Clinical Surgery in the University of Edinburgh and in the surgical wards of the Royal Infirmary, and as the teacher of a vast body of students such as no other school in Great Britain can boast; he has for some years now held a commanding position in the surgical world, and in practice in Scotland, than which no man could desire anything more honourable, or more influential, or more satisfactory. Very few men, we imagine, would have entertained the proposal to uproot himself from a position so eminent and so firmly established, in order to accept the post of surgeon and clinical lecturer in one of the twelve medical schools in this metropolis, where the competition of teaching is much closer, where the number of students, although greater in the aggregate, is much less in each individual case by reason of the subdivision, and where it must necessarily lie less easily within the grasp of any individual, however distinguished, to attain the position of peculiar eminence and authority which Mr. Lister has acquired for himself in Scotland.

The course which Mr. Lister has taken has been quite characteristic of his sincere devotion to the scientific principles of which he is the apostle, and which he has introduced into practice with a success which has procured for him followers in every city where surgery is cultivated as a science or practised as an art. It is well known that antiseptic surgery has established for itself a firmer hold in all the other great cities of Europe than in London, and the desire to establish in London a centre from which his teaching and practice could be disseminated, where it should be brought within the reach of metropolitan students and under the direct cognisance of all who are interested in the subject, has induced Mr. Lister to accept the post of clinical lecturer in King's College and surgeon in King's College Hospital. He intimated from the first that nothing would induce him to sacrifice his position and his opportunities of usefulness in Edinburgh, unless the means were afforded to him of carrying out the system of clinical surgical teaching in an independent manner, and with the same completeness with which, following Mr. Syme, he has been accustomed to teach in Edinburgh, and unless also he had the means of practising the antiseptic system in all its completeness in the wards allotted to him here.

At first, owing to certain difficulties which were interposed from a cause to which we need not further refer, the Council of King's College feared that it would be impossible for them to accede to the scientific and clinical requisitions which Mr. Lister considered indispensable; the offer which they made was, therefore, declined by Mr. Lister. Subsequently, the whole medical staff addressed to the Council a me-

morial, which was, some weeks since, published in our columns, requesting that steps should be taken to overcome the existing obstacle. Since that date, Mr. Bowman has been added to the Council; and subsequent consideration of the position, aided, we believe, in no small measure by the enlightened and judicious counsels of Mr. Bowman, has resulted in the completion of arrangements which afford to Mr. Lister full opportunities of carrying out his system of clinical teaching and of practising antiseptic surgery at King's College Hospital under satisfactory conditions.

Mr. Lister will hold office as a Professor of Clinical Surgery in the College, and in this capacity will give clinical instruction in the regular course twice a week throughout the summer and winter sessions, and will have wards set apart for himself, with his own house-surgeon and dressers, whom he will be able to properly instruct and superintend in carrying out his instructions. Thus this method will be fully and fairly tried with the cognisance and under the eyes of the students and surgeons in London. We think King's College Hospital is to be heartily congratulated on having secured for itself this valuable addition to the resources and attractions of its school and hospital, and no doubt their influence will be felt in the increased usefulness and prosperity of the institution. Some feeling of soreness has found expression in our own columns and elsewhere at the very decided and unusually strong language in which Mr. Lister expressed, in the first instance, his determination not to accept any post in London, however flattering or however attractive the prospect, unless he were enabled to carry out clinical teaching and antiseptic surgery according to his own views. One at least of his expressions was open to palpable objection, as being liable to an interpretation which he must have been far from intending. Men so much in earnest as Mr. Lister is on the great subject of his labours and great achievements of his life may claim a favourable interpretation of their words, when called upon to speak on the subject under circumstances of no small difficulty.

Professor Lister has, however, been present in London during the last week, and the cordial reception which he met in all circles of the profession must have convinced him that the surgical profession in London are prepared to receive him in a manner due to his character and distinguished achievements, and that here he will meet with only friendly rivalry; and that, if he must expect keen and close criticism, he may also rely upon generous and friendly appreciation.

THE proceedings of the General Medical Council have extended to such length, that we allow them this week to speak for themselves through the report. Next week we shall summarise and comment upon the conclusions arrived at.

THE Cambridge Museums and Lecture-rooms Syndicate, in their eleventh annual report, just issued, state that Professors Liveing, Dewar, and Stuart complain of want of suitable accommodation for the work of their several departments, and the Syndicate concur in the reasonableness of their complaints. Thanks are returned to (*inter alios*) Professor Humphry, for a valuable series of wax models of parts of the human body.

#### THE REMOVAL OF THE SICK POOR.

AT an inquest held recently at the Central London Sick Asylum, Cleveland Street, on the body of a woman who died shortly after her admission, some very sensible observations were made by the coroner (Dr. Hardwicke), who commented with well deserved severity on the cruelty implied in the removal of seriously sick persons in ordinary street cabs, instead of by properly constructed ambulances, where such sick persons could lie down or be in a semirecumbent position. We also entirely agree with Dr. Hardwicke in his condemnation of the stretcher system used by the police in the removal of sick or injured persons. At every police-station and every urban workhouse a properly constructed ambulance should be provided, and so placed as to



be immediately available either by day or night. At the same time, we feel it our duty to protest against the somewhat reckless system adopted in too many instances in the removal of persons whom a little more care in examination would show to be in a dying state. In the case in question, it was obviously an error to have removed her at all, as she was clearly unfit to bear the journey.

#### WESTMINSTER HOSPITAL.

COPIES of the following resolution have been addressed to the medical officers. "At a meeting of the House Committee held this day, it was resolved that leave of absence be granted to the medical officers of the hospital from the 12th June to the 20th September." Some of the medical officers, however, complain that they have not asked for such leave of absence, and have not been consulted with respect to it.

#### DEATH FROM BLOOD-TRANSFUSION.

AN inquest has been recently held at Liverpool on the body of a man named Walter Robert Williams, who died after having some of his blood transfused to another man, who was in a very weak state. The operation took place a few days ago, and the deceased went on well for a day or two afterwards. He then became ill, got gradually weaker, and died last Thursday from erysipelas. The deceased was a man of full habit, and it was stated that he was occasionally given to drinking. The surgeon who performed the operation said that, before doing so, he made particular inquiries from the deceased as to his habits and state of health, and his answers were satisfactory. Witness thought him a remarkably fit subject. The general medical evidence was to the effect that the operation had been skilfully performed. Mr. Higginson said he had performed the operation successfully in fifteen cases. The jury returned a verdict of "Death by misadventure", but they were also of opinion that sufficient inquiry was not made by the medical men who made the operation as to the deceased's habits and physical condition, and that he was not sufficiently cautioned as to the risk he was running.—Together with this report, we receive at the same time a little pamphlet by Dr. Roussel advocating the more frequent practice of transfusion by the aid of his now well-known instrument, with a few introductory words of recommendation by one of the most thoughtful of surgeons, Sir James Paget, who adds the following words, on which the above accident furnishes a striking commentary. "As to any damage to be sustained by the person who gives the blood for transfusion, no fear of this can be felt by any one who, like myself many years ago, bled healthy people in any number without harm."

#### STRANGULATED HERNIA: COLLAPSE: DEATH UNDER ETHER.

AN inquest was held this week in the case of a man aged 69 who was admitted into the London Hospital with strangulated hernia of three days' duration. It was evident that strangulation existed, although the hernia had been reduced, as he was constantly vomiting, and the abdomen was tense and tender. He was so much exhausted that it was a question how far he would bear any operation. Ether was administered by Clover's inhaler, first allowing air only to be admitted, then a small quantity of ether-vapour. He did not take it well, and struggled much. Air was then admitted freely; and, although respiration continued a short time, the pulse became weaker and finally stopped. Silvester's artificial respiration and other restorative measures were tried, but failed. Not more than two drachms of ether were used. On *post mortem* examination, the heart was found flaccid, and the left ventricle uncontracted; the lungs were extremely emphysematous, and the bronchi filled with muco-purulent matter. These and other morbid changes, both chronic and acute, might be considered sufficient in themselves to account for death. The facts, therefore, would not warrant the conclusion that death was due to the administration of ether. Several coils of intestine were strangulated by two long bands of omentum twisted round them spirally and adherent to the sac, which had been inverted and pushed up into the peritoneal cavity. An additional explanation of the sudden collapse was afforded by the fact that the relation of parts was so peculiar, that traction on the scrotum, in attempt-

ing reduction, pulled down the sac, and tightened the bands around the mass of intestines to an extreme degree. The jury returned a verdict of death from accidental causes.

#### COMMISSIONS IN LUNACY.

CONTESTED Commissions in Lunacy are likely to become more frequent. Last week, such a commission was held before Master Warren, at which Dr. Bucknill and Dr. Tuke gave evidence as to the insanity of a lady, which was so manifest from their testimony and from her letters which were produced, that the jury unanimously found her of unsound mind without hearing the defence or seeing the lady. Nevertheless, a well known alienist physician appeared for the defence, having made an affidavit that, notwithstanding the lady had insane delusions, she was capable of managing her affairs. The conjunction of insane delusions with civil capacity is, however, a possibility which the law does not at present recognise. Mr. Kemp, Q.C., was leading counsel for the friends; and Mr. Digby Seymour, Q.C., for the lunatic.

#### CONVALESCENT HOME FOR KING'S COLLEGE HOSPITAL.

THE amateur theatricals performed at Bridgewater House, by kind permission of the Earl of Ellesmere, on behalf of the King's College Convalescent Fund, passed off in a highly satisfactory manner, and £700 were handed over to the charity as the proceeds of the entertainment; a proof of the good management as well as artistic ability of the lady managers.

#### THE HASTINGS INFIRMARY.

THE present infirmary at Hastings, with its thirty-two beds, has long been found inadequate to the wants of the rapidly increasing borough, and, during the last four years, the question of providing larger and better accommodation has been frequently considered. The difficulty is to find a suitable site for a new and efficient hospital, opposition arising from the inhabitants of the various districts from the fear that its presence may lower the value of neighbouring property. Plans have been prepared for a new building on the present site with sixty beds, but there seems reason to fear that if these plans are carried out the want of space per bed may cause overcrowding; added to which, the cliff adjacent to the back of the premises prevents thorough ventilation. It is to be regretted that the Committee seem inclined to admit the dangerous principle that, as the beds will not always be full, a little close packing will produce no harm. It has always been found a short-sighted policy to build on unsuitable sites, and with a rapidly increasing population, like that of Hastings, a good site, and building capable of extension, are essential to the permanent success of a hospital. The governors have, therefore, wisely determined to wait for a new site rather than rebuild on the present confined space.

#### TEACHING OF THERAPEUTICS.

DR. CHARLES PHILLIPS, in his recent excellent introductory lecture on *materia medica* at the Westminster Hospital, dwelt upon the anomalous position it held in the curriculum of the various examining bodies, also the grave error in uniting in one course two separate and distinct parts or subjects, the "materials" and the "therapeutics". The former is well placed at the beginning of the student's career; the latter should be concomitant with the lectures on surgery and medicine and practice in the wards. This would enable the student to verify the action of drugs and educate him to prescribe with success. The great attention which has been applied to physiology and pathology on the part of the principal teachers of the metropolitan schools has, it is said, acted to the detriment of therapeutics, and led to much scepticism in the action of drugs and to nihilism. All teachers of *materia medica* have become deeply impressed with the injuriousness of the present system, and its condemnation has had their unanimous approval. Dr. Harvey of Aberdeen, Dr. Farquharson of London, the late Dr. Parkes and other members of the Medical Council, have either pressed the matter upon public notice, or expressed themselves in its favour. The Cam-



bridge University has (March 1877) introduced this necessary change in the curriculum, an example which it is to be hoped will soon be followed by the other authorities. The General Medical Council, in issuing this week a revised code of recommendations on education and examination, has recommended that the examination on therapeutics shall take place at a later period than that in materia medica and pharmacy.

#### SIR JAMES PAGET'S HUNTERIAN ORATION.

SIR JAMES PAGET has published his Hunterian Oration, delivered in the presence of the Prince of Wales at the Royal College of Surgeons on the 13th of February last, in a worthy form and enriched by copious and valuable notes. There are few of those who either heard or have read that admirable oration, who will not desire to possess it in its separate and enriched state. The lecture was as remarkable for the solidity of its substance and the morality of its teaching as for the brilliancy of its form and delivery. The notes indicate what is known to be the fact, that, by way of preparation to the oration, Sir James Paget had made a most careful, complete, and conscientious study of all the works of Hunter and of the voluminous literature which has gathered around his name. The notes conclude with this characteristic and well-to-be-remembered sentence: "After having studied Hunter's life, and all his defects of temper and of general culture, of social skill and of all the arts of pleasing, nothing has seemed clearer than that the power of a great intellect, with a strong will and a right aim, is, in the competition of life, sufficient and irresistible; and that, among all the intellects and wills that I have studied, not one was stronger than John Hunter's."

#### THE HOSPITAL FOR DISEASES OF THE THROAT, GOLDEN SQUARE.

It is stated that the management of the medical department of the Throat Hospital in Golden Square has lately been called in question, and that the chairman, vice-chairman, trustees, and several members of the committee, in addition to the surgeon, secretary, and other officials, have resigned. We believe that an investigation into the circumstances which have led to the resignation of these gentlemen is about to be made by a committee of noblemen, aided by a distinguished member of the medical profession.

#### HERNIA MISTAKEN FOR ABSCESS.

THE *Times* reports that Mr. Bedford held an inquest this week at York Street Board-room touching the death of Margaret Purcell, aged 42, a servant at Mr. Frost's academy, 39, Vincent Square. Deceased had been ill many weeks, suffering internally, and under the care of Dr. Sylvester of Vincent Square, who examined her and found a lump in the side. Firmly believing it to be an abscess, he pierced the abdomen, and then found she was suffering from strangulated hernia. She died soon afterwards. The jury returned a verdict of "Natural death".

#### THE MEDICAL BENEVOLENT COLLEGE.

WE are very glad to hear that, at the next general meeting of the Royal Medical Benevolent College, a further effort will be made to induce the Council to abolish the evil costly and indefensible practice of canvassing for votes which now is tacitly imposed upon the candidates. We believe that the practice is totally indefensible in respect to any charity; but it is especially so, as the Charity Voting Reform Association point out in respect to the Royal Medical Benevolent College, inasmuch as that College owes its existence and its support to the efforts of the medical profession, who need no such incentives to induce them to give their most earnest aid to an institution such as this. Many of them are, on the contrary, prevented from giving to it that hearty and strenuous assistance which it fully deserves, from the consciousness that the elections are conducted upon a most unsatisfactory system. The class of applicants, as is also pointed out by this Association, are persons whose former social status should shelter them from unnecessary publicity, exposure, and humiliation. Sooner or

later we feel satisfied that the system of election as the result of canvassing, with all its attendant abuses, must be abolished at this the only medical charity which promotes it; and, in our opinion, the sooner this is done the greater will be the claims of the Council in appealing to the medical profession for their generous aid to this noble institution.

#### ASSAULT ON A PATIENT IN A LUNATIC ASYLUM.

AT the Manchester county police-court, Mr. F. C. Hulton, clerk to the committee of visitors of the County Lunatic Asylum, Prestwich, preferred a charge against John Gray, one of the attendants at the asylum, for having assaulted a patient named John Gustave Schiller, and broken one of his ribs on the 14th inst. Schiller had escaped from the institution, and Gray was sent in pursuit of him. Before Gray returned, Schiller was captured and placed in the asylum. On his return, Gray asked if Schiller had been brought back to the institution, and was answered in the affirmative. He then went into one of the wards, and, inquiring if Schiller was there, was told he was in bed. The prisoner went to the bedside, and Schiller on seeing him, used abusive language, and attempted to strike Gray, but the latter warded off the blow. Gray then struck the patient, breaking one of his ribs. It was stated that the prisoner was generally a man of very mild temper. A fine of £5 and costs was imposed, with the alternative of two months' imprisonment. The fine was paid.

#### LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

AT the annual meeting held on May 18th, at the General Infirmary at Leeds, a very satisfactory report for the past year was presented. The following were elected office-bearers for 1877-78. *President*: Mr. Scattergood (Leeds). *Vice-Presidents*: Dr. T. Clifford Allbutt (Leeds), Dr. Holdsworth (Wakefield). *Treasurer*: Dr. Heaton (Leeds). *Honorary Secretaries*: Mr. A. F. McGill (Leeds), Dr. E. West Symes, Halifax. *Librarian*: Mr. Horsfall (Leeds). *Committee*: Mr. E. Atkinson (Leeds), Dr. J. H. Bell (Bradford), Dr. Deville (Harrogate), Dr. Eddison (Leeds), Dr. Ginders (Normanton), Mr. Lodge (Bowling), Dr. Major (Wakefield), Dr. Myrtle (Harrogate), Mr. Nunneley (Leeds), Dr. Tibbits (Bradford), Mr. C. J. Wright (Leeds), Mr. J. Hodgson Wright (Halifax).

#### NATIONAL HEALTH SOCIETY.

FURTHER lectures on the following subjects will be delivered under the auspices of this Society, in the rooms of the Society of Arts, John Street, Adelphi, at 4.30 P.M., on the following days. June 6th—Rev. Harry Jones, M.A., Homes of the London Poor; June 13th—Ernest Hart, Esq., Coffee-Taverns for the People; June 20th—Dr. Bridges, F.R.C.P., The Influence of Civilisation upon Health. Members of the Society (subscribers of one guinea) are entitled to a ticket for the course. Single admission, 1s.; reserved seats, 5s. for each lecture. Special arrangements can be made for schools, nurses, bible-women, and domestic servants. Communications to be addressed to the Secretary, 44, Berners Street, Oxford Street, W. Tickets to be obtained at the office, 44, Berners Street, or can be forwarded by post on application. Payments can also be made at the door.

#### THE PUBLIC HEALTH.

THE following is the return of births and deaths in London and in twenty-two other large towns of the United Kingdom for the week ending Saturday, May 19th. During last week, 5,596 births and 3,864 deaths were registered in London and twenty-two other large towns of the United Kingdom. The mortality from all causes was at the average rate of 25 deaths annually in every 1,000 persons living. The annual death-rate from the seven principal zymotic diseases averaged 3.6 per 1,000 in the twenty towns, and ranged from 0 and 1.4 in Norwich and Plymouth, to 4.9 and 6.4 in Bristol and Oldham. Whooping-cough showed fatal prevalence in Bristol and Sheffield. The deaths referred to small-pox in the twenty-towns, which had been 62 and 92 in the two preceding weeks, were 85 last week, of which



70 occurred in London, 3 in Liverpool (exclusive of one municipal fatal case in the Toxteth Workhouse), 6 in Manchester and Salford (exclusive of 3 municipal fatal cases in the Monsall Hospital), 4 in Oldham, 1 in Brighton, and 1 in Plymouth. The prevalence of small-pox at Oldham is reported to be increasing rapidly. In London, 2,410 births and 1,564 deaths were registered. Allowing for increase of population, the births exceeded by 91, and the deaths by 174, the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the two previous weeks had been equal to 22 and 23.8 per 1,000, was last week 23.1. The 1,564 deaths included 70 from small-pox, 59 from measles, 20 from scarlet fever, 4 from diphtheria, 59 from whooping-cough, 12 from different forms of fever, and 22 from diarrhoea; thus, to the seven principal diseases of the zymotic class, 246 deaths were referred, against 189 and 245 in the two preceding weeks. These 246 deaths were 18 above the corrected average number from the same diseases in the corresponding week of the last ten years, and were equal to an annual rate of 3.6 per 1,000. Only 12 deaths were referred to fever, or 19 less than the corrected weekly average; 2 were certified as typhus, 6 as enteric or typhoid, and 4 as simple fever. The fatal cases of small-pox, which in the two preceding weeks had been 54 and 78, were 70 last week; 24 were certified as unvaccinated, 13 as vaccinated, and, in the remaining 33 cases, nothing was stated as to vaccination in the medical certificates. The Metropolitan Asylum District Hospitals contained 925 small-pox patients on Saturday last, showing a further increase upon the 824, 846, and 854 at the end of the three preceding weeks. The number of new cases admitted during the week was 254, against 246 and 219 in the two previous weeks, and exceeded the number of admissions in any previous week of the present epidemic. No less than 15 deaths of women were referred to puerperal fever or the accidents of childbirth, exceeding the corrected average weekly number by 6; of the 8 deaths from puerperal fever, 3 occurred in South London. The deaths referred to diseases of the respiratory organs, which had been 327 and 355 in the two previous weeks, were 338 last week, and exceeded the corrected weekly average by 107; 200 resulted from bronchitis, and 98 from pneumonia. In greater London, 2,916 births and 1,812 deaths were registered, equal to annual rates of 34.8 and 21.6 per 1,000 of the population. The fatal cases of small-pox in the outer ring were 7, against 7 and 3 in the two preceding weeks; 5 occurred in West Ham, 1 in Carshalton subdistrict, and 1 in Bushey. Two deaths from enteric fever occurred in Croydon, and 2 in Bexley; and 2 fatal cases of scarlet fever were returned in Tottenham and in Edmonton. The mean temperature of the air was 51.1 deg., and 1.2 deg. below the average in the corresponding week of the sixty years, 1814-73, as determined by Mr. Glaisher from thermometrical observations at the Royal Observatory. The duration of registered sunshine in the week was 19.5 hours, out of the 109 hours that the sun was above the horizon.

## SCOTLAND.

THE death, very suddenly, on Tuesday, the 15th of this month, of Dr. W. Macindoe of Lockerbie is announced. Dr. Macindoe had a large practice, and an excellent local reputation as a man of great skill and ability in his profession, and of a kindly and genial disposition. He was a comparatively young man, and leaves a widow and three children.

### GLASGOW MORTALITY RETURNS.

DR. RUSSELL, Medical Officer of Health for Glasgow, has just issued the mortality statistics of that city for 1876. The population within the municipal boundary is given at 538,765, or 89.3 persons per acre. Of the 13,688 deaths registered (being at the rate of 25.40 per 1,000), 6,270 were children under five years of age, giving a percentage to the total of 45.80. Of the infectious diseases, it is noted that 315 persons

died of scarlet fever and 311 of other fevers. Among children, the most fatal diseases were the acute diseases of the lungs, which caused 1,556 deaths, and nervous affections 935. Diarrhoeal diseases killed 365. Of the total number of deaths, 11,650 were certified. In all, 436 adults and 562 children had died without receiving the benefit of medical aid, while 93 adults and 648 children had merely been treated at the various dispensaries. It is remarked that 4,897 of the children who died had been entered as members of different friendly societies.

### THE REGISTRAR-GENERAL'S REPORT.

THE Registrar-General's returns for the eight principal towns of Scotland show that the death-rate last month was below and the birth and marriage-rates above the average. The number of marriages was the highest and the proportion of deaths from zymotic diseases the lowest recorded since the Registration Act came into operation. The meteorological return, for the same month, states that April was "unfortunately distinguished by low temperature, great fluctuations in the barometrical pressure, large rainfall, much wind, and that more persistently from the eastward, than was ever before chronicled for any month of the year". The mean direction of the wind was a point south of due east.

### EDINBURGH UNIVERSITY STUDENTS' CLUB.

THE *Students' Journal* has an interesting statement under this head.

"It is well known" (says our contemporary) "that in Scottish Universities the boarding out system of student life exists in a wholly unrestricted form. The students appear for the prescribed hour before their professor, and, when lecture is over, disappear to live how and where they like, till the same hour next day. Now, while the advantages of this system are in some respects great, there are certain attendant disadvantages which have been long felt. The student is really isolated from his fellows; he meets them only in the crowded class-room, and whether he feels it or not, suffers from the lack of that free and healthy intercourse with his equals, which is such a good feature of the English system. He is, moreover, exposed to the physical evils of bad cooking and uncomfortable surroundings at his meals in lodgings, and is sometimes hard put to it in his search for relaxation and amusement. With a view to lessen these disadvantages as much as possible, several gentlemen in Edinburgh resolved last autumn to try the experiment of instituting a 'Students' Club.' They formed themselves into a committee of trustees, and subscribed a sum of money to meet expenses, until the institution should be able to support itself. Rooms having been taken opposite the university, and the necessary alterations made, a purveyor was found to supply good dinners of two courses at a shilling, and an entrance fee of half-a-crown was provisionally fixed upon. These arrangements were completed shortly after the session had begun. At present the premises consist of a dining hall, to hold from fifty to sixty seated; reading room, with the principal daily and weekly papers, illustrated journals, and magazines; two smoking-rooms, with chess, dominoes, and backgammon; lavatory and luncheon bar, besides kitchen and servants' accommodation. Dinner, at the price originally agreed upon, is served at 1, 2, 4, and 5 o'clock, and luncheon can be had at any time during the day. Tobacco and cigars are now sold at the bar, and a post office has been established. An important feature of the club is the institution of 'social evenings' on Saturdays, when those, not otherwise engaged, assemble for mutual amusement. A piano has been hired, and songs, recitations, and piano solos are volunteered by members for the benefit of the rest. The success up to the present time has, thanks to the managing committee and their indefatigable honorary secretary, Mr. C. Rumney Illingworth, been complete. After the first news of the club had spread, the number of members rapidly increased, till now there are four hundred and fifty on the roll, and of these nearly two hundred dine daily at one or other of the various hours. The reading and smoking rooms are filled during the greater part of the day, as one relay takes the place of another, and the only difficulty now is to find sufficient room for the increasing numbers. The committee are seeking for more commodious premises in an equally convenient locality, and, should their efforts be successful, it is proposed to extend the scheme, and have rooms where students may live permanently or temporarily. The foundation of a free intercourse between students of all classes and faculties has been laid, and attractive indoor recreation afforded, while the very moderate rate at which everything is conducted, has been an inducement to the poorer students to join. The students thoroughly appreciate the provision



which has been so kindly made for them ; and, should the promise of its youthful days be fulfilled in riper years, this club will not only save many from the miseries and temptations to which their predecessors have been exposed, but prove a most important and attractive feature of Edinburgh student life."

## IRELAND.

MR. CRONYN, Professor of Midwifery in the Royal College of Surgeons, has been of late so dangerously ill as to cause the utmost anxiety to his friends.

THE Local Government Board for Ireland have made a provisional order, confirming the improvement scheme lately prepared by the Belfast Corporation, under the Artisans' Dwellings Act, for the removal of the unhealthy area comprising places called Hudson's Entry, Smithfield Place, etc., one of the worst localities in Belfast.

### ARTISANS' DWELLINGS.

SIR JOHN ARNOTT, proprietor of the *Irish Times*, has determined to erect, in a healthy portion of Dublin, for the use of the printers connected with his journal, cottages which he will provide for them at a merely nominal rent. As soon as practicable, from forty to fifty suitable houses will be completed, so that the steady and industrious among the *employés* will shortly become occupiers of well-built, well-drained, and moderately rented cottages, instead of residing in crowded and unhealthy tenement-houses, where neither comfort nor cleanliness exists.

### MEMORIAL OF THE LATE DR. MADDOCK.

THE friends of this gentleman, who died about a year ago at Buncrana, Donegal, have recently erected in the parish church of Conwall, Letterkenny, a tablet of Sicilian marble in memory of the deceased, bearing the following inscription : " A few friends erected this tablet to the memory of William Maddock, M.B., T.C.D., medical practitioner at Buncrana, whose remains lie in the adjacent graveyard, as a tribute of affection and esteem."

### NURSES FOR THE SICK POOR OF BELFAST.

THE annual meeting of this estimable Society was held in Belfast on May 18th, the organisation being a most valuable one, and having worked most satisfactorily since its formation in 1874. During the past year, the subscriptions exceeded those of the preceding year ; and the liberal and generous support from the community shows the value the subscribers attach to the work done by the Society, in relieving suffering and distress among the sick poor. It appears that, during the past year, 498 patients were attended, 153 of whom recovered either entirely or sufficiently to resume work. Although the nurses do not attend contagious diseases, yet, whenever they come into contact with them, they instruct the friends how to disinfect the room, clothes, etc., and, as far as possible, give directions for nursing.

### ROYAL COLLEGE OF SURGEONS.

ON Monday, June 4th, the annual election for President, Vice-President, Secretary, and Council will take place. We hear that Messrs. Corley and McDowell, whose names we recently mentioned as probable candidates, will compete for places on the Council. Mr. Corley is a lecturer on surgery at the Carmichael School, and connected with the Richmond Hospital ; whilst Mr. McDowell is Surgeon to Mercer's and the Westmorland Hospitals, and a lecturer at the Ledwich School of Medicine ; he is a surgeon rapidly rising in his profession, and is in every respect well qualified for the position he seeks. An impression is gradually gaining ground that the College representatives exceed in number what a fair and equitable arrangement would warrant ; and, although the Fellows of the College are extremely conservative, seldom removing a councillor once he is elected, yet it is probable that some change may take place in the list of members of the Council on the first Monday in June.

## LEGISLATION FOR HABITUAL DRUNKARDS.

A MEETING of the Metropolitan Counties Branch was held at the house of the Medical Society of London, 11, Chandos Street, on Friday, May 11th, to discuss the Necessity of Legislative Measures for the Treatment of Habitual Drunkards. The Chair was taken by JONATHAN HUTCHINSON, Esq., President of the Branch, at 8 P.M. Among the members and visitors present were Dr. Cameron, M.P., Dr. Lush, M.P., Dr. Risdon Bennett (President of the Royal College of Physicians), Dr. Bucknill, Dr. Allen Thomson of Glasgow, Dr. Quain, Dr. A. P. Stewart, etc.

MR. STEPHEN S. ALFORD opened the discussion by referring to the existence of persons who, having an insatiable craving for stimulating drinks, lost their self control and became incapable of managing their affairs and injurious to themselves and to others. He objected to the very prevalent idea that habitual drunkenness was only a vice, holding that it often was or became a diseased state of mind. This condition affected persons in all ranks of life ; and the existing law prevented it from being effectually treated. Mr. Alford said that 73 per cent. of the pauperism of the country could be traced to intemperance, at a cost of £10,000,000 *per annum*. Dr. Lankester and Dr. Hardwicke, the coroners for Central Middlesex, had stated that 75 per cent. of the inquests held by them were caused by strong drinks. The appetite for intoxicating drinks was generally acquired, but was confirmed by several important influences, such as temperament, hereditary constitution, various circumstances of life, etc., some of which were certainly not connected with vice. Having considered the causes, he proceeded to consider the means adopted by private enterprise or by legislation for cure and treatment of drink-cravers. There were several establishments in Great Britain for the cure of inebriates, but, as detention in them was voluntary, sufficient time could not be secured for treatment. The confirmed drink-craver required time and careful treatment in order effectually to break through the habit and substitute a healthy tone of mind and body. Temporary removal from all old associations and systematic occupation of mind and body were pointed out as being essential requisites. Total abstinence from all stimulating drinks must be enforced. The withdrawal of all stimulants, however sudden, did not produce a bad effect on the health, but, on the contrary, was followed by an improvement. The legislation existing in America, Australia, and other countries for the treatment of dipsomaniacs was referred to ; and it was stated that the cures varied from 50 to 60 per cent. In speaking of the means of cure, Mr. Alford remarked that the plea of total abstinence appealed to the moral feelings and judgment ; but that it was useless for inebriates, who had more or less lost moral power, and could not resist the craving for strong drinks. Restrictions on the sale of stimulating drinks would not prevent confirmed dipsomaniacs from obtaining them. Dr. Bucknill had expressed a strong disbelief in the possibility of curing habitual drunkards ; regarding drink-craving as always a vice. He had also questioned the success of the American inebriate establishments ; but Mr. Alford said that, judging from information which he had received from America, Dr. Bucknill had founded his remarks on the failure of a few imperfectly managed institutions, and had not visited the more successful establishments. Mr. Alford remarked that intemperance was undoubtedly changing its character. There was less of delirium tremens than thirty years ago ; and the present tendency was towards what was called dipsomania, the results of which were manifest in lesions of the brain and ganglionic system, resulting in incurable nervous disorders, and readily transmissible to the offspring. He regarded the dipsomaniac as afflicted by a disease fairly within the range of medical treatment. In concluding, he gave a sketch of the provisions of the Bill introduced by Dr. Cameron.

THE CHAIRMAN said that they were all very much indebted to Mr. Alford for bringing the subject before them. Dr. Cameron being present, he would ask him whether there was anything with reference to the Bill which he had introduced in the House of Commons which he would like to explain to the meeting before the discussion proceeded.

DR. CAMERON said that it might be well briefly to explain the lines of the Bill. Under the former Bill (Mr. Dalrymple's), there were proposed three different kinds of retreats or reformatories. Under the present Bill, there were two classes. There were private institutions, established by private persons for the purposes of gain. These would be supported by means of the fees derived either from the persons under confinement, or from those friends or persons at whose instance they were confined. So far as the ratepayer was concerned, he had nothing to fear. These might be carried on at the present time, but it would be impossible to carry them on effectively, because there was no power for detaining patients after they chose to leave. Under the Scotch law,



it was possible for the patients to go into lunatic asylums; but there, again, they were able, the moment they were tired of the regimen to which they were subjected, to go out. The most important point in the proposed Bill was that which related to the retention of voluntary patients. Experience in America had shown that 94 per cent. of the entire patients treated as habitual drunkards were voluntary patients. But it was necessary to have some means of committing patients who were obstreperous, and whose friends might have a great interest in getting them committed; and the more stringent the law was made in reference to this matter the better. The American experience showed that there were only 2 per cent. which came under this category. He understood that there was a practice in lunatic asylums of liberating the inmates on parole, which was found to work admirably; and this system was imported into the Bill in the case of habitual drunkards. The second class of retreats which he had mentioned were inebriate reformatories. He did not wish to discuss the question whether habitual drunkenness was a disease or a vice. What was required was, to discover the best practical mode of treatment in such cases. An habitual drunkard was certainly a public nuisance; and if, by his detention in an inebriate reformatory, he could be cured of a vice or a disease, or society could be benefited, there would be a great amount of good done. The Bill was entirely permissive, and it was open to the different authorities to adopt the Bill or not. There was also relief to the rate-payers. At the present moment, a person who was taken under public charge for habitual drunkenness was obliged to be supported at the public expense; but this Bill proposed that during a person's incarceration he or his friends should be responsible for the cost of his maintenance, for which he might pay after his liberation. Altogether, he (Dr. Cameron) thought that that part of the machinery of the Bill ought to work very well.

Dr. LUSH said that the Bill was undoubtedly a move in the right direction, and that evidently the public sentiment would recognise the importance not only of taking care of those unhappy individuals who became slaves of either a vice or a disease, but of providing for the suffering and loss which were, in consequence of this affliction, encountered by their families. This opinion was held very strongly by his late friend Dr. Dalrymple. The present Bill was a highly penal one, and, as such, would meet with the very strongest opposition. If it were looked at simply from the point of view of the liberty of the subject, it seemed that the Bill gave power to the magistracy of this country which, under no other circumstances whatever, was given to them. It assumed at once that these persons were incorrigible criminals, and it inflicted upon them a penalty which, except upon those who were incorrigible, the legislature were very chary of inflicting. He believed that this was an unsound view, seeing that no condition of vice or of mental suffering was in any way analogous in its consequences to intemperance. If a person had so yielded to drunkenness as to make him unfit to control his property, his person, or his actions, and was absolutely unable to arrange his own ideas, he was placed in a position analogous to those persons who were placed in a lunatic asylum, and some steps ought to be taken by the legislature in order to insure protection to himself and his family. He (Dr. Lush) thought that the power of committing a person who had been drunk three times in twelve months was very penal, and one which the legislature would be very unwilling to adopt. However, his support would be very cordially given to Dr. Cameron, to see what could be done in the direction contemplated by the Bill. He would remark that there should be, in an argument of this kind, no exaggeration of figures. The statement made in the paper that 73 per cent. of the pauperism was due to drunkenness had very much struck him. He recollected that a statement had been made some time ago before a select committee that 64 per cent. of the pauperism was the result of sickness. If this were so, he could scarcely reconcile the two assertions.

Dr. JOSEPH ROGERS said that, without endorsing the figures which had been referred to by Dr. Lush, namely, that 73 per cent. of the pauperism was due to drunkenness, he was satisfied that too large a proportion of the sickness which came under his notice in the large workhouse of which he had charge was attributable to intemperance, and how to deal with it was to him one of the most difficult problems. He thought that if they began with the lower stratum of society, they might possibly be enabled to grapple with a higher. It appeared to him that the matter was one which ought to have been dealt with by the legislature long ago. During the last five years in which he had had charge of the Westminster Workhouse, he had the pleasure of treating, as sick persons, men and women who were brought in suffering from the effects of drunkenness, and who, after being restored to health, returned in a very short space of time in their former condition; but so jealous was the legislature of the liberty of the British subject, that they did not restrict these people from doing it over and over again. If

these people would persist in coming in, some stop ought to be put upon their going out. It had been said, "What shall we do with them if we restrain them?" Under a magistrate's order, they should be detained for six or twelve months, and they should have no opportunity of taking one drop of stimulating liquid, and kept to some form of remunerative labour. Then, again, when these men and women habitually violated the laws of God and man, and went in and out in this drunken condition, they ought to be severed from their parental influence, and not be permitted to have the opportunity of dragging out their little children into the streets of London to be brought up in the same condition of life into which they themselves had fallen. Several difficulties presented themselves to those who advocated this question; but there was no doubt whatever that if they were earnest in their efforts to bring some practical measure before the legislature, a great many of those difficulties would vanish. The misery which drinking introduced into this country was something beyond all belief, and if something could be adopted to stop it it would be a most invaluable gain to society and to the individuals themselves.

Dr. STEWART said that when it was proposed two years ago to petition the Home Secretary on the question of drunkenness, he was sorry to be obliged to decline to accompany the deputation because it was proposed to look upon the matter as a question of disease. He felt bound to stand out, although there were on the other side such distinguished names as Sir Thomas Watson, Sir George Burrows, and others, who went to the Home Secretary on the subject. A short time served to bring about a change of opinion. After long discussions of the question, it had been decided to adopt the ground upon which he (Dr. Stewart) had wished the matter to be presented; and now he thought that they were pretty much agreed as to the propriety and wisdom of approaching Parliament, not taking up medical theories and thrusting them upon the House of Commons, but going upon the ground that for three hundred years the right of interference with the liberty of habitual drunkards had been a commonly admitted principle. It was going on every day throughout all parts of the kingdom. The principle being granted, he thought that it was a proper thing to interfere with the liberty of the drunkard for the sake of himself and others. By two or three hundred repetitions of the act of locking up, a drunkard might be made to spend a very large portion of his life in prison. Nobody doubted that this was a right and proper thing; but when it was proposed to imprison him for six or twelve months with a view of reformation, there was immediately an outcry raised against interference with the liberty of the subject. The evidence of the blue-books went to prove indisputably that lockings up for short periods did incalculable mischief in place of good. The question was, "Can the drunkard be reformed?" From many instances which had come under his own observation, he believed that the drunkard could be reformed; and there was sufficient rough evidence, from the experience in this country and in the United States and in Canada, to warrant them in saying that it was a thing worth trying by a rigorous course of experiment. The Bill proposed to place these inebriate reformatories under the jurisdiction of the Inspector of Prisons. He thought it would be better if they were placed under the Lunacy Commissioners. He merely mentioned this, because otherwise it would conflict very greatly with the protest against the idea of there being anything at all criminal in habitual drunkenness. With regard to the Bill itself, in his opinion the fatal objection to it was, that it attempted to do too much. It contained provisions much too strong, and which would be sufficient to set up the backs of ninety-nine out of every hundred members of the House of Commons. If they looked forward to obtaining the full demands of the Bill in the course of the next ten years, they would be very reasonable. In the meanwhile, he believed the principle to be a good one; and sufficient evidence had been received to show that it had succeeded to such an extent as to lead them to ask for as much as they could get; and by and by they would make such an impression on the public mind as would enable them to carry their bill into effect.

Dr. BUCKNILL, in answer to a remark made in Mr. Alford's paper, that he (Dr. Bucknill) had not visited so many American institutions for drunkards as he might have done, said that it was not by any means a correct statement. In his journey to the United States and Canada, he had visited six institutions, which were all that he could find in the Eastern States, with the exception of one which he purposely avoided, in consequence of being warned that he would get there no honest statement of the treatment or of facts. This institution contained only eight inmates, and, under the circumstances, he thought that he was perfectly justified in purposely avoiding it. Those which he did visit, and which he carefully examined, were the one at Quebec, one at New York, one at Boston, one at Philadelphia, one at Baltimore, and the great State Asylum at Binghamton. He did not wish to say anything further in reference to the American matter than to justify himself before



the meeting with regard to the statement made, that he had placed before the public a one-sided view of the question. If he had understood Dr. Cameron rightly, he had said that he (Dr. Bucknill) was averse to any treatment of habitual drunkards; but reference to his article on the subject would show that he said that something ought to be done in the case of those persons who were being continually brought before the justices for drunken crimes, and who, after short periods of imprisonment, came out and were soon before the magistrate again. He was strongly of opinion that before they made any great changes in the legislation with regard to drunkenness, the measures already existing on the subject ought to be more strictly enforced. He had this year visited the city of Glasgow, which he believed was the most drunken city in the world. He then gave, as illustrations in support of his statement, instances which had come under his own observation in that city, and stated that there was but one stage of intoxication recognised as drunkenness by the police authorities, and that was when a person fell down insensible, and a wheeled stretcher was then brought, and the drunkard wheeled off to the station-house. Was there no law in Great Britain to prevent such a state of affairs as this? and were they to be told that they were to leave things in such a state, and turn their eyes microscopically to the individual of a class where sobriety was the almost general rule, and drunkenness the rare and disgraceful exception? He thought that it would be well to put the existing law into general operation before asking for the very extraordinary restrictions which were demanded by this Bill. The retreats mentioned in the Bill seemed to be a new sort of lunatic asylum. He had been attending recently a select committee of the House of Commons, at which it had been laid down as a principle that the liberty of the subject should not be abrogated for the profit of any private individual. Private lunatic asylums were justified because they existed, and because they had grown out of a very long practice, but here was the principle of private lunatic asylums adapted by the Bill to an entirely new set of institutions. If anything were to be done now or hereafter in legislation for drunkards, the institutions established must be public institutions. The representatives of the public in the present day would never sanction private prisons for drunken persons. Dr. Bucknill proceeded to criticise at length the construction of the various sections of the Bill, and concluded by remarking that the persons who had drawn it were evidently very conversant with the difficulties of the proprietor of a lunatic asylum, for all such difficulties were most carefully guarded against.

Dr. CAMERON had not the least hesitation in saying that the statement made by Dr. Bucknill, with regard to the state of things in Glasgow, was altogether incorrect. There was not a town in the United Kingdom where drunkenness was dealt with so stringently as in that city. As to the criticism of the Bill, his (Dr. Cameron's) present object was to get for it a second reading in the House of Commons, and after that to get it referred to a Select Committee, which would go through the clauses *seriatim*, and amend them in any way necessary. As to the principle, if drunkenness were not recognised as a disease, the craving for drink must be looked upon as such.

Mr. ERNEST HART pointed out that a description given by Mr. Archibald Forbes of the state of matters in Glasgow very closely corresponded with the experience of Dr. Bucknill.

Dr. A. CARPENTER moved the following resolution.

"That the Metropolitan Counties Branch approves of the main provisions of the Bill to facilitate the control and cure of habitual drunkards, introduced into the House of Commons by Dr. Cameron; and authorises the President to prepare and transmit to Parliament, in the name of the meeting, a petition in favour of legislation of the kind proposed."

Dr. Bucknill had stated that the present law was competent to deal with this question; but did the common sense of the meeting support such an assertion? Did not every medical man meet with cases in which the law was not competent to act? If Dr. Bucknill made such a statement as that, he evidently did not understand the question. It was their duty to protect this wretched class of dipsomaniacs against themselves. With regard to legislation, there was no alteration of the present law proposed. It was simply an extension of the law to enable a magistrate to bind an habitual drunkard to the same extent as a magistrate had power to bind a burglar in whose case there was sufficient proof that he was intending to commit a burglary. It was because the Bill was misunderstood that opposition was raised to it. The argument was used that on account of the probability of a relapse, it was useless to attempt the cure of an inebriate. But were they to forbear on this ground? If a man had a fit of the gout, was he not to attempt to cure him because he was likely to have another fit next year? The principle of the Bill was one which must commend itself to all medical men who had anything to do with family practice; and

they would do well to ask the legislature for power to detain those patients for a sufficient time to effect a cure who placed themselves under control. The mere fact that habitual intemperance would be an offence placed on the statute-book, would be a check to the tendency to drinking in some persons.

Dr. NORMAN KERR seconded the resolution. They had been told that dipsomaniacs could not be cured; but it seemed to him that if the medical profession would only promulgate the total abstinence movement they would soon find it to be an entire cure, and it was one that had never failed. It was a very simple reform, but the medical profession had never considered it.

Dr. FOULERTON thought that there could not be the slightest doubt that the great majority of those individuals who might be termed habitual drunkards were neither insane nor criminal. They had never been convicted of a crime, and were therefore not criminals. Was it proposed to deprive those persons of their liberty because other drunkards did commit crimes? The fact of the matter was, that no government was competent to deal with this matter. Drunkenness was a vice. If a man chose to place himself in confinement in order to get cured, he was perfectly at liberty to do so; but the State had no right to place a man under control and deprive him of his liberty simply because it thought that such treatment would be beneficial to him.

Dr. BUCKNILL moved "the previous question", but this proposal was not seconded.

The resolution was then put to the meeting, and carried with but two dissentients.

#### PUBLIC HEALTH LEGISLATION AND ADMINISTRATION IN IRELAND: DEPUTATION TO SIR MICHAEL HICKS-BEACH.

THE deputation from the Irish Medical Association, which we announced last week as being in London with a view of bringing under the notice of the Irish Chief Secretary the state of sanitary legislation and administration in Ireland, had an interview with Sir Michael Hicks-Beach on Thursday last in the conference-room of the House of Commons.

The deputation was introduced by the Hon. David Plunket, M.P. for the University of Dublin, and was accompanied by Drs. Lyon Playfair, Cameron, Lush, and Brady, and Messrs. Bruen, Beresford, Butt, Ion Trant Hamilton, Delahunty, Collins, Brooks, Mitchell Henry, and S. Moore, members of Parliament. Dr. Hudson, Crown representative for Ireland, Mr. Macnamara, representative of the Irish College of Surgeons, on the General Medical Council, together with Dr. A. P. Stewart, Secretary of the Joint Committee on State Medicine of the British Medical and Social Science Associations, also attended.

Dr. Grimshaw and Mr. Macnamara announced that the Colleges of Physicians and Surgeons in Ireland had made representations to Government similar to those which it was the function of the deputation to put before Sir Michael, and that therefore the two great medical corporations of Ireland were quite in accord with the deputation.

Dr. Jacob, Chairman of the Council of the Irish Medical Association, addressed Sir Michael, and, after telling the well-known tale of how the present unsatisfactory state of things had come into existence, proved in a conclusive manner, by quotations from the report of the Committee on Local Government and Taxation in Ireland (from which we gave an extract last week), that the present system was not working in the town districts of Ireland, and, from the petition signed by upwards of six hundred of the eight hundred medical officers employed in the service, that the officers were dissatisfied with their position. Dr. Jacob showed that this unsatisfactory state of things was owing chiefly to want of supervision by the central authority, and also in a great measure to the present position and pay of the medical officers. Dr. Jacob then suggested the remedies which are obvious to all sanitarians. We have already, on April 14th, put before our readers all the points touched upon by Dr. Jacob in his able and clear address, which we regret we cannot give in its entirety. Dr. Grimshaw followed to Dr. Jacob, and quoted from the report of the Irish Local Government Board for 1874 a letter addressed by the Treasury to Sir Michael, and stated his (Dr. Grimshaw's) opinion that the Irish Board had not followed out the intentions of the Lords of the Treasury, who had specifically stated that the Board should take into consideration the proportion of the medical officer's new "salary to his new duties". Dr. Speedy then gave examples, from his own experience as an officer under the Act, of the unsatisfactory and unjust working of the present system.

Sir Michael Hicks-Beach admitted that the deputation had made out



a good case, and stated that the "scale of salaries fixed at the time the Act came into force was tentative", and that his "opinion had been much influenced by the report of the Commons" quoted by Dr. Jacob. He promised his favourable consideration of all the points raised, and expressed a hope that the defects would be remedied, subject to the co-operation of his colleagues and the Treasury.

We shall await with considerable interest the result of Sir Michael's consideration of the views laid before him. We heartily sympathise with Sir Michael in his present unfortunate position. As Chief Secretary of Ireland, he is *ex officio* President of the Irish Local Government Board, and therefore supposed to be responsible for its acts. As a matter of fact, all the mismanagement and muddling have been done by the permanent members of the board, who are his subordinates, but who are practically beyond Sir Michael's control. Sir Michael's views have so often been declared upon these points before he took office, that they are quite well known to be in strict accordance with the views of the Irish Medical Association. It must, therefore, seem rather hard to him that, between the Treasury above him and his ignorant colleagues below him, he is made a scapegoat for official sins in Ireland. We believe, however, that Sir Michael has strength enough, if he will only exert it, to bring both the Board and the Treasury to their senses, and put a stop to the present disgraceful state of things. We presume it was through a merciful tenderness for Sir Michael's feelings that Dr. Grimshaw did not quote further from the Blue Book of the Irish Board, for, if he had, he could have shown that the Board had themselves specifically fixed, by sealed order, salaries at the munificent figure of £5 *per annum* for medical officers of health! This is "tentative" with a vengeance; the *tentation* was upon the endurance of the medical officers, not upon the efficiency of the service. Sir Michael told the Irish College of Physicians in November 1874 "that all that had been done up to that time was provisional"; the medical profession in Ireland have put up with the "provisional" arrangement for two years and a half, and we trust that now experimental administration will come to an end in Ireland. No such experiment was necessary except for the purpose of educating the ignorant officials of the Irish Board. It must not be forgotten that this two and a half years of "tentative" sanitation has cost many lives, produced much sickness, and been made at the expense of the pockets and comfort of close on one thousand number of the medical men. The principles and practice of sanitation were thoroughly understood without repeating in Ireland the experiments which had failed in England. Sir Michael has been too confiding in his permanent Irish officials; and we trust that he will stop experimenting and put in practice the lessons he has learnt so long ago from his own experience and that of his former colleagues on the Joint Committee of the Social Science and British Medical Associations. We may remind our readers that this Committee originated at the Dublin meeting of the Association within half a mile of the office of the Local Government Board of Ireland.

#### BRITISH MEDICAL ASSOCIATION: DUBLIN BRANCH.

THE following circular letter announces the satisfactory news that arrangements are being made in Dublin for giving to our Irish members resident in that city and its vicinity an adequate corporate existence, and due representation in the Council of the Association.

"At a meeting held in the hall of the King and Queen's College of Physicians on Friday, the 18th inst., Dr. Gordon, president of the college, in the chair, it was unanimously resolved to form a branch of the British Medical Association for Dublin and its vicinity under the name of the Dublin Branch of the British Medical Association.

"It was reported to the meeting by the Honorary Secretary for Ireland that over fifty members of the Association residing in Leinster, as well as several non-members of the Association, had already signified their willingness to join the Branch. A committee was appointed to draw up its laws, and directed to submit the same to an adjourned meeting for approval.

"Your presence is particularly requested at this adjourned meeting, which will be held on Friday next, the 25th instant, at the College of Physicians, Kildare Street, at 4 o'clock p.m. In addition to the adoption of the laws, the president and the officers of the Branch will be elected by the members present at the meeting.

"Members of the Association who may not as yet have signified their willingness to join the Branch, and who may be unable to attend and vote at the meeting, are requested to inform me as to their wishes without delay. Non-members of the Association may be provisionally admitted members of the Association and of the Branch, and, if desirous, exercise the right of voting at the meeting by signifying their wish in writing to me before noon on the day of meeting.—I am, sir, your obedient servant,

"GEORGE F. DUFFEY, M.D., *Hon. Sec. for Ireland.*"

#### THE EDINBURGH MEDICAL SCHOOL.

OUR Edinburgh correspondent writes to us as follows.—The absorbing topic of the profession in Edinburgh at the present time is the announcement that Professor Lister is, after all, to be a Professor of Clinical Surgery at King's College. That this will be a very great loss to the Edinburgh Medical School cannot be doubted; and this is the more felt just now, in that it was generally supposed that Mr. Lister had quite abandoned the notion of leaving Edinburgh. There will be assuredly no lack of candidates for the vacant post. The three surgeons to the Royal Infirmary, Dr. P. H. Watson, Mr. Annandale, and Dr. Joseph Bell, and the two assistant-surgeons, Dr. John Duncan and Mr. Chiene, are understood to intend to apply for the appointment; and it is possible the renown of the Chair may draw one or more candidates from Glasgow. By Mr. Lister's removal to London, the post of Surgeon to the Queen in Scotland will become vacant; and this post, it is whispered, is likely to be conferred upon a distinguished Glasgow surgeon. The contest for the Chair of Materia Medica, recently vacated by Sir Robert Christison, excites less interest, as it is looked upon as almost a foregone conclusion for Dr. T. R. Fraser, whose distinguished labours in connection with the subject are well known.

#### CONGRESS OF GERMAN SURGEONS.

##### II.

RICH as the Congress was in matters of scientific interest, it was not deficient in matters of hospitality and entertainment, exercised perhaps in a less oppressive manner than in our own country. On the evening of the first day of scientific meeting, a general dinner of the members was held, under the chairmanship of Professor von Langenbeck, in the Kaiserhof Hôtel. The dinner and wines were good, and the cordiality was genuine and universal, although the sudden illness of a member from Holland, overcome by the heat, threatened to disturb the earlier part. Fortunately, he soon recovered and was able to assist in the proceedings of the following days. After dinner, cigars were lit and two toasts were drunk: one proposed by Langenbeck to the success of the Association, the other proposed by, I think, Professor Esmarch to Langenbeck's health. His reply was short and to the point, commencing thus: "Die gefährlichste Eigenschaft eines Chirurgen ist das Alter" (the most dangerous qualification of a surgeon is his age), he modestly indicated his own unsuitability to preside over so young and flourishing a society. Everyone present save himself felt that it would be indeed impossible to obtain a president who, to so marked a degree as himself, would combine ripe experience with keen critical appreciation of modern surgical advances.

These were all the toasts drunk, and, after coffee, those present dispersed to their various duties or amusements.

There were two meetings on the second day—one in the forenoon for practical work, exhibition of patients, etc., in Langenbeck's clinic; the other in the afternoon in the University.

In the forenoon meeting, Professor Hüter of Griefswald exhibited patients after resection of joints; among them, two of partial resection of the ankle-joint with a movable articulation. He also demonstrated the septicæmic disturbances of the circulation, where clots of blood are, as it were, showered through the vessels in the *post mortem* room, on the membrana nictitans of dogs. He exhibited a number of new American inventions in the way of surgical instruments and apparatus, and showed a blood-cyst from the neck, which had the following history. It seemed not to have been congenital, but appeared in the neck of a patient who was twenty-seven years old. It was punctured and found to contain blood. As it afterwards threatened to burst, it was extirpated. It was adherent, and, owing to this, it was torn



during the operation. Great bleeding ensued, which was arrested by compression, and a precautionary ligature was placed beneath the common carotid. On the extirpation being proceeded with, it was necessary to dissect between the external and internal carotids, and aspiration of air took place. Your reporter did not learn whether the patient recovered or not. The cyst contained clots, and seemed to be the representative of the internal jugular vein. Hüter had been able to discover twelve similar cases in medical literature; and Edmund Rose of Zürich, who was present at the Congress, was able to add another.

Dr. Winkel of Dresden showed a female in whom he had opened the dilated pelvis of the right kidney, which was so large as to have simulated ovarian tumour and established a fistula on the front of the abdomen. A curious feature of the case was, that at first the fluid was more like echinococcus-fluid than urine, and contained no urea. This is of special interest, as bearing perhaps on the peculiar characters of the discharge in Mr. T. Holmes's late case of wound of the ureter. The secretion in Winkel's case is now characteristic of fistula from the pelvis of the kidney, and the patient wears a vulcanite cannula in the wound.

Next followed a display of antiseptic surgery and results which would have delighted—I venture even to say astonished—Professor Lister himself. I doubt whether Lister has ever obtained such results as those of Volkmann of Halle, who uses Lister's plans in their utmost detail. Volkmann's statistics of cases treated antiseptically at Halle within the last three years were distributed in a printed form among the members, and are too long to be given here; but, as a sample, the following facts may be mentioned.

1. Of 139 simple amputations, only 4 died, *i.e.*, 2.87 per cent., and, of these four, one, an amputation for injury at the shoulder-joint, and an amputation for injury at the hip-joint, died four hours after operation. Another, an amputation for injury of the thigh and of the soft parts, even above the gluteal region, died in twenty-four hours; and the fourth, an amputation of the leg for disease, died of habitual erysipelas. These results are more astonishing when we consider that they include seven recoveries after amputation of the thigh for injury, eleven traumatic amputations of the upper arm and one at the shoulder-joint.

2. Out of nine cases of double amputation, only two died.

3. Of seventy-five compound fractures of the forearm, elbow, arm, leg, knee, and thigh, treated conservatively, all recovered.

4. His cases of penetrating wounds of joints all also recovered. Volkmann himself showed at the meeting a young surgeon who had received in a duel a pistol-shot in the head of the tibia, from which synovia escaped. The bullet lodged, and, in removing it by chiselling, air entered the knee-joint. The knee-joint was opened at the inner side, washed out with carbolic acid, and treated antiseptically, the operation having also been conducted antiseptically. The case healed by the so-called blood-clot, and the patient walked seven weeks after the injury. One of Volkmann's assistants (Dr. Ranke) detailed to the meeting the wonderful results under the antiseptic treatment, and enlarged on Volkmann's method of compressing the joints, wounds, etc., by numerous short drainage-tubes and firm bandaging with large pads of gauze. He also showed two patients who had hydatids of the liver, and in whom the peritoneal cavity was intentionally opened, adhesion of the liver to the wound established, and the cyst subsequently laid open: and narrated a case where the peritoneal cavity had been opened and a part of a malignant tumour, which was found to be irremovable, excised and examined, while the abdominal wound was again closed, and the patient recovered, only, however, to die subsequently of the disease. Volkmann and König both contributed their large and favourable experience of treating hydrops articuli by puncturing with a very large trocar and washing out the joint with carbolic water or iodine in the form of Lugol's solution. *A propos* of this, Volkmann drew attention to the unexpectedly frequent occurrence of fibrinous flakes (*corpora oryzoidea*) in joints as found in washing them out antiseptically.

Dr. Max Schede exhibited a number of osteotomies that had been performed for bent bones and genu valgum, with most brilliant results; and Vogt of Griefswald introduced a man in whom the right upper arm was little more than half the natural length, the forearm and hand being natural.

In the afternoon meeting, the subjects discussed were of minor interest. Dr. Busch of Berlin gave the results of his investigations concerning the madder-tincture in determining where Growth still goes on in completely formed Bones, and exhibited his specimens. He concluded that there is always a continuance of growth taking place in the spongy ends, at the insertions of muscles and tendons, under the periosteum, and round the medullary cavity. In the discussion on his lec-

ture, Wolf adduced some experiments apparently in direct contradiction to those of Busch.

Next followed a discussion on a paper on Genu Valgum read on the previous day. Langenbeck, in former years, in bad cases, used to divide the external lateral ligament and adduct the leg, in the treatment of this deformity. In doing this, air always entered the knee-joint, but he had had no harm from it. Of late years, he had had no bad cases. Wolf, in performing Schede's operation for knock-knee (wedge-shaped osteotomy of tibia and simple osteotomy of fibula), had his patient attacked by osteo-myelitis.

Dr. Ziemssen of Wiesbaden, speaking on the treatment of Constitutional Syphilis, advised the removal by splitting and scraping out with the sharp spoon of tertiary nodes and ulcers; and strongly stated his disbelief in the efficacy of any of the vaunted mineral waters, since the bath doctors always gave drugs, usually mercury besides.

Dr. Menzel of Trieste communicated the results of a study of Zoosperms in the fluid of Spermatocoele. He concluded that these bodies possessed amoeboid movements, and could alter their shape so as to resemble a common cell; and that they consisted of a nuclear portion dark in colour and of a clear protoplasmic portion, the tail being always formed of, and connected with, the nuclear part.

### THE NEW FORCEPS OF M. TARNIER.

THE forceps is an instrument precious to accoucheurs and constantly the subject of thoughtful discussion. Recently, especially, it has been much discussed at the Obstetrical Society of London. Moreover, since its invention by Chamberlen, it has been the subject of numerous alterations. The greater part of these were only modifications of detail, relating to the form of the handle of the articulation, etc.; only one really important change was made in it by Levret. Chamberlen's forceps was, in its general direction, straight; it presented only at the level of its blades a curvature called cephalic, because it allowed the instrument to be exactly applied to the head. Levret, in 1747, and after him Smellie, in 1751, added a new curvature called pelvic, because, following the antero-posterior curve described by the axis of the pelvic cavity, it allowed the head to be seized when retained above the brim of the pelvis. It is this forceps of double curvature which is almost exclusively employed in certain countries—in France and Belgium, for example; and its use tends to become more general in this country. Dr. Tarnier, the well-known accoucheur at the Maternité of Paris, after having for a long while studied the advantages and inconveniences of the forceps, has introduced some new modifications, which are regarded by the obstetricians of the French capital as of the greatest importance. He adds to the cephalic and pelvic curvatures a third curvature, which is impressed on the handles. It is of such a kind that, when the forceps is applied at any point, even at the brim of the pelvis, traction may always be made mathematically in the axis of the cavity of the pelvis. M. Tarnier, in an extremely well written memoir, entitled *Description de deux Nouveaux Forceps*, examines the curved forceps or forceps of Levret, and demonstrates that, with it, it is impossible to make traction in the axis of the pelvis at the level of the brim. The instrument is necessarily kept in a bad direction for the resistance of the perineum; it would not be the same with the straight forceps. Figure 1 represents a section of the cavity of the pelvis and of the perineum, drawn after plate 18 of Legendre's *Atlas of Surgical Anatomy*, except that all the soft parts comprised between the posterior border of the anal sphincter and the pubes have been suppressed, and the branches of the forceps pass a little behind the point which in Legendre's plate is occupied by the anus. It would then hardly be possible, in an application of the forceps practised upon the brim of the pelvis and upon the living subject, even by strongly depressing the perineum, to carry the branches of the instrument further back than is indicated in Figure 1.

The line s p, extending from the promontory to the pubes, represents the minimum antero-posterior diameter of the brim. It is this diameter which most often arrests the head of the foetus when the pelvis is deformed. The forceps is supposed to be applied upon it at the level of the brim of the pelvis, but not to complete the traction. The centre of the head would correspond nearly to the point drawn. The line A B represents the axis of the brim, or of the opening through which the head must pass, and consequently the direction which must be given to the traction. On the contrary, traction made by the operator, when he draws up the handles of the ordinary forceps, is converted into a force, which is represented by the line A M. These tractions cannot be carried further back by reason of the resistance of the perineum R. If we suppose that the traction is a force equivalent to twenty kilogrammes, the work necessary below the head will only be equivalent



lent to fifteen *kilogrammes*, whilst the pubes will support an injurious pressure of thirteen *kilogrammes*. By drawing the parallelogram of forces *A D M N*, it is found that the traction *A N* is decomposed into two forces; one, *A D*, which lowers the head in the direction of the axis of the brim of the pelvis; and *A N*, representing the injurious pressure on the pubes. The lines *A M*, *A D*, *A N* have their respective differences of length, which are expressed by the figures 20, 15, and 13 in round numbers. In drawing, therefore, upon the handles of the forceps with a force of twenty *kilogrammes*, represented by the line *A M*, we obtain the following result. The head is drawn in the direction *A D*, with a force of fifteen *kilogrammes*, whilst the forceps is made to undergo a pressure of thirteen *kilogrammes*. In this calculation, the pressure which arises from the act of the operator is alone taken into account, and that which arises from the natural action of the maternal tissues is neglected. If we suppose that, in Figure 1, the line *A M* represents a traction of forty *kilogrammes*, the head will be depressed in the direction *A D* with a force of thirty *kilogrammes*; while the pubes will undergo a dangerous pressure *A N* of twenty-six *kilogrammes*.

M. Tarnier then demonstrates that, at the outlet of the pelvis, and even at the vulvar orifice, the tractions exercised with the curved forceps are equally faulty. He afterwards studies a new point. In natural labours, the head of the infant, in passing through the genital passages from the brim of the pelvis to the vulvar orifice, changes at each moment its direction, and consequently describes a curve, which runs into the central line of the pelvic cavity. The head would describe the same curve if, the forceps being applied, the woman passed through her labour spontaneously without the operator being under the necessity of exercising any traction. Now, the ordinary forceps, held fixed by the accoucheur, has the inconvenient effect of depriving the head of the mobility which is necessary to it, in order to find the best route for it to follow during its expulsion.

Briefly, the ordinary forceps, in spite of all its advantages, is imperfect. It may be said to have the following defects: first, of never allowing the operator to exercise traction in the axis of the cavity of the pelvis; second, of never leaving to the foetal head a sufficient mobility to enable it to follow truly the curve of the pelvis. "One could not", M. Tarnier adds, "deny, without committing a scientific heresy, that it is a matter of the first importance to give to the traction made by the forceps the direction of the axis of the canal which the foetal head has to traverse; but what is this direction in respect to the pelvis of the woman in labour? An experienced operator guesses it closely, but no one knows it exactly; the accoucheur is then, so to say, deprived of his compass, and reduced to the necessity of varying as well as he can the direction of his forceps according to his anatomical knowledge. It would be extremely advantageous to have a forceps provided with an indicating needle, which should guide the operator and indicate to him, automatically and at each instant, in what sense he ought to direct his traction." After having referred to the labours of Hubert, Morales, and Chassagny, M. Tarnier gives a description of his instrument.

It is composed of two prehensile branches, *A A*, and of two traction stems, *B B* (Figure 2). These are implanted in a transverse handle, of which the section is represented at *C*. Each one of the prehensile branches *A A*, and of the traction stems *B B*, presents an articular portion *Z Z*.

In Figure 3, the prehensile branches *s* are united to the traction stems *t* by an articulation, which is movable in all directions. It will be observed that the prehensile branches are crossed and articulated together as in the ordinary forceps, whilst the branches of traction *t* are parallel.

In Figure 4, which represents the forceps applied to the superior stems, it may be observed first, that, when the traction stems are placed in a direction parallel to the prehensile branches, separated by a space of about one *centimètre*, the operator draws exactly according to the axis of the superior isthmus *A B*. The special and new curvature of the instrument, a curvature of the handles, renders this traction easy in the axis, which is the only legitimate one. With the new forceps, all the force employed draws the head in the axis of the pelvic cavity, and it does not produce any compression of the maternal tissues; if, on the contrary, the traction stems be removed from the branches of prehension, traction would no longer be made in the axis of the pelvic cavity; that is evident. The traction stems at the level of their point of attachment being movable in all directions, the prehensile branches, which have seized the head, and consequently the head itself, are also movable in all directions.

Finally, to say that the traction stems must always be placed near the prehensile branches during the pain, no longer making traction in the axis, is to recognise that the prehensile branches indicate always how traction must be made, in order that it should take place in the axis. These prehensile branches, which are mobile and are displaced

with the head, constitute then a real indicating needle, which will show the operator what direction the traction stems ought to follow.

The application of this instrument does not present any difficulty. The operator introduces the branches according to the ordinary rule; only the hand which has used the instrument holds at the same time the prehensile branch and its traction stem, whilst the other hand guides the blade in the interior of the maternal parts. In this stage of the operation, the prehensile branch is so well applied against the traction stem that the introduction of the instrument is as easy as with the ordinary forceps.

Such are the modifications introduced by M. Tarnier in the forceps. They may be summed up thus: 1. Traction in the axis of the pelvic cavity rendered always possible; 2. Mobility of the head preserved; 3. Such an arrangement of the instrument that one of its parts, the prehensile branches, indicates always to the operator in what direction he should make traction.

The forceps has already been employed experimentally many times in France on the subject, and on special phantoms, which allow the exact reproduction of the greater part of the normal and abnormal conditions of accouchement. A certain number of applications have besides been made upon the living patient, with the greatest facility and with great advantages, by M. Tarnier and his pupils, Drs. Budin, Pinard, and Ribemont. The reform proposed by the surgeon of the Maternité seems, then, to be likely to render very great service; in any case, it deserves to be attentively studied by obstetric physicians in all countries.

## ASSOCIATION INTELLIGENCE.

### SOUTH MIDLAND BRANCH.

THE annual meeting of this Branch will be held at the Town Hall, Northampton, on Thursday, May 31st, at 2 P.M.; President, H. W. SHARPIN, Esq.; President-elect, WM. MOXON, Esq.

Gentlemen who intend to read papers, or be present at the dinner, are requested to communicate early to the Secretary.

J. M. BRYAN, M.D., *Honorary Secretary*.

Northampton, May 1st, 1877.

### THAMES VALLEY BRANCH.

A MEETING of the above Branch will take place at the Griffin Hotel, Kingston, on June 14th, at 5 o'clock.

Members who may be willing to contribute papers are requested to notify the same to the Honorary Secretary, as soon as possible.

There will be a dinner at the above hotel at 7 o'clock. Charge, 7s. 6d. each, exclusive of wine.

F. P. ATKINSON, M.D., *Honorary Secretary*.

Surbiton Road, Kingston-on-Thames, May 17th, 1877.

## REPORTS OF SOCIETIES.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 8TH, 1877.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

CASE IN WHICH A SILVER TRACHEOTOMY-TUBE WAS REMOVED FROM THE LEFT BRONCHUS, WHERE IT HAD BEEN LODGED SEVEN WEEKS.

BY R. CLEMENT LUCAS, B.S., F.R.C.S.

[Communicated by J. W. HULKE, F.R.S.]

THE patient in this case was fifty-six years of age, and the tracheotomy-tube had been worn for fifteen years, without being changed. The operation was originally performed for an injury to the larynx caused by throttling. The outer tube broke away from the shield on December 28th last, and dropped into the trachea; but, the symptoms were so slight, the patient's story was not credited; a new silver tube was introduced, and he left the hospital in a week. On January 5th, he came to Guy's Hospital, stating that he had violent attacks of coughing and dyspnoea when turning on his right side. His trachea was examined, under chloroform, with a long probe, and the tube felt; various forceps were tried, without effect; no signs of irritation followed, and the man left the hospital. He came again on January 29th, looking more sickly than before, and stating he could neither sleep nor do work. Dr. Pye-Smith examined him, and found dulness at the base of the left lung and absence of respiratory murmur, etc. He was unable to lie on his right side; a larger tube was inserted, and the



patient left the hospital breathing more freely. He was again admitted on February 16th, with general rhonchus, and his sputum foetid, and he consented to an operation. Under chloroform, a metallic body was felt in the left bronchus. After an unsuccessful attempt with a soft copper wire, bent as recommended by Mr. Hulke, which, on being withdrawn, brought a large blood-clot with it, affording much relief to the patient's breathing, and attempts with several kinds of forceps, the tube was seized by a pair of slightly curved forceps opening laterally, and was withdrawn with great ease. A red India-rubber tube was introduced, but it partially collapsed; and, being choked with mucus, and air being driven into the cellular tissues of the neck, it had to be replaced in three or four hours by a metallic tube, which gave immediate relief. No rise of temperature followed, and the expectoration and emphysema of the neck gradually subsided. In ten days, he was able to sit up and to walk. After the removal of the tube, the patient's urine was examined, and found to be loaded with albumen; there was oedema of the ankles, and a slight general anasarca. The patient progressed well till March 9th, when he caught cold, and expectorated a quantity of greenish mucus; and he was still troubled with bronchial expectoration when he left the hospital on March 16th. The tube, which was thickly coated with black sulphide, was found to have broken away from the shield. The case showed that, in a person who had worn a tracheotomy-tube for years, a foreign body might become lodged in a bronchus without causing any great difficulty in breathing or grave symptoms of irritation for a considerable period; that instruments may be freely introduced into the trachea without fear of exciting serious bronchial inflammation; and that, if a wire were used, it should be of soft metal, lest it become immovably fixed. The difficulties of the case arose principally from a want of proper instruments, the various forceps having improper curves for opening in the trachea. The author had since had a forceps made for him by Mr. Millikin, adapted for removing foreign bodies from the trachea or bronchus: a specimen was shown.

Mr. BARWELL said that the retention of foreign bodies in the air-passages without producing irritation depended on their position and size rather than on the fact of tracheotomy having been done. In a case under his notice, a lad had drawn a Punch's squeaker into the trachea, where it lay a fortnight without irritating; and instruments could be introduced without giving rise to irritation, provided that the back of the trachea were avoided. Tracheotomy was then performed, and an unsuccessful attempt was made to seize the foreign body. After a severe fit of coughing, it could no longer be found; but the mucopurulent discharge to which the lad had been subject ceased, and he recovered. It was probably discharged through the bowels.—Mr. HULKE said that the difficulty in removing the wire hook depended on extent to which the wire was bent. He thought the forceps shown by Mr. Lucas very useful, but would call attention to the flexible forceps described by Dr. Gross in his *System of Surgery*.—The PRESIDENT thought that the flexible India-rubber tube should not be introduced at once in cases of tracheotomy, but at the end of twenty-four or forty-eight hours.—Mr. LUCAS said that Mr. Marrant Baker, in bringing the flexible tubes before the Society, had recommended that they should not be introduced until a day or two after the operation.

#### TWENTY-FIVE CASES OF OVIARTOMY: WITH SOME REMARKS ON THE CAUSES AND TREATMENT OF THE FEVER SO FREQUENTLY FOLLOWING THE OPERATION.

BY J. KNOWSLEY THORNTON, M.B., C.M.

Referring to the smallness of the table of cases as compared with the one lately given to the Society by Mr. Spencer Wells, the author said it was, nevertheless, impossible to deal with all the features of interest in the individual cases. For many of the cases, he was indebted to Mr. Wells; and to the fact that he had assisted Mr. Wells in the greater number of the three hundred cases, he was indebted for much of the knowledge which had enabled him to attain fair success. The author then drew attention to the fever frequently following ovariectomy; defining fever as any temperature between 100 deg. and 103 deg. Fahr., and above this as high fever. He believed there was a simple fever distinct from that caused by peritonitis or septicæmia, but liable, if not checked, to lead to serious lesions in important organs. Attributing this form of fever chiefly to the sudden increase in the volume of blood circulating in the body after the removal of the large circulating area contained in the tumour, he pointed to the various organs which might suffer, drawing especial attention to the brain as receiving a large blood-supply. The treatment of this form of fever must be especially directed to the control of the circulation and lowering of temperature. The readiest means of effecting this object was by the application of dry cold to the head. Briefly sketching the history of the use of coiled tubing conveying iced water, he showed how he was led to the use of

the ice-water cap for the fever after ovariectomy. While giving due praise to the use of bloodletting and aconite, he believed if the ice-water cap were used early and efficiently, they could be dispensed with. The author then referred to the differential diagnosis of this simple fever from the fever accompanying peritonitis or septicæmia, drawing especial attention to the tranquil expression of the patient with the former. He then referred to some of the cases in the table to illustrate the use of the ice-water cap (of which an engraving accompanied the paper), remarking that none of them were quite typical of the condition he had described, because, having had considerable experience in the after-treatment of cases of ovariectomy before he operated himself, he always put on the cap early; "prevention being better than cure". In conclusion, he gave a short analysis of the cases in the table, alluding especially to the large proportion of complicated cases and double operations, in spite of which the mortality was only 28 per cent. Some of the cases were almost hopeless, from the nature of the adhesions and the state of the patient; but he thought it right to give them the last chance of life.

Mr. SPENCER WELLS had noticed that the chief cause of death after ovariectomy was not peritonitis so much as fever. Packing with the wet sheet had been tried, but was attended with disadvantage. The ice-cravat had also been used; but all other plans were set aside when Mr. Thornton introduced the system of applying iced water, which he had seen used in Glasgow in the treatment of injuries of the head. The plan was attended with some objections; it required a large quantity of ice, and caused much labour to the nurse. These obstacles were less in hospital than in private practice. He had lately used a sort of helmet of ice in a double cap. Great credit was due to Mr. Thornton for introducing a plan of lowering the temperature.—Sir JOSEPH FAYRER thought that the ice-cap would be very useful in the treatment of cases of heat-stroke.—Dr. ROUTH said that the application of the ice-cap in practice must be very difficult; and he did not see its advantage over the old India-rubber cap. He had used the iced collar with the result not only of checking fever, but of relieving the troublesome sickness following ovariectomy. He would ask whether, in cases where the temperature was as high as 105 deg. or 108 deg. Fahr., the cap would cool the body as well as the cold bath; the use of which after ovariectomy he did not believe to be dangerous. He objected to bloodletting.—Mr. PAGE believed that the changes in which fever consisted were the result of some condition of the nervous system.—Dr. HEYWOOD SMITH thought that, when venesection failed, it was from not being employed at the right time. He called attention to veratrum viride as a means of reducing febrile temperature.—Mr. THOMAS SMITH thought that the ice-cap acted through the medium of the nervous system.—After some remarks from the President, Mr. THORNTON replied; and the meeting adjourned.

## MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, May 17th, 1877.

*Female Medical Degrees.*—Mr. COWPER-TEMPLE asked the Chief Secretary for Ireland whether it was true that the by-law passed in 1876 by the Senate of the Queen's University for the admission of women to examination for degrees in arts and medicine had been thwarted and rendered inoperative by a refusal on the part of the Councils of Professors of the Queen's Colleges of Belfast, Galway, and Cork to admit any of the female students who presented themselves for matriculation.—Sir M. HICKS-BEACH said he had no official information whatever on the subject, and he might say that the Government had no control over the proceedings of these bodies.

*The Arctic Inquiry.*—Mr. M. HENRY asked the First Lord of the Admiralty whether the report on the existence of scurvy in the late Arctic Expedition was the original report, or whether it had been in any respect modified or mitigated in consequence of pressure from the Admiralty or from any other official quarter. He also asked whether it was true that a large part of the supply of lime-juice sent down for the *Alert* and *Discovery* had been refused by the captains on the ground that there was not room.—Mr. HUNT replied that there was no foundation for the statement in the second question; and with regard to the first—regarding it as an insult to the Admiralty and to the Committee, whose functions were of a judicial character—he declined to answer it.—Mr. HENRY disclaimed all intention of insulting the Admiralty, and was proceeding to put the question in another form, when the SPEAKER informed him that he must give notice of it.—Mr. BUTT moved the adjournment of the House, in order to protest against the tone of the First Lord. The question, he thought, was a plain one and ought to be answered.—The CHANCELLOR of the EXCHE-



QUER, on the other hand, thought the question as it stood did imply that the Admiralty had taken steps to procure the modification of a report, which was of a judicial character, and Mr. Hunt's warmth, therefore, was justified. If Mr. Henry had any information on the subject, he should have embodied it in a motion.—After some observations from Mr. HENRY, expressive of his determination not to be "intimidated" by Mr. Hunt's "disorderly" language, and from Sir J. M'KENNA, who thought that Mr. Henry could hardly have understood the Committee to be of a judicial character, Dr. PLAYFAIR disapproving the form of the question, proposed to ask simply whether the original report had been modified in any way.—Mr. HUNT said he had no objection to answer the question so worded. The report laid on the table was the only report he had ever seen, and there had been no intimation to the Committee from the Admiralty, except to thank the Committee for the pains it had taken in the inquiry.

## OBITUARY.

PETER BROTHERSTON, F.R.C.S.ED.

By the sudden death of Dr. Brotherston of Alloa, in Clackmannanshire, we have lost one of our best country surgeons.

While a student in Edinburgh, he attracted the attention of Professor Syme, who formed so high an opinion of his aptitude for surgical work, that he frequently requested him to assist at his private operations. Having obtained his diploma from the Royal College of Surgeons of England, he returned to his native town, and it was not long before he acquired the largest practice in the district.

Dr. Brotherston possessed a high amount of decision and promptitude; and with these gifts, accompanied by a clear head and a steady hand, he was enabled to perform many important operations, including numerous major amputations, several excisions of the knee, shoulder, and elbow, and various operations in the region of the throat. With the aid of a few friends, he established a small cottage-hospital, to which he devoted a certain proportion of his time daily. In 1876, seventy patients were treated under its roof.

The results of his work he published from time to time in the medical journals. His principal communications were "Cases of Excision of the Knee-Joint"; "Three Cases of Empyema occurring after Scarlatina treated by Paracentesis"; and "Provincial Surgery, as illustrated by Cases treated in the Alloa Hospital". The last paper was read before the meeting of the British Medical Association in Edinburgh in 1875.

He was a member of the principal medical societies in Edinburgh, and was well known, both in that city and in Glasgow, as an able surgeon. He was a man with a large heart, and one who, to relieve suffering humanity, spared himself no exertion, thinking but too little of the remuneration. He took a deep interest in the Archaeological Society which was founded several years ago in Alloa, and before it he read several interesting communications. His arduous labours, extending over a period of upwards of thirty years, in 1875 began to tell seriously on his health, and by the advice of his friend Dr. Begbie he spent a few months in San Remo. On leaving for Italy, he was presented by his grateful townsmen with a sum of money. Returning in the summer of 1876, he was able to resume a great part of his practice; but it soon became evident that serious disease was advancing in his chest. He continued to see his patients until a late hour of the night previous to his sudden demise, which took place early on the morning of April 28th. His loss will be long felt in Alloa and the surrounding district, and it will not be easy to fill the place of Peter Brotherston.

## MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on May 22nd.

Bailey, H. F., L.S.A., Newport Pagnell  
Bradley, C. A., Macclesfield  
Cant, W. J., L.S.A., Birmingham  
Edwards, L.R.C.S.EDIN., Anglesea  
Glanville, F. T., Putney  
Jones, D. J., M.B.EDIN., Liverpool  
Lewis, T. H., L.S.A., Carmarthen  
Lightfoot, W. S., L.S.A., Hanwell, Berkshire  
Lloyd, E. J., M.D.ABERD., Bangor  
Malvin, Mark, Stockton-on-Tees  
Martland, E. W., Wigan  
Merriman, W. S., L.S.A., Knutsford  
Oxley, A. J. R., Conisbro', Yorkshire  
Payne, A. A., L.R.C.S.EDIN., Sheffield

Pratt, Alfred, L.S.A., Hounslow  
Prees, W. M., L.R.C.S.EDIN., Conway  
Risk, R. R. T., L.R.C.S.EDIN., Harrow  
Tomkins, Henry, L.S.A., Manchester  
Twinem, John, Liverpool  
Woodcock, R. F., York Street, W.

Eleven candidates were rejected.

The following gentlemen were admitted members on May 23rd.

Battye, J. H., St. George's Road, S.W.  
Bellaby, Frederick, L.S.A., Nottingham  
Broster, A. E., Beamster  
Browne, J. W., M.A. & M.B. OXON., Bodfari, North Wales  
Clarke, W. B., B.A. OXON., North Wootton  
Cockell, F. E., Dalston  
Cones, G. A., Brompton Square  
Ekens, J. W., L.S.A., Alresford, Hants  
Fisher, F. B., Tiverton  
Fraser, Duncan, M.B. TORONTO, Shakespere, Canada  
Green, T. B., Kendal  
Hayman, S. A., Stokenchurch, Oxon.  
Khan, Mirza Hussein, L.S.A., Fabrysz, Persia  
Pickford, J. K., L.R.C.S. LOND., Toller Fratrum, Dorsetshire  
Schofield, R. H. A. B.A. OXON., Cambridge Gardens, W.  
Smith, E. S., Finsbury Circus  
Stevens, A. F., Brixton  
Wilkinson, J. C., Lee, Kent

Six candidates were rejected.

APOTHECARIES' HALL.—The following gentleman passed his examination in the science and practice of medicine, and received a certificate to practise, on Thursday, May 17th, 1877.

Ewen, Harry Walter, Manchester

The following gentlemen also on the same day passed their primary professional examination.

Buzzard, Thomas Hardy, Birmingham General Hospital  
Garman, Vincent Cornelius, London Hospital  
Instone, Samuel Vaughan, Guy's Hospital  
Thorpe, Henry Stanley, St. Bartholomew's Hospital  
Walker, Lawrence Newman, London Hospital

## MEDICAL VACANCIES.

THE following vacancies are announced:—

ABINGDON UNION—Medical Officer for No. 1 District. Salary, £107 per annum. Applications to be sent in on or before the 26th inst.  
BUCKINGHAM GENERAL INFIRMARY—House-Surgeon. Applications to be made on or before the 20th instant.  
CARNARVONSHIRE AND ANGLESEY INFIRMARY—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be sent in on or before June 14th.  
CHARING CROSS HOSPITAL—Resident Medical Officer and Assistant Medical Officer. Applications to be sent in on or before the 26th inst.  
CITY OF LONDON LYING-IN HOSPITAL—Consulting Surgeon. Applications to be sent in on or before June 19th.  
DURHAM COUNTY HOSPITAL—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be sent in on or before the 30th inst.  
EAST RIDING ASYLUM, Beverley—Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, and attendance. Applications to be sent in on or before June 23rd.  
HAILSHAM UNION—Medical Officer for the Parish of Heathfield. Salary, £60 per annum, and fees. Applications to be made on or before the 28th inst.  
KINGTON UNION—Medical Officer for the Huntingdon District.  
NANTWICH UNION—Medical Officer for the Audlem District.  
NEW HOSPITAL FOR WOMEN, Marylebone Road—Junior Physician; also, Resident Medical Officer. Women only eligible. Salary, £50 per annum, with board, lodging, washing, and attendance.  
NORTH LONDON CONSUMPTION HOSPITAL—Physician. Applications to be made on or before June 7th.  
NOTTINGHAM GENERAL HOSPITAL—Resident Surgeon-Apothecary. Salary, £150 per annum, with furnished apartments and board.  
RIPON DISPENSARY AND HOUSE OF RECOVERY—Resident House-Surgeon and Dispenser. Salary, £100 per annum, with furnished apartments, coals, and attendance. Applications to be made on or before the 31st instant.  
ROTHERHAM HOSPITAL AND DISPENSARY—Assistant to House-Surgeon. Salary, £25 per annum, with board, lodging, and washing.  
ST. GEORGE'S AND ST. JAMES'S DISPENSARY—Physician. Applications to be sent in on or before the 31st instant.  
WESTMINSTER GENERAL DISPENSARY—Honorary Surgeon. Applications to be made on or before the 28th instant.  
WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL—House-Surgeon. Applications to be made on or before June 11th.

## MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

\*HASTINGS, George, M.D., L.R.C.P., appointed Honorary Physician to the London Deaconess' Institution, *vice* \*H. Cripps Lawrence, L.R.C.P., resigned.  
\*WILLIAMS, William, M.D., appointed Honorary Physician to the Stanley Hospital, Liverpool, *vice* A. Whittle, M.D., resigned.

## BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

### DEATH.

\*OLIVE, Eustace H., M.B., at Northampton, on May 10th.



## OPERATION DAYS AT THE HOSPITALS.

**MONDAY**..... Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

**TUESDAY**..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

**WEDNESDAY**.. St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.

**THURSDAY**.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—Charing Cross, 2 P.M.

**FRIDAY**..... Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

**SATURDAY**.... St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

LETTERS, NOTES, AND ANSWERS  
TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

**AUTHORS** desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

**PUBLIC HEALTH DEPARTMENT**.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

**CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

**WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.**

**COMMUNICATIONS** respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## A CASE FOR SYMPATHY.

**SIR**.—Efforts are being made here, under the management of a reliable committee, including some of the medical men in Greenock, to raise a fund for the unhappy wife and children of the late Dr. Dougall, who was cut down so suddenly last week by blood-poisoning, consequent on a puncture he received during a *post mortem* examination. He fell at the post of duty; fell in the prime of life; fell just when he was struggling up from difficulty to a position in which he might by and by have made provision for those dependent upon him. But cut down, as he has been, so soon and so suddenly, his poor widow and a family of eight children (the oldest still a boy, the youngest a baby of five months) are left in a manner destitute. I understand there will be enough to pay all that is owing; but that done, the widow and this large family of children are left without provision. It is a case calling earnestly for immediate and practical sympathy. I trust there are many in Glasgow who will lend their aid. I shall be glad to take charge of any contributions that may be committed to my care. Trusting that help will come in, I remain, etc.,

DAVID MACRAE.

Ashton Manse, Gourcock, May 11th, 1877.

**P.S.**—Dr. Fergus, President of the Faculty of Physicians and Surgeons, Glasgow, is taking a kindly interest in this case, and has given the Fellows an opportunity of subscribing by placing a copy of the letter in the Faculty Hall. In addition, however, it has been thought desirable to bring the case before the profession generally, in the hope that the fund may be thereby effectively augmented. Contributions may be sent either to the Rev. David Macrae, Ashton Manse, Gourcock, Scotland; or to Mr. Duncan, Secretary and Librarian, Faculty of Physicians and Surgeons, Glasgow.

## A CAUTION TO MEDICAL MEN.

**SIR**.—Another "Victim" to Fullagar's designs has forwarded his *carte de visite*, taken some few years since, but which would be quite sufficient to identify the man. I shall be happy to show it to any who may wish to see it any morning, or to entrust it to "A Victim" or any one who is anxious to take out a warrant for his apprehension.—I am, etc.,

ARTHUR W. EDIS.

22, Wimpole Street, W., May 23d, 1877.

**P.S.**—I have had the *carte de visite* copied, and intend depositing one at the several libraries, in order that every one who cares to do so may have an opportunity of seeing them.

\*.\*. We have received letters from several other medical men who have been victimised by this person.

## REFUGE FROM EAST WINDS.

**SIR**.—Can any of your readers suggest any place in England whither one can flee for succour from these atrocious east winds? One endures and endures through March and April until the abominable month of May arrives (every poet that chants the praises of the spring, let him be anathema, maranatha), when, in spite of double guernseys and thickest pilot-coats, the relentless current carries off every particle of caloric faster than one can generate it. Internal congestions ensue, and the whole animal economy gets out of gear. Whither can one flee?—Yours, etc.,

A VICTIM.

**CORRESPONDENTS** are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## THE ENTOMBED MINERS.

**SIR**.—Without entering into a religious discussion, I should like to ask Mr. H. N. Davies whether he thinks that the calm state of mind of the imprisoned miners has any effect upon their endurance of the sufferings and prolongation of life. They were represented as singing hymns of triumph over death; and Morgan spoke to his deliverers of his dead son having entered into life. All praise and thanks to all concerned in the rescue.—I am, yours truly,

Liverpool, May 14th, 1877.

BENJ. BLOWER.

## TURKISH ARMY HOSPITALS.

**SIR**.—I notice at page 524 an announcement of a gift by an English society of a number of blankets to a Turkish army hospital, which is of course a contribution by Englishmen towards the cost of war by Turkey. If such contributions be made to the Turkish army only, those who give are assisting a government very many Englishmen condemn; if similar gifts be made by them to the Russians as well, they are helping to make the war—which all regret and must condemn—last longer, which is what the contributors surely do not wish to do, but certainly are doing. It is pretty certain that the war will be continued until one or both of the contending powers spend all the money they can raise or borrow; and, if so, to relieve them of the cost of providing for their hospitals will be to enable them to spend more in means of destruction. I submit, therefore, that it is not benevolent, but in effect cruel, to relieve either or both of the combatants of any part of the outlay war occasions, which must have the effect of making the war either last longer or be conducted with greater activity. It is true that by providing better for the hospitals some more of the wounded may be preserved; but by so providing for war expenses, more men will be killed or wounded and more lives be lost, more misery inflicted. I contend that the true philanthropist will abstain from any contributions to a war that it is not his duty to join, and give what he can afford to sufferers who have not tried to injure others.—I am, etc.,

P.H.H.

## THE DEGREE OF DOCTOR AT ST. ANDREW'S.

**SIR**.—Your correspondent "G. H. S." having broached the subject of the degree of M.D. at the University of St. Andrew's, in the interest of our common profession I should like to make a few additional observations; and I think it only fair that it should be known that, instead of receiving a degree at the advanced age of forty years at this University, the majority of candidates will be rapidly advancing to fifty before they can ever hope to receive it. Knowing quite well the utter hopelessness of any application until I was on the shady side of forty, I waited until I had passed that age, and I was informed that years must elapse before I could be admitted. The list of candidates was filled for years to come; and, seeing that I should be nearly fifty years of age, I abandoned the attempt with contempt and disgust, knowing quite well that if I had battled through the struggles and strife of a lifetime for so long a period without a degree, and that successfully, I could and would do so through the short period that would be left to me. Hundreds of us would be thankful to have a degree if we could have one in middle life (say thirty), without being ruined in social position by residence clauses on the one hand, or, on the other, by having it kept back until a period in life when a man's best energies, work, hope, and troubles have passed away, when he should be retiring, or, too frequently, when he is past active work—a time when to me the possession of such a thing seems to be a mockery and farce. The age of forty years is held out, and yet really it must be nearer fifty. How much better for the University, to complete the farce, to fix the age at seventy years, and then, with an additional ten years' waiting for one's turn, we should have a race of octogenarian graduates, and I think none of us would complain. How every possible discouragement appears to be placed in the way of the medical man cultivating his profession after he gets into practice.—I am, sir, your obedient servant,

May 1877.

Gaucha

## THE BOY WITH TWO STOMACHS.

**FREQUENT** notices have appeared in the Dundee local papers giving a substantial account of a child said to have two stomachs. Dr. MacLagan of Dundee has kindly forwarded us the following account of his inspection of the child in question. "It is a stout healthy boy of three months. The abnormality consists of a general bulging of the right side of the abdomen, giving one the impression that the muscular walls of that side are deficient; and the bulging in, as Dr. Sinclair said in his letter, a ventral hernia. It is certainly not a second stomach, and, so far as I can learn, no medical man ever said that it was so. The difficulty in the way of accepting the view that it is simply hernial is, that the percussion-note over the protrusion, though tympanitic, is not so clearly so as over the gastric region on the left side. On grasping the abdominal walls over the protrusion, they seem fuller than on the normal left side. I am not satisfied as to what its real nature is, but shall watch the case, and send to you any thing that I can find out regarding it. My impression is, that it is some peculiar abnormality of the peritoneum, as well as of the abdominal walls, and that a thin layer of fluid exists between the skin and abdominal cavity proper; but that is a surmise, determined from the physical signs on percussion and palpation."

## SYPHILITIC DISEASE OF THE ARTERIES.

**SIR**.—I take the liberty of correcting an error in the report of the last meeting of the Pathological Society. In the record of a case of gummata on the cranial nerves and syphilitic disease of the arteries in an infant, your report states that "the cellular growth was mostly in the outer coat, but slightly so in the intima". The reverse of this was the fact. As I stated at the meeting—although in many places the adventitia and the media were infiltrated—by far the most extensive change had taken place between the membrana fenestrata and the endothelium. The enormous thickening in this situation (consisting of spindle-shaped cells) was exactly in accordance with what Heubner has described.—I remain, sir, yours faithfully,

THOS. BARLOW.

10, Montague Street, Russell-square, May 8th, 1877.

## EFFECTS OF DYNAMITE.

**SIR**.—Can any of your readers tell me what dynamite contains, which causes great pain in the head when making it up for shots used in a snare? My patient is a master snaker, and is unable to fix the fuse in the holes, as caused by his men in the sinking on account of the smell of the dynamite affecting his head.—Yours truly,

FRED. JOHN GRAY.

Rugeley, May 19th, 1877.



NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

## AMERICAN MEAT.

SIR,—Your correspondent "Pater" must have been singularly unfortunate in his purchase of American meat. Not long ago, when passing the central dépôt, I purchased a roasting joint. About the same hour an English joint was procured from my regular butcher, and the American meat was in so much better condition than the English that we had to use the latter first. The American mutton, though good, is not equal in quality to our own Welsh or Southdown; but there is no finer beef in the world than that now imported, in rapidly increasing quantities, from Canada and the United States. The temperature at which this meat is kept tends to preserve it in excellent condition; and my only regret is, that unless when in the vicinity of the Cannon Street dépôt, I cannot buy American meat at any reasonable price.—I am, sir, your obedient servant,  
May 1877.

NORMAN KERR.

## CHILDREN'S HOSPITALS.

SIR,—The four questions asked by "A Member of the British Medical Association" in to-day's JOURNAL, comprised so much debatable ground, that it is difficult to answer them fully in a letter. I will, however, give briefly my experience on the subject—an experience gained not only from my own work in connection with the hospitals under my management, but also from a personal inspection of most of the general and many of the cottage hospitals in the United Kingdom.

1. *The walls* must be made of some non-absorbent materials. The best Portland cement should be used, as Parian is absorbent, expensive, and unsuitable. I believe the best plan to adopt is to paint the walls (four coats), and afterwards to give them two coats of varnish (best copal). This is expensive at first, but the primary outlay will be repaid again and again; for, when this plan is thoroughly carried out, a perfectly smooth, hard, impervious, and non-absorbent surface is presented, which can be readily washed down, and the wards are thus capable of being easily and completely disinfected. Where this plan has been tried, pyæmia has disappeared, and the most satisfactory results have been obtained. Walls thus prepared will remain perfectly clean in appearance, and at the same time are very generally safe for ten years at least. A new cement has been invented by Mr. G. Turner, the architect of the Central Ear and Throat Hospital, which appears to combine all the advantages which were originally claimed for Parian. It can be purchased, I believe, in different colours, and certainly appears to be non-absorbent, impervious, and most inexpensive. Time alone will prove whether it is really efficient; but to all appearances it combines the advantages claimed for it by its inventor, and it is far cheaper than ordinary cement.

2. *Heating and Ventilation*.—Open fires are, in my opinion, a *sine quâ non* in English hospitals; and the experience of those who have tried artificial heating and ventilation in large offices certainly does not encourage one to recommend any such plan for a hospital ward. The windows should be opposite each other, and may be made to open on the slanting valve principle, as at the Middlesex and some of the London fever hospitals. By using this system, the parts of the windows open inwards, others throw the air towards the ceiling, and preventing draughts. The vertical system, with ceiling ventilation, is strongly to be advocated, with which can be combined a plan for carrying off the products of combustion from the gas-burners by bell-glasses with tubes in the flues. These are of course only a very small selection from the many plans of ventilation at present in force; but your correspondent will find much useful information on the subject in Mr. Eassie's book. I believe the plan adopted in some of the metropolitan workhouse infirmaries of using ventilating stoves, in which the air is warmed in chambers behind the grate, has been found very successful in practice.

3. *Cubic Space*.—I think any one will agree who has had experience in the management of children's wards, that at least one thousand cubic feet per cot ought to be allowed in each ward.

4. Dr. West has, I believe, a work in the press on the organisation of children's hospitals, which will, no doubt, contain much valuable information. In my book, *The Cottage Hospital*, I have given a plan for a model pavilion hospital of twenty-two beds.—I am, etc.,  
HENRY C. BURDETT.  
Greenwich, April 28th, 1877.

## THE ANTI-VIVISECTIONISTS IN EDINBURGH.

SIR,—I have not the slightest desire to be allowed to engage in any controversy in your columns with your correspondent "X." but, as you have reprinted Dr. Baker's letter to the *Scotsman*, I think I may fairly ask you to give the same publicity to my reply which appeared in the same paper on the following day.

The controversy between Dr. Baker and myself was carried on with the utmost courtesy; and I am doubly glad, in view of his untimely death, that I had an opportunity personally of taking him by the hand and of disabusing his mind of a misapprehension under which he laboured.

The following is my letter, cut from the *Scotsman*, which I shall feel obliged by your inserting.—I am, sir, your obedient servant,  
Stockwell, 28th April.

A. P. CHILDS.

## "The Vivisection Revue."

"Edinburgh, April 12th, 1877."

"Sir,—I am not concerned to refer to more than one of the statements contained in the letter of Dr. Baker, published this morning. I had seen, from the proceedings of the previous evening, how extremely desirable it was that some method should be observed in the mode of reply to my lecture. I pointed out to Dr. Baker that, upon such an immensely wide subject as vivisection, he and I might each of us address an audience for weeks without ever once joining issue or bringing our arguments into direct antagonism. To effect this, and to make the meeting at all useful for the purposes of the Society for the Suppression of Vivisection, I thought the best mode would be for Dr. Baker not to make a general address, but to challenge me by questions, the grounds of which he might have fully set out, upon any statements of mine which he disputed. I suggested that this was the course that ought to be pursued, and I still think that more could not reasonably be expected, especially when it is remembered before what kind of audience the discussion was to take place. To this, however, Dr. Baker would not agree.

"With reference to his offer of payment, I know nothing, and have nothing to do. I have no doubt it was made as Dr. Baker says, and I have no wish to insinuate any doubt as to the entire good faith of the proposal.

"I desire to exonerate Dr. Baker from all association with the disgraceful pro-

ceedings which brought the meeting to a premature close, and I accept most sincerely his expression of regret at the result. Nothing would give me greater pleasure than to meet an antagonist, apparently so able and competent, in a fair argument, upon issues previously clearly set out, and before a tribunal which would patiently listen to and fairly weigh the arguments and suggestions that might be offered on either side.

"I would only, in conclusion, ask you to allow me to make public my explanation of the misunderstanding under which Dr. Baker laboured in reference to my having 'vilified and calumniated' the medical profession. I learn from him that he thought I had applied the term 'demons' to them. Owing to the disturbance that was going on, I no doubt failed to make myself heard distinctly at the end of the hall, and thus the mistake arose. I was quitting, towards the close of my address, from the stanza in Tennyson's *In Memoriam*, beginning—

"Who loves not Knowledge? who shall rail  
Against her beauty?"

Certainly not, I said, who denounce vivisection. But—

"What is she, cut from love and faith,  
But some wild Pallas from the brain  
Of demons?"

Let her know her place;  
She is the second, not the first."

Most assuredly, no idea of vilifying a noble profession ever entered my head. Apologising for the length of this letter,—I am, etc.,  
"A. P. CHILDS."

"\* We think that nothing could have been more reasonable than Dr. Baker's request to be allowed at the second meeting, as he had been in some measure at the first, to reply on the part of the physiologists to the statements made by Mr. Childs. Evidently, Mr. Childs had the best of the bargain; for, while he could make a carefully arranged and deliberate statement, Dr. Baker must have encountered the far more difficult task of making a reply on the spur of the moment. We fail to see why Mr. Childs would not have enjoyed the "pleasure" of a "fair argument" on the occasion, for he admits that "the controversy between Dr. Baker and himself was carried on with the utmost courtesy". As for "the issues being previously clearly set out", we should think that Dr. Baker must have seen quite as clearly as Mr. Childs that the issues are. Regarding the "tribunal that would patiently listen to fairly weigh the arguments offered on either side", it seems clear that at the second meeting Mr. Childs particularly desired the tribunal to listen to his arguments only. We, therefore, entirely agree with Dr. Baker, that it is "a bad cause that dare not listen to a straightforward reply". More medical men might with advantage come forward as Dr. Baker did to meet the anti-vivisection agitators in open debate at their meetings, and expose the real nature of their proceedings and the empty folly of their statements.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The York Herald; The Bridlington Quay Gazette; The Scarborough Daily Post; The Blyth Weekly News; The Glasgow Herald; The Malvern News; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; The Manchester Free Lance; The Belfast News Letter; The Manchester Courier; The Macclesfield Courier; The North Wales Chronicle; The Sunderland Daily Post; The Western Daily Mercury; etc.

"\* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. George Johnson, London; Dr. McCall Anderson, Glasgow; Dr. W. Fairlie Clarke, Southborough; Dr. J. Hughlings Jackson, London; Dr. Rutherford, Edinburgh; Dr. J. Milner Fothergill, London; Dr. J. W. Moore, Dublin; Dr. Edis, London; Dr. Joseph Bell, Edinburgh; Dr. A. Ogston, Aberdeen; Mr. N. A. Humphreys, London; Mr. Stephen S. Alford, Hampstead; Dr. Joseph Coats, Glasgow; Dr. Francis Warner, London; Mr. J. F. Smith, London; Dr. W. H. Wright, Ormskirk; Mr. R. J. Pye-Smith, Sheffield; Dr. Palfrey, Ramsgate; Dr. Goldie, Leeds; Manchester School of Medicine; Dr. Boerner, Berlin; The Registrar-General of England; Mr. E. Noble Smith, Paddockhurst; The Secretary of Apothecaries' Hall; Dr. Mahomed, London; Dr. J. Ashburton Thompson, London; Dr. Caddy, London; The Registrar-General of Ireland; Dr. James Russell, Birmingham; Mr. Jonathan Hutchinson, London; Mr. Bushell Anningson, Cambridge; Dr. E. West Symes, Leeds; Dr. J. C. Murray, Newcastle-upon-Tyne; Dr. Charles Parsons, Dover; Mr. W. T. H. Wood, Boston; Dr. Clifford Allbutt, Leeds; Mr. P. P. Sanders, Southsea; An Associate; Mr. F. J. Gray, Rugeley; Mr. John Horan, Sunderland; Mr. S. Wilson Hope, Petworth; Mr. Charles Bennett, Braunston; Dr. Evatt, India; Dr. T. J. Walker, Peterborough; Dr. Dowse, Highgate; Dr. J. C. Thorogood, London; Dr. Murphy, Sunderland; A Member; Dr. Bond, West Bromwich; Our Dublin Correspondent; Dr. Creswell Baber, Brighton; Mr. Herbert Jones, London; Dr. T. Lauder Brunton, London; Dr. Wallace, Liverpool; Mr. Raglan Thomas, Llanelli; Dr. A. Hughes Bennett, London; Dr. Alex. Ford, Harrogate; Mr. George Holman, Uckfield; Dr. J. Hurd Wood, Leatherhead; Dr. W. L. Richardson, Boston; Dr. Alex. Collie, Homerton; Dr. Grimshaw, Dublin; Mr. D. T. Evans, Pendleton; Our Edinburgh Correspondent; Dr. Poole, Norwood; Dr. John Wilson, Glasgow; Dr. Heywood Smith, London; Mr. Herbert Page, London; Mr. Chauncy Puzey, Liverpool; Mr. John S. Bartrum, Bath; Dr. George Hastings, London; Mr. T. W. Bush, Nottingham; A Victim; Dr. Dyce Duckworth, London; Mr. G. Eastes, London; Mr. W. Adams, London; E. C. F.; Mr. S. Cartwright, London; etc.

## BOOKS, ETC., RECEIVED.

Tonic Treatment of Syphilis. By E. L. Keyes, A.M., M.D. New York: D. Appleton and Co.



# CLINICAL LECTURE ON SOME URINES AND URINARY CALCULI.

By WILLIAM M. ORD, M.B.LOND., F.R.C.P.,  
Senior Assistant-Physician, St. Thomas's Hospital.

GENTLEMEN,—I propose to-day to review some of the more interesting urinary specimens that have come before us of late, associating with them such illustrative matter brought from without as we have freely used in our joint efforts to make the observations of the out-patient room more useful.

1. *Condition of the Urine in a Case of Poisoning by Iodine.*—"Poisoning" is perhaps rather a strong word, if the effects usually following the swallowing of the tincture of iodine be considered. As far as I know—and I have seen here and elsewhere several cases in which the tincture has been taken by mistake or accident—the most serious result is a sharp irritation of the mucous membrane in the path of the fluid. Vomiting is induced when the fluid reaches the stomach, and, though salutary in the most important respect, involves, of course, further contact of the regurgitate iodine with the tender faucial membranes.

F. Y., a boy aged 3, was admitted into Alice Ward on August 28th, 1876. All the history that could be obtained was to the effect that he had swallowed some tincture of iodine from a bottle in his mother's room, and that he had vomited immediately afterwards. The quantity swallowed and the proportion rejected were unknown. Dr. Sharkey (resident assistant-physician) found the child to be suffering with croupy cough, and admitted him by way of precaution. Otherwise than in experiencing great irritation of the mouth and throat, the child did not appear to have taken any harm. The croupy cough passed away as the throat healed, and the child was discharged well at the end of nine days.

Having seen recently a note in the BRITISH MEDICAL JOURNAL relating that Dr. Simon had found albumen in the urine of a patient after the application of iodine to the skin, I requested my clinical clerk, Mr. Gulliver, to examine some urine passed by the child the day after admission; that is to say, the day after the accident. Mr. Stewart, of the chemical laboratory, was good enough to assist Mr. Gulliver. They found the urine amber-coloured, of specific gravity 1038, somewhat strongly acid, throwing down on cooling a slightly flocculent sediment, amorphous under the microscope.

The addition of acetic or nitric acid to the urine produced a copious amorphous precipitate, soluble in excess of nitric acid and on the application of gentle heat. On subsequent cooling, a precipitate again fell, and was found to consist of yellow halberts of uric acid mixed with fine granular matter. No precipitate was obtained on boiling; and Mr. Stewart, who at first suspected the presence of some modified form of albumen, states that, on further examination, he detected nothing of the kind. There was large excess of urea. Mr. Stewart obtained good reactions of iodine, combined, not free, and of indican. I may remark in passing that the test used for iodine was a double test. In one, starch mucilage was used first, and nitric acid added afterwards. Good indications were also obtained with the process I now exhibit. A few drops of bisulphide of carbon are placed in a test-tube, which is then half filled with urine. If, on shaking, the bisulphide become tinted with a rose colour, iodine is present free. If, again, the tint appear after the addition of chlorine water or strong nitric acid, iodine is present in combination. The tint here does not appear till after the addition of nitric acid, and iodine is, therefore, present in combination.

Now, when uric acid separates from urine in the halbert form, there is always reason to suspect the presence of some considerable quantity of colloid matter. I have shown this in former papers, and have demonstrated it again and again in the out-patient room. In order to push further the question of the presence of colloids, I obtained some urine passed a day later. The specific gravity had fallen to 1025; the other reactions were as before. Failing to obtain indications of albumen by the ordinary means, I added to a small bulk of the urine (the whole quantity at my disposal was under two ounces) an equal bulk of absolute alcohol. Two samples of average urine (one of specific gravity 1019, one of 1026) were treated in the same way at the same time. The cloud produced at once in the boy's urine was much denser than that in the others, and gathered at the end of a week to a

flocculent mass occupying nearly a fifth of the fluid, the precipitate in the others being a little powder hardly visible at the bottom of the test-tubes. This precipitate gave the reactions of mucin, and not of albumen. No tint was produced on heating with Millon's reagent. Under the microscope, it consisted of brilliant spherules with long colourless prisms, a mixture of urates and phosphates in a finely granular adherent substance, mucin. The colloid giving the distinctive shape to the crystals must in this case have been mucus present in unusually large quantity dissolved or in complete hydration.

A word on the nitric acid reaction in this case. The test in which a stratum of cold nitric acid is brought into contact with a superjacent stratum of urine is of much use in the detection of the presence of small quantities of albumen, and has, as you are aware, been put to the purpose of quantitative determination of albumen in urine by that excellent practical observer Dr. W. Roberts of Manchester. It occasionally happens, as in this case, that uric acid is thrown down even at the ordinary temperature of rooms and laboratories, and this circumstance makes it desirable in all cases to correct the experiment by further observation: a matter of no difficulty. But I may further point out to you that, after a little practice, you will be able to distinguish between albumen and uric acid by the formation of the cloud. In the case of the albumen, the cloud is horizontal and of uniform thickness. Usually one or two lighter clouds are formed above with clear fluid between. These are perfectly parallel and uniform strata. With uric acid the cloud is irregular on its upper surface, like a storm-cloud. It extends with some rapidity to the rest of the fluid, like the same storm-cloud mounting the sky, and never, as far as I know, do parallel strata appear above.

2. *Case of Spontaneous Disruption of Calculi.*—The specimens exhibited were passed by a gentleman aged 84, who, three years ago, weighed 25 st. He had been in his early days a hard worker and, as he alleged, a small eater, particularly of meats. For the last twenty years, however, he had been leading a sedentary life, chiefly because of his bulk. His general health has been good, and, though there is gouty enlargement of his knuckles, he has never had any acute gouty or rheumatic illness. One day, when passing urine, he observed two round stones fall into the chamber-utensil he was using. He was rather amused than frightened, and, feeling no inconvenience, took no notice of the matter. Not long afterwards, his urethra was for some hours obstructed by a calculus. A catheter was introduced, but only as far as the calculus, which barred the way to the bladder. The stone ultimately came away, and was, like the first passed, perfectly spherical. For a year after this, his health was bad. He lost all appetite, took very little food, and wasted considerably. Then he began to pass stones in fragments. The number passed was very large, enough, as he said, to gravel the path to his house. He is not aware that there was any change in the quality of his urine. He felt no unusual sensations in the bladder; nothing like an explosion. He had no violent fall or jerk that he remembers. Most of the stones thus passed were in fragments.

After the stones had come away, his health underwent a fresh change. He was attacked with eczema and senile prurigo, and at the same time regained his appetite. Then he began to grow fat again, and his legs, which had become oedematous, resumed their natural state.

At present, he is well and cheerful, his only complaint being of "heaps of sand" in his eyelids. His urine, otherwise healthy, always contains crystals of uric acid, and sometimes small friable concretions of the same. The calculi exhibited are only a few out of hundreds that he has passed; some are round, some irregular; but it is evident that the majority are fragments of larger calculi; they are such fragments as might be compared to fragments of an exploded spherical shell. Each has a pyramidal form, with the base of the pyramid convex, the apex slightly hollowed. The calculi of which they would appear to have formed parts must have been mostly about half to three-quarters of an inch in diameter, and each sphere must have split up from the centre outwards into seven or eight segments. It is evident, on close examination, that the fracture occurred some time before the stones were voided. The surfaces are not fresh or sharp, and the whole stone is covered with an uniform grey deposit. A section being carried in a radial direction through any one of them, the surface exposed is marked by concentric lines, by fragments of a concentric system of which the rounded base would be the outermost circle, and of which the centre would be the apex of the fragment, if it remained perfect. Such a section demonstrates at once the fact that the seeming segments are, in fact, segments of a calculus built up of many concentric layers. The section-surface is of a reddish grey colour, very compact, and exhibits no cracks or irregularities of consistence. The crust which invests the whole fragment, and which is moulded



to all the irregularities left by the fracture, is much lighter in colour than the substance of the calculi. (See Fig. 1.)



Fig. 1.

The calculi are composed of uric acid and urate of ammonia intimately mixed. The outer light portion, which has the look of a phosphatic deposit, is, in fact, urate of ammonia. When this is dissolved in liquor potassæ, it leaves a gelatinous matrix and a great abundance of spores and mycelium, strongly resembling those of microsporon furfur. The central portion of the original calculus is wanting in all the fragments. Under the microscope, the mass of the calculus is found to consist of compact crystalline matter with a radial fibrillation. No separate crystals are to be obtained.

The cause of the original fracture of the calculi appears to me to have been an expansion of the central portion, or some expansion at the centre, acting as the exploding powder in a shell. There is evidence that, for some time preceding the appearance of the fragments, there was enough disturbance of the general health to render it probable that the chemical constitution of the urine was altered. There is also evidence in the nature of the secondary deposit that the state of the urine was different after the fracture from the state accompanying the formation of the calculi. I infer that such change was accompanied with a tendency to alkalinity, and that as a result a chemical influence was exerted upon the calculi, tending to cause swelling of any mucoid matters which might enter into their composition; that the centre which has disappeared was different in some respects from the circumference which remains; and that this difference determined an unequal swelling of the centre, resulting in disruption of the spheres.

That this was the case rather than a disintegration or falling to pieces through general failure of cohesion, is an idea supported by the perfection of the individual segments and the compactness of their structure. The regular form of the fragments opposes the idea of fracture having arisen through collisions among calculi. Such conditions would produce irregular chipping rather than radial fissure and segmentation. An inspection of the fragments resulting from lithotripsy will show the essential nature of the difference. It is not uncommon, indeed, to find calculi that have been cut in two and preserved, as commonly found in museums, fissured radially round the centre. This is, to my mind, usually an acquired, and not an originally present, condition, not existing when the calculi were in the bladder, due to the unequal drying of the centre and circumference. The condition, however, indicates that under exposure to certain circumstances of altered moisture, radial splitting, beginning from the centre, may occur in calculi; and what I suggest is, that a similar sort of process led to the segmentation in this case under circumstances which determined swelling instead of shrinking of the nucleus.

The spontaneous fracture of vesical calculi is apparently not a common event. The late Mr. Southam, however, published in the BRITISH MEDICAL JOURNAL two cases observed by himself and one of Mr. Luke, quoting also a case of Mr. Liston and giving a drawing of a calculus from the Dupuytren Museum of Paris. The paper was illustrated by excellent drawings, which have been reproduced in Dr. Beale's work on the *Urine*. The calculi in Mr. Southam's two cases were larger than those now exhibited, and the hypothesis of rupture by internally developed gas was advanced. The fragments were only two in each case, and were less regular segments of spheres. One was composed of lithic acid with a coating of hard oxalate of lime, and the fragments, after disruption, had become coated with fresh phosphate. It is, therefore, quite possible that changes in the composition of the urine played a part in producing disruption. The composition of Mr. Southam's second calculus is not stated. In Mr. Luke's case, the calculus was composed of triple phosphate, and there was no history of violence. In Mr. Liston's case, the calculus is supposed to have broken up suddenly under the influence of a violent bodily shock. The fragments were numerous, and the result was fatal. No analysis is given. In the last case only the drawing is given, showing a fragment separated by fissures, but not detached. The fissures do not reach the nucleus, and the fragment is held in place by fresh enveloping deposit.

Mr. Coulson has also recorded a case in which a sort of natural lithotripsy occurred, two or more calculi being crushed together and broken by one another as nuts may be broken in the hand. In such cases, the calculi are mostly of loose consistence, and the fragments are irregular and not segmented. (*Pathological Transactions*, vol. xv, p. 143.)

I have been fortunate enough to find in the Museum of the Royal College of Surgeons a preparation (Calculi, A 177) very closely resembling my own. It is figured at the end of the catalogue in Plate 1, figs. 6, 7, and 8. There is no history, but the preparation is described as a pisiform calculus (Prout's term) "separated into triangular portions, possibly the result of spontaneous disintegration". The segments are pointed, instead of being, like these, truncate; that is to say, the centre remains. They are composed, according to Mr. Taylor's analysis, of uric acid, and appear to have been coated by fresh material after fracture.

In relation to the analysis of these calculi, I may add a few remarks illustrating the use of the microscope in these processes. After the general facts of organic composition, of the presence of uric acid and ammonia had been determined, some of the central part was chipped and examined under the microscope. The characters of the fragments have been already noted, and it may be observed that the whole of the original portion of the calculus was built up of fine concentric laminæ, perfectly compact, perfectly continuous with one another, and showing a radial crystalline structure. The superficial portion, on the other hand, consisted of spherules imbedded in a clear matrix, the spherules being dense at their centre, less dense and lighter in colour, with marked radial crystalline structure, at their circumference. This is the form taken by urate of ammonia in the presence of colloids. The spheres were slowly disintegrated by hydrochloric acid, and rapidly dissolved by caustic potash, leaving the matrix and the contained fungoid structures.

The central mass, on being powdered and boiled in distilled water, dissolves sparingly, giving a strongly acid solution, from which large very thin flat lancet-ended crystals are thrown down. These are exactly like the crystals which I have shown elsewhere to be produced when uric acid is added in large excess to hot solutions of urate of ammonia. As I believe them to be crystals of a highly acid urate, they will indicate that only a comparatively small relative quantity of ammonia is present. After three or four exhaustions of the powder with boiling distilled water, rectangular plates of pure uric acid are deposited. There is clearly, then, also a large proportion of uncombined uric acid, representing, in fact, more than half the bulk of the calculus. The solution yielded by the surface is neutral. The quantity of material being small, and the material itself comparatively soluble, crystallisation was not effected. No oxalate crystals were obtained in any process.

[To be concluded.]

## AN ADDRESS

ON

### OPHTHALMOLOGY IN ITS RELATION TO GENERAL MEDICINE.

*The Annual Oration delivered before the Medical Society of London.*

By J. HUGHLINGS JACKSON, M.D., F.R.C.P.,

Physician to the London Hospital, and to the Hospital for the Epileptic and Paralysed; etc.

#### III.

THERE are still other valuable deductions to be made from the facts of cases of ocular palsy. In a case of paresis of the right external rectus, when the patient tries hard to turn the lamed eye out, the other eye turns in too much; there is secondary deviation. From the attempt to move the paralysed or weak part, there is a double effect; there is, firstly, failure to move it, and, secondly, overmovement of associated muscles.

Later on, we shall see that there is evidence, both by cases of disease of the brain and by Ferrier's experiments, that there are centres for conjoint movements of both eyes. This principle bears in a most important way on the interpretation of locomotor ataxy and of disorders of co-ordination in general. It has already been applied by Wundt to explain the disorder of co-ordination produced by experiments on animals; but, so far as I know, it has not been yet applied by physicians to explain cases of disorder of co-ordination by disease. I do not, however, maintain that in locomotor ataxy there is solely a motor difficulty; there is sensory defect, and the joints and bones even become diseased. Let us, however, apply the principle so far as it will



go. Generally speaking, the principle is that, when a centre discharges and when one route for the current is stopped, the current, so to speak, overflows in other channels, in those for associated movements.

There are other examples supplied by cases of paralysis illustrating the principle, although the ocular palsy is the clearest. When the flexors are atrophied, an effort to shut the hand is considerable; and then, to use Duchenne's language, a very intense nervous current reaches the extensors, giving rise to exaggerated extension—not to the desired closure, which is, of course, impossible. The flexion here is the analogue of the secondary deviation of the healthy eye in paralysis of one external rectus.

The principle of double effects in paralysis must be considered in all cases of disorder of co-ordination. I think it applies evidently to locomotor ataxy. To call this or any other symptom a disorder of co-ordination is to speak with conventional correctness, but the word co-ordination has such misleading implication that it is scarcely safe to use it. It is frequently used metaphysically, it being implied that there is such a thing as a faculty of co-ordination residing in this or that centre, and that the centre has nothing to do with movements except to regulate them autocratically.

I believe the essential thing in locomotor ataxy is paralysis. This will, no doubt, seem a strange remark. It will, in the first place, be asserted that there is no loss of power. It is quite true that the patient has great power in his legs, can stamp vigorously, and can resist flexion and extension. I only suppose there to be some loss of power to execute, or to execute effectively, the more special movements of walking.

In locomotor ataxy, there is central disease—viz., of the posterior column; hence there is not likely to be paralysis of some muscles, but paresis of complex movements. It is just what happens in cases of disease of the higher centres: we never have from disease of any part of the brain simple paralysis of any one or more ocular muscles, but loss of movement—loss of power to look to one side, for example. Moreover, the pathological change in locomotor ataxy is wasting of nerve-fibres, and this could cause nothing active. A wasting of nerve-fibres—in effect, a loss of them—could not make a man reel; it could only directly cause paralysis of motion or sensation, or of both. It would, I submit, lead indirectly to disorder of co-ordination, as palsy of an ocular motor nerve demonstrably does.

In detail, I think the state of things is this: the first failure in locomotor ataxy is of that movement which is most important in locomotion, of that in which the peroneus longus takes the lead—the movement by which the body is swung over on to the ball of the big toe. In early stages of locomotor ataxy, we see that the patient has a difficulty in, so to speak, biting the ground with the front part of his foot; and we see, also, that there is strong contraction of the tibialis anticus, the antagonist of this muscle—in ophthalmological metaphor, there is secondary deviation of it. The explanation I give (limiting the illustration to these muscles) is, that there is a two-fold effect. Suppose some higher centre, perhaps the cerebellum, energises. It is absolutely certain that there is activity of some centre, and that cannot be made up of wasted nerve-fibres, or the patient could not walk at all. The centre may be the cerebellum, although it matters not, for the principle of the explanation, which centre it is. The current developed cannot, on account of the wasting of fibres in the posterior column, reach the muscle for the most special movement, or cannot reach it in full degree, just as in the ocular palsy it cannot reach the external rectus. But as in the case of the ocular palsy the estimate is by the central discharge, so in locomotor ataxy a strong movement of the peroneus is estimated, although not performed; then, as the analogue of the secondary deviation of the healthy eye, there is over-action of the associated movement, that in which the tibialis anticus takes the lead. In short, there is over-estimation of the intended but underdone peroneal movement, and actual overdoing of the tibialis anticus movement. If this be so, we see that we have no need to invoke a faculty of co-ordination, nor a special co-ordinating centre. We see, too, that locomotor ataxy compares not with such diseases as chorea, but with such as hemiplegia. There is paralysis leading to secondary effects.

Duchenne believes that some cases of flat foot are owing to what he calls functional impotence of the peroneus longus. It seems to me that he gives an essentially similar explanation of the symptoms of this affection as I have given of those of locomotor ataxy. He speaks not only of the impotence of the peroneus longus, but of the reflex contraction of the extensors of the foot—so to speak, secondary deviation of the foot.

So far, we have spoken only of paralysis of ocular muscles from disease of nerve-trunks. The physician often sees cases of palsies of ocular muscles, or rather paralysis of certain ocular movements from

disease of nerve-centres. Let us suppose that the right corpus striatum is extensively damaged, there will be left hemiplegia, and for some hours or days the two eyes turn to the right.\* The head often turns in the same direction. The eyes and head turn to the right side for the same reason that the face does. The turning in all three is from the side paralysed, and therefore towards the side of the brain injured. There is no strabismus, for the eyes, although turned to one side, remain parallel. The implied healthy nervous arrangements for this lateral movement of the two eyes have been likened by M. Foville, junior, to the arrangement of reins for driving two horses. What occurs in the lateral deviation is analogous to dropping one rein (the right one, we will suppose); then the heads of the horses (supposing the left rein to be, so to speak, in tone) turn to the left. Here the secondary deviation in paralysis of the external rectus may be illustrated. Using a clumsy mixture of illustrative terms, we may say that when the centre for one rein energises strongly, the current developed cannot reach the head of the horse on the right, as the slip of rein to that side is paralysed; but in the effort to make it move, a strong current passes by the other slip to the head of the horse on the left—that horse's head undergoes strong "secondary" deviation. The lateral deviation shows that after the nerve-fibres of the ocular nerve-trunks have entered the central nervous system (if we may, for convenience, trace them backwards way), they are—partly probably by the intermediation of several centres—redistributed. It shows that far above their points of entrance, or rather exit, the nerve-fibres of the ocular muscles are rearranged in each cerebral hemisphere in complex ways for particular movements of both eyeballs. There is no such thing as paralysis of the muscles supplied by the third nerve, or sixth nerve, from disease above the crus cerebri. But there is clear evidence that the movement for turning the two eyes is represented still higher than the corpus striatum. I have long believed that ocular, and indeed all other movements, are represented in the cerebral convolutions: if they be not, the occurrence of convulsion from disease of them is unintelligible; without admitting such a constitution of ideational centres, and certainly unless ocular movements are therein represented, what is called the physiology of mind is, I think, an impossible science. Hitzig and Ferrier's experiments show, it seems to me, that movements are represented in at least some of the convolutions. For many years I have believed that every part of the nervous system is made up of nothing else than of nervous arrangements representing impressions and movements.

In Hitzig's and Ferrier's experiments the centres are stimulated; in the experiments by disease, of which I have been speaking, there is destruction. Ferrier finds that stimulation in several parts of the cortex cerebri produces movements of the eyes. I have already mentioned that he finds lateral movement of the two eyes from stimulation of what he calls the auditory centre: he finds, too, that irritation of the visual centre—the angular gyrus—produces lateral movements of the two eyes in an upward or downward direction, according to the particular part of the gyrus stimulated. He concludes, and I think fairly, that in both these cases the primary irritation is of sensory fibres representing the auditory and retinal expansions, and that the associated ocular movements result from a propagated irritation to what he calls the special motor centre for ocular movements. This special centre is situated at the hinder part of the superior and middle frontal convolutions. Stimulation on the right side causes the two eyes to turn to the left, and at the same time there is dilatation of the pupils. I have seen him produce this movement, well defined, exactly according to his prediction made, before applying the electrodes. This, to renew an old illustration, is like pulling the rein which goes to the right sides of the two horses' heads. It is just what one so frequently finds in cases of epileptiform convulsions, due to, at any rate occurring with, lesions of the cortex cerebri by disease. Ferrier is able to produce a convulsion by experimentally irritating the surface of the cerebrum, closely like that resulting from the discharge of that part in disease. It is to lesion in some part of what Ferrier calls the special centre for the movements of the eyes that I should attribute the loss of lateral movements in some cases recorded by Priestley Smith. He has recorded cases in which loss of the lateral movement of the two eyes was the sole paralytic symptom. Such a symptom of necessity points away from lesion of nerve-trunks, and to a lesion of nerve-centres: that centre might be the pons Varolii or cerebellum; but the most likely seat of lesion is, I think, the convolutional centre spoken of.† At one time I did not believe that destruction of parts of the cortex produced local paralysis, but Ferrier's experiments on monkeys go contrary to this opinion. It has been recently found by Charcot and

\* This was first pointed out by Vulpian and Prevost, Humphry, Hutchinson, Lockhart Clarke, Russell Reynolds, and Broadbent.

† Priestley Smith has just published a paper on Double Vision in the *Birmingham Medical Review*, highly deserving the attention of physicians.



others, exactly in confirmation of Ferrier's experiments on monkeys, that from destructive lesions of parts of the cortex there occur limited palsies, as of the face, of the arm; and as Charcot finds *post mortem* wasting of fibres "descending" from the parts of the cortex destroyed, the cases must, I think, be admitted as conclusive. The most likely explanation of some of Priestley Smith's cases is, that there is a monoplegia, to use the French term, comparing with other monoplegias, such as paralysis of an arm only, or of the face only, as in cases of cortical lesions described by Charcot.

Further, there is clear evidence from Ferrier's experiments, and from other experiments, that the movements of the eyes are represented not only in the cerebrum, but in the cerebellum. From experimental destruction of the right crus cerebelli in some quadrupeds, the right eye is turned upwards and outwards, and the left downwards and inwards. This which I call a skew deviation, it will be observed, is just one-half of the movement for the estimation of differences of distance. In the adjustments for distances there is more than convergence and divergence; in convergence the eyes are slightly directed downwards, and in divergence slightly upwards. Ferrier finds that several different associated movements of the eyes are developed by irritation of several particular parts of the cerebellum; but he only develops the skew deviation in animals whose eyes are placed laterally. He did not develop it in monkeys; yet such a deviation occurs in man. Lesion of the crus cerebelli was diagnosed correctly by M. Nonat from observation of skew deviation.

We see from the experiments of disease, and very evidently from Ferrier's experiments, that the ocular muscles are represented far apart in each of the two great divisions of the nervous system—in the corpus striatum and in the hinder parts of the superior and middle frontal convolutions, and also in the crus cerebelli and cerebellum. There are cerebral and cerebellar movements of the eyes.

In an earlier part of this address, it was suggested that the cerebral ocular movements are for the estimation of the superficial extension of bodies, their superficial size and shape. I would suggest that the ocular movements for the estimation of distance are chiefly represented in the cerebellum. It is of course understood that these estimations by the eyes are symbolic of tactual and locomotor movements. I believe the movements of the eyes which are represented in the cerebellum are concerned in the symbolic estimation of depth of bodies and of depth of space, and also of resistance, which is, physiologically speaking, arrested locomotion. I founded the latter part of this doctrine chiefly on the experiments of Adamük, who asserted that different kinds of movements, either parallel or convergent and divergent, of the eyes are producible by irritating different parts of the corpora quadrigemina. However, Ferrier, although he finds that irritation of the corpora quadrigemina produces movements of the eyes, has not been able to corroborate all Adamük's statements.

It interests me greatly that Priestley Smith has recorded a case in which, with loss of power to look to one side, convergence was intact. For this shows, by another kind of evidence, that parallel movements and convergent movements are separately represented. It does not, of course, follow from this that the convergent movements are represented in the cerebellum; however, Ferrier has been unable to produce convergence by stimulation of any part of the cerebral hemisphere; but he suggests that convergence might result were we to be able to stimulate simultaneously the special motor centre for the eyes in each cerebral hemisphere.

For the rest, however, I shall speak only of affections of ocular movements from cerebral disease. The lateral deviation of the eyes and head is valuable in many ways.

1. By it we estimate the gravity of a lesion; the lateral deviation is the sign of a grave lesion.
2. It will be helpful in diagnosis betwixt drunkenness and apoplexy from local brain-disease, as Prevost has insisted.
3. The lateral deviation is an exceedingly valuable symptom, helping us to a methodical interpretation of unilaterally beginning convulsive seizures.
4. It is valuable physiologically; it illustrates the order in which symptoms appear in disease of nervous centres. The deviation appears both in hemiplegia and in the hemispasm, which is one of its mobile counterparts at a certain stage of gravity of these affections; it illustrates what I call the law of dissolution, using this term as the opposite of evolution.
5. It is valuable in that part of physiology which corresponds to psychology. Its occurrence in hemiplegia and in hemispasm shows us a definite relation betwixt hand and eye movements, and thus inferentially betwixt what are psychologically tactual and visual ideas.

[To be continued.]

## RECOVERY AFTER TAKING EIGHTY GRAINS OF EMETIC TARTAR.\*

By F. MASON, L.R.C.P.Ed., Surgeon to the Eye Infirmary, Bath.

TARTARATED antimony has been so seldom taken in large quantities accidentally, or used either for the purpose of suicide or murder, that the number of cases recorded of poisoning by it are very few. Casper, in his work on *Forensic Medicine*, only mentions antimony in the list of irritant poisons, without giving any cases. Taylor, in the third volume of the third series of *Guy's Hospital Reports* (1857), has collected thirty-seven cases, of which sixteen proved fatal; seven of these deaths were in young children; the smallest fatal doses were in two infants, three-quarters of a grain having been prescribed for one for some disorder of the stomach following measles, and a like quantity for another recovering from measles, and, in the adult (a medical student aged 28), two grains taken for gastric disturbance; "but, in this instance, there were circumstances which favoured the fatal operation of the poison". The largest fatal dose was one hundred and eighty grains. In the other cases, the quantity ranged between ten grains and sixty grains. The largest quantities swallowed, and from which recovery has taken place, are a girl 360 grains, a man 240 grains, and a man a tablespoonful, or 478 grains.

In 1855, Palmer was suspected, and afterwards found guilty, of having murdered John Parsons Cook by administering tartar emetic in repeated doses, and finally a dose of strychnine. This case gave rise to suspicion, and the discovery that he had in the previous year poisoned his wife also by repeated doses of tartar emetic. Imitators quickly followed, and, before the summer of 1857, two persons were tried for murder and one for the attempt at murder by administering this mineral in frequently repeated doses.

As Taylor, in the ninth edition of *Manual of Medical Jurisprudence*, published in 1874, only refers to these cases reported in 1857 and to no others, it may be assumed that no case has been recorded in the interval of seventeen years.

Some time ago, the attention of the profession and the public was forcibly directed to one of the most celebrated inquiries in the annals of medical jurisprudence, in which a verdict of wilfully poisoning by tartar emetic was returned. I consider the following case, in which eighty grains of this substance were carelessly given by a prescribing druggist, of sufficient interest to bring before your notice this evening, especially as, from the lapse of time, no harm can now follow the publication.

At half-past 9 A.M., May 12th, 1848, I received a message to go immediately to a druggist's shop in the neighbourhood of my residence. On arrival, the druggist called me to the back of the shop and told me he had by mistake given a man a large quantity of tartar emetic. The man was sitting in the front part of the shop. The mistake had arisen thus. The man had gone to the shop and asked for medicine to relieve some affection of the bowels. The druggist intended to give him a dose of quinine, but was at the time engaged in preparing a quart of antimony wine, and had the eighty grains of antimony in a mortar dissolved in a portion of the wine. He took a mortar precisely similar in size, etc., and, after preparing a draught in it, turned from the counter to get a glass for the man to drink from, when, on coming back, took the wrong mortar, gave the contents a stir, poured them into the glass and handed them to the man to drink. The man left the shop and returned to his work as a stableman before the mistake was discovered. He was then sent for to come back.

I ordered tannin, in some form or other, to be given, and a drachm of tincture of galls in water was at once administered. I also requested some strong coffee or tea to be made directly, for him to drink of it as much as he possibly could.

I went home for the stomach-pump. When I returned, the man had again gone back to his work, and I sent for him. He only complained of pain in the stomach, but not more than he had had for several days, together with diarrhoea, for which he had been under treatment. After he had taken the first cup of coffee, there was slight vomiting; this must have been nearly an hour after the antimony was swallowed. I now passed the tube of the stomach-pump, and pumped in about half a pint of milk, when the efforts to vomit became so violent, that I desisted from pumping, and, before I could reverse the action, the milk was ejected through the tube.

Before using the pump, I ordered decoction of cinchona to be made and now to be given in doses of a wineglassful every twenty minutes or half an hour, and, if he threw up one dose, to give him another imme-

\* Read before the Bath and Bristol Branch.



diately. I suggested that the man should not be allowed to leave the house, but that a bed should be made for him, and that he should go to bed at once. This suggestion was acted upon, and it was decided that he should remain in the house and be properly nursed until all dangerous symptoms had passed. I was compelled to leave for a time, but a friend promised to remain during my absence. At 4 P.M., I saw him again, and found the vomiting had been very great; but the most prominent and distressing symptom had been violent and frequently recurring cramps of the legs, relieved by forcible extension. His pulse was small, 108 to 114. He complained of pain when pressure was made over the epigastrium. He was dosing and very drowsy. At 9 P.M., he was still drowsy, perspiring profusely. The pulse was about 90, fuller and softer than at 4 o'clock. He had pain in the epigastrium.

May 13th, 8.30 A.M. He had passed a good night and felt much better. He was in no pain unless pressure were made over the epigastrium. When asked, he complained of the bowels feeling sore. Pulse soft and not so quick as last night.—2.30 P.M. The pain in the epigastrium was very slight. He now stated that he had had this pain, together with severe purging, for some weeks past; that it was better now than it had been for some days.—11 P.M. He was doing well; perspired freely. The pulse was 72, full and soft; tongue white. He was in no pain. He said that he had during the day a slight pricking pain in the bowels. The bowels had acted once during the day. There was no vomiting.

He now gave the following history. He came to Bath in December 1847, and was then in good health. Three months later, he was taken ill with swelling of the testicle; but, a fortnight before this came on, he had a severe purging, the bowels acting four or five times daily, sometimes oftener. He took no notice of the purging or swelling of the testicle until the latter became so large that he was obliged to give up his work as an ostler. He then applied to the late Mr. Haines, who gave him medicine and advised him to go to the hospital. He was an in-patient at the hospital from March 15th for one week under the care of the late Mr. Norman. He was relieved and went home, when the purging returned, frequently seven or eight times in the day, and this continued to the time of taking the antimony.

May 15th. He had passed a good night. He felt quite well, with the exception of weakness. He was in good spirits. The bowels had acted once; the motion was healthy. The tongue was coated with a yellowish brown fur. There was no thirst; the skin was covered with sweat. Pulse 60. He was ordered to take decoction of cinchona with sulphuric acid three times in the day.

On May 18th, he returned to work.

## CASE OF PENETRATING GUNSHOT-WOUND OF THE ABDOMEN.

By J. D. CROWE, L.K.Q.C.P., Surgeon Army Medical Department.

ON January 3rd, 1876, a young soldier belonging to the battery of artillery in my charge was wounded by the accidental discharge of a fowling-piece carried by his comrade. I saw the patient immediately on his being carried into camp, about half an hour after the receipt of the injury. He was then suffering from shock, but not in a very marked degree. His face was pale and anxious; his body cool (not cold), and sweating. Pulse slow, but fairly strong. He was craving for water. It was found that the charge had struck the abdomen to the left of the mesial line, the wounds of the shots covering an oval space which measured vertically six inches and horizontally five inches. The bulk of the charge entered above the level of the umbilicus. The shots were tolerably fairly scattered over the space, but in a few places they had entered in clusters of four or five grains, close together, thus making larger wounds than those caused by the single grains. The number of shot-wounds was about one hundred and sixty; the greater number of the shots could be felt under the skin, but not in those places where they had penetrated in groups. The man complained of stinging and burning pain at the seat of the injury. There was no external bleeding. Water-dressing was applied to the wounded part, some brandy and aromatic spirits of ammonia were administered, and after about half an hour he had one grain of opium, which was repeated in two hours. A warm linseed-meal poultice was placed over the wound at bedtime. He slept fairly well, and passed urine once during the night.

January 4th. The battery marched for the next camping-place at 4 A.M., the wounded man, in charge of the apothecary, being carried in a dooley. Before starting, he had some coffee and one grain of opium. When within about a mile of the camp, his bowels acted, and

I am informed by the apothecary that the motion consisted almost entirely of black altered blood, showing that the intestinal canal had been wounded. I saw the patient immediately on his arrival in camp, and found him looking pale and exhausted. He was given one grain of opium, and was able to eat some food. At 12 noon he passed a large quantity of black tarry-coloured blood streaked with bright red blood. The opium was then repeated, and a bran poultice applied over the abdomen. In the afternoon, he was sent forward to the next stage in charge of the apothecary, with orders to be carried slowly and carefully, and to have the opium repeated twice, viz., one grain on the march and one at bedtime.

On the morning of January 5th, on my arrival in camp, the apothecary reported that the patient travelled comfortably and rested well during the night. The bowels had not been moved. His diet consisted of milk, rice, and arrowroot, and a little soup once a day. He had three grains of opium during the day. The battery halted at this stage until the morning of the 7th.

On January 6th, he had passed a quiet night with several hours' sleep. There was some tenderness over the lower portion of the abdomen, with tympanites, but no constitutional disturbance; pulse quiet, tongue clean; appetite fairly good. He was ordered to have a grain of opium every fourth hour. The bran poultice was repeated. There was no motion of the bowels during the day.

January 7th. The patient slept well during the night. He was carefully carried to the next camp, having had a grain of opium before starting. He complained of headache during the day; probably due to the opium. His pupils, however, were not contracted, and his condition generally was very satisfactory. At 3 P.M., he had a motion of the bowels, consisting of firm faeces slightly coated with black blood. From this date the dejections were perfectly normal, and the man made a good recovery. A considerable number of shots came away from time to time in the poultices, but many of them may still be felt beneath the skin.

The remarkable points of the case appear to me to be these: 1. The wounded man was only four or five paces from the muzzle of the gun when it exploded; 2. The weapon was loaded with full charges of powder and shot (No. 6); the wadding, however, used, was some raw cotton which the men had picked in the fields through which they passed; 3. The entire charge of shot struck the man's abdomen, not in a close compact body as one would have expected, considering the very short distance at which the gun was fired, but scattered over a tolerably large space.

The scattering of the shots, I think, may be explained by the fact of the soft cotton which was used as wadding not confining the charge tightly in the barrel. The power of penetration was also lessened by the same circumstance, and by the fact of the charge having passed through a number of articles of clothing worn by the man before it struck his body. These were a white cotton coat, ditto trousers, a cotton shirt, flannel shirt, and thick flannel cholera-belt; in addition to which, many of the shots passed through some of the cotton (which was used as gun-wadding) carried by the man between his two shirts at the time of the accident.

## REMOVAL OF TRACHEOTOMY-TUBES.

IN the JOURNAL for May 26th, I observe, in the report of the meeting of the Royal Medical and Chirurgical Society on May 8th, 1877, an account of a case in which the cylindrical part of a tracheotomy-tube had dropped into the left bronchus. The difficulties, dangers, and delay which were encountered in the various attempts to remove it arose chiefly from an erroneous conception of the principle on which the extracting power should be applied in such cases. The copper wire is apt to hitch into the bronchial mucous membrane and bring up, as it did in the case referred to, "a large clot of blood". On the other hand, if the blades of every possible form of forceps be not equally applied on both sides of the tube when an attempt at extraction is made, the inevitable result will be to impact it more firmly. Several years ago, Professor Spence, in a case of a similar kind, discovered the true principle on which such foreign bodies should be extracted, and which, for simplicity, speed, and safety, cannot be excelled. The blades of an ordinary pair of pharyngeal forceps are introduced closed; and, acting as a probe, discover the situation of the tube. They are then passed into the lumen, firmly expanded, and equal pressure being thus established, the instrument is withdrawn, carrying the tube with it (see Spence's *Lectures*, vol. ii, p. 887). Mr. Spence, in his admirable address to the British Medical Association in Edinburgh two years ago, alluded to this plan, which, however, requires to be reiterated.

P. H. MACLAREN, M.D., F.R.C.S.E., Edinburgh.



# ON THE USE OF TEREbene IN SURGICAL DRESSINGS: A CONTRIBUTION TO ANTISEPTIC SURGERY.

By H. E. WADDY, M.R.C.S., ENG.,

Surgeon to the Gloucester County Infirmary, the County Gaol, and the Children's Hospital.

HAVING been led recently to investigate the utility for surgical purposes of terebene, an aromatic hydrocarbon, which has been introduced to the notice of the profession for disinfecting and deodorising purposes by Dr. Bond, Medical Officer of Health to the Gloucestershire Combined Sanitary District, I have thought that the results were sufficiently striking to be worth putting on record.

It is only necessary for me to premise that some of the properties which this liquid possesses seem to render it very suitable for the purposes in question. It has a pleasant odour, and it is said, when volatilising, to develop ozone. Whether this be so or not, it certainly has marked powers in neutralising putrescent odours. When applied to any surface, it exhibits remarkable adhesive properties, spreading over it in a thin film, and thus sealing it from the air, an effect which is prolonged by the slowness with which it evaporates. Lastly, it may be applied to a raw surface with impunity, and it exercises a distinctly stimulating effect on the process of cicatrisation. These are properties which any one may test for himself. It further appears, from the recent researches of Messrs. Braidwood and Vacher on Contagium, that terebene possesses germicide properties, so far as can be judged from the effect which it exhibits in destroying the vitality of vaccine matter, when applied to heifers.

Since the spring of 1875, I have used terebene very largely, both in hospital and private practice; and the conclusion to which I have been led in regard to it is, that it offers to the surgeon very important advantages for surgical purposes in the facts that, by its aid, a wound may be placed under the most favourable conditions possible for healing, and that the dressings need not be removed for weeks together—indeed, not until the wound is entirely healed; thus saving the patient a great deal of suffering and some risk, and the surgeon a large amount of trouble.

The impunity with which terebene can be applied to a raw surface is

due to its being an entirely neutral body, and to its not acting as a coagulant of albumen and gelatine, as carbolic-acid and other similar antiseptics do. It may, therefore, be brought into direct contact with the surface of a wound, which when thus covered with it is, for the reason given above, effectually protected against the absorption of foreign matters from without.

I have appended a tabular statement of some of the larger operations in which I have used terebene; but I have applied it in a number of smaller ones with equally good effect, and also as a dressing in cancerous disease and for ulcers. The point to which I wish principally to call attention is the length of time during which the dressings were left unchanged, extending in some cases to three months, without causing any prejudicial effect to the patient, but rather the reverse. It will be obvious that the advantages which are thus offered to the surgeon, in ordinary civil services, would be very largely increased in conditions where wounds have to be left unavoidably untended for a considerable length of time; for instance, after operating in the field or in military hospitals during war. In such cases, the duty of the surgeon would be confined, as indeed is the case also under any conditions in which this method of treatment is applied, to taking care that the parts are brought into proper position at the outset, so as to produce a satisfactory result when healed, and to seeing that the terebene is applied regularly to the dressings, so as to keep them saturated.

To illustrate the method of application which, in my hands, has proved successful, I give a brief description of the dressing applied after the operation for excision of the knee-joint.

Bleeding having been stopped by torsion of vessels, the wound is washed with terebene and water (an ounce to the pint, the two being well shaken together); all bone-dust and blood-clot being removed, and the skin of the limb cleansed, pure terebene is poured freely over the surfaces of the wound, and all crevices filled with it. The limb is placed on a common wooden back splint, with foot-piece properly padded, and strips of strapping fix the thigh, leg, and foot to the splint.

The edges of the wound are adapted with the fingers, and strips of lint soaked in terebene (pure) are passed tightly round the limb to maintain them in apposition, plenty of terebene being poured between the surfaces of the wound. No ligatures or sutures are used.

Cotton wool is applied outside the lint, enveloping the entire limb from toe to groin, and a bandage soaked in terebene outside the wool. The nurse is instructed to keep the outside bandage soaked in terebene,

Table of Cases.

Name.	Age.	Sex.	Disease.	Operation.	Dressing.	Date of Operation.	Dressing removed; Date; Condition.	Subsequent Dressing.	Date of Result.	Result.
H. C. A.	7	M.	Abscess of knee-joint	Knee-joint opened; part of heads of femur and tibia, and patella removed	No sutures; edges of wound adapted with strips of lint soaked in terebene; back splint and bandages applied with terebene	May 12, 1875	July 18: wound nearly healed; dressings free from odour	Lint soaked in terebene and water	Sept. 3	Cured; stiff knee
R. C. W.	9	F.	Pulpy disease of left knee-joint	Excision of knee-joint	Edges of wound brought together with strips of plaster soaked in terebene; cotton-wool and bandages soaked in terebene; back splint	June 1, 1875	Oct. 7: wound healed, except one small sinus	As above	Nov. 4	Cured; stiff joint; subsequently two small sinuses formed, dead bone came away, and leg healed entirely
A. N.	5	F.	Necrosed femur	An opening made with gouge and chisel, and sequestrum removed	Wound filled with terebene; a strip of lint bound firmly round, well soaked in terebene; splint, cotton-wool, & bandage	Oct. 4, 1875	Oct. 7: one small sinus left	As above	Dec. 7	Cured; three months afterwards, two or three small pieces of bone escaped from one small sinus
T. A. B.	6	M.	Pulpy disease of right knee-joint	Excision of joint	Wound washed in terebene, and filled with it; the rest as H. C. A.	Mar. 13, 1876	June 7: wound nearly healed; no pus	Zinc ointment	Aug. 1	Cured
A. R.	9	F.	Contracted cicatrices after burn	Cicatrices dissected out, and flaps of skin brought over	Wound surrounded with a strip of lint soaked in terebene; cotton-wool, splint, and bandage	Mar. 16, 1876	May 7: healed		May 7	Cured
L. C.	7	F.	Knee-joint in advanced disease, abscess, and necrosis	Excision of patella, head of tibia, and condyles of femur; also of the tibio-fibular joint	The same as R. C. W.	Mar. 13, 1876	June 3: three small sinuses left	Zinc ointment	Feb. 3, 1877	Cured
J. R.	4	F.	Necrosis of humerus	Opening made with gouge, and sequestrum removed	The same as A. R.	Mar. 13, 1876	May 4: cured		May 4	Cured
T. J.	24	M.	Accident	Amputation of forearm at lower third	Flaps brought into position with strips of plaster soaked in terebene; lint and cotton-wool soaked in terebene; splint and bandage	Oct. 4, 1876	Nov. 4: Three-quarters of wound healed	Water dressing	Dec. 7	Cured
J. B. E.	16	M.	Accident	Amputation of first and ring fingers	Lint, cotton-wool, and bandage soaked in terebene	Oct. 4, 1876	Nov. 4: cured		Nov. 4	Cured
L. P. T.	6	M.	Knee-joint; pulpy disease	Excision	Wound washed and filled with terebene; lint soaked in terebene; cotton-wool; bandages soaked in terebene; splint	Jan. 4, 1877	Feb. 14: wound almost healed	Zinc ointment	Feb. 22	Wounds healed entirely



a small quantity dropped two or three times daily upon it sufficing for the purpose.

A wound thus dressed may be left for weeks without a bandage or pin being removed. Before removal of the dressing, it should be well soaked with terebene for three or four hours. This is done by slowly dropping the terebene all over the surface of the bandage. It is then removed carefully, layer after layer being divided with the scissors, and fresh terebene is poured on to moisten any parts which have become matted together, when they easily separate.

I have never been troubled with any quantity of discharges; as a rule, the amount is practically *nil*. If the terebene be frequently applied, there is no unpleasant odour.

The advantages of this mode of dressing are these.

1. The patient never sees the wound; he is spared the anxiety caused by the anticipation of being dressed, and the bodily shock attendant upon the removal of dressings.

2. The wound is treated antiseptically.

3. The efforts of nature are not interfered with by accidental rough removal of dressings.

4. Perfect rest, the treatment for pain, is obtained.

5. Economy of time and labour for surgeon, assistants, and nurses, is secured.

## OBSTETRIC MEMORANDA.

### ERYSIPELAS IN CONNECTION WITH THE PUERPERAL STATE.

ON April 29th, I was asked to see Mrs. N. Having been engaged to attend her in her confinement, I expected that labour had begun; but I was wrong in my conjecture. I found her suffering from an attack of facial erysipelas, the inflammation being confined to the left side of the face. I treated her in the ordinary manner, bearing in mind that she was very near her full time. On the following day, the erysipelatous inflammation had extended across the nose to the right side of the face—the lower eyelids were involved, the upper ones escaped. The constitutional disturbance was slight; the pulse was 88, and the temperature was little above the normal standard. The lymphatics of the neck on both sides were swollen and painful. Dr. Deville saw the patient with me, and suggested that we should check the tendency of the erysipelatous inflammation to spread upwards, by painting the adjacent skin with a preparation of iron. The liquor ferri perchloridi fortior was freely applied, beginning a little below the mastoid process on one side, and going across the temples and forehead to a similar point on the other side.

About 2 A.M. on the following day, May 1st, I was hurriedly called to see the patient, as labour had commenced. The second stage was going on, and in a short time (the patient had six children before) the child was born, a well-nourished male infant. The placenta was removed without any difficulty.

Speaking of the occurrence of puerperal fever, Dr. Churchill says: "The two epidemic diseases which most commonly prevail at the same time, and under somewhat similar circumstances, are erysipelas and typhus fever, especially the former, whose presence in surgical hospitals is always indicative of impending puerperal fever. Some have gone further, and expressed their opinion of these diseases being so far identical as that infection from either erysipelas or typhus fever may give rise to puerperal fever. Mr. Nunneley, in his work on *Erysipelas*, considers the two diseases to be identical, prevailing under the same atmospheric conditions, exhibiting the same general symptoms, and each capable of reproducing the other. Dr. Hutchinson and others have seen both puerperal fever and erysipelas in the same patient at the same time, etc." Hence I watched my patient with some anxiety.

On May 2nd, the pulse and temperature were normal; the left cheek was better, the right one was swollen and painful. To be brief, on May 5th, the erysipelatous inflammation had entirely subsided.

The patient is in easy circumstances. She had a good nurse, and the greatest attention was paid to cleanliness, ventilation, etc. The lochia was not interrupted; it continued after this to the same extent as after the patient's former confinements. The secretion of milk was established in due time, and the baby exhibited no repugnance to take it freely. I saw the patient on May 14th, and was not displeased to find her seated at table enjoying a hearty dinner.

I trust this case is not without some interest in a practical point of view, seeing that the lochial and lacteal secretions were not interfered with in the slightest degree.

ALEX. FORD, L.F.P. & S.Glasg., Harrogate.

## REPORTS

OF

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### HOSPITAL NOTES.

LONDON HOSPITAL (MR. HUTCHINSON).

*Relation of Gout to Chronic Rheumatism.*—An elderly hemiplegic man, the subject of chronic arthritic rheumatism, presented the latter affection only on the paralysed side, the joints here being much distorted, while those on the other side were comparatively free from disease. In his remarks, Mr. Hutchinson said this would seem to indicate that a limb, the subject of nerve-lesion, is more susceptible to chronic arthritis than other parts. Gout is chronic rheumatism made special. Some condition of the system is added to the simple rheumatic condition, as manifested by the presence of lithate of soda in the blood and in the seat of inflammation. It is generally accompanied by a bad digestion, and at least a functional disturbance of the kidneys, and very often by organic renal changes, so that lithic acid tends to accumulate in the blood. Again, gout is probably chronic rheumatism plus a dietetic derangement. Arguments in favour of this view are found in tracing the family history of cases. In most instances of gout, the family history will show chronic rheumatism in some members, frequently on the female side, the males being liable to fully developed gout with chalky deposits. In seeking to ascertain whether a case of chronic arthritis was true gout at its commencement, inquire as to the duration of the primary attack, whether it lasted a short time and was acute in its course, or a longer time in a chronic condition—whether one joint was long attacked, the inflammation lasting many weeks as in chronic rheumatism—or whether the early attacks were acute on the various occasions attacking different joints—particularly inquiring whether the first onset was an acute inflammation of the great toe. True gout may be inherited, and thus the tendency to its development inherent to the individual, or it may be acquired by him as the result of his habits—the latter class are usually in early life full eaters, with good teeth and vigorous digestion.

*Molluscum contagiosum.*—A girl thirteen months old was the subject of numerous warty growths irregularly distributed on the limbs, face, and eyelids, with a few on the scalp, the latter being a rather unusual situation. They were mostly very small, but some were as large as small peas; many were almost pedunculated; there was generally an absence of all signs of inflammation. The child had been suckled, but the mother was free of molluscum. Nothing was noticed on the skin till the child was four months old. When the warts began to appear, they have increased in number and size to the present time. Mr. Hutchinson took a small curved pair of scissors, snipped each off, and scraped out the sebaceous contents and lining membrane with the finger-nail or scissors. No scar will result, the cutis vera being uninjured. The tumours are hypertrophied sebaceous glands, in growth tending towards the epithelial surface; they are analogous to the Meibomian glands forming tarsal tumours, and the treatment is similar; cut into them and squeeze or scrape out the cyst-wall.

*Ankylosis of the joint.*—A boy aged 16 walked to the hospital on crutches. The femur was found ankylosed to the pelvis, much new bone having been thrown out around the joint. This condition is attributed by the mother to an accident when he was three years old. In walking, in order to bring the foot to the ground, he bends the pelvis backwards by flexing the lumbar region of the spine; this produces great distortion of the body, and quite incapacitates him for all work. Mr. Hutchinson proposes to perform subcutaneous section of the femur below the trochanters and produce a false joint.

*Fracture of Patella.*—Mr. Hutchinson remarked on the almost constant atrophy of the quadriceps extensor after this accident, while the flexors, which are equally kept at rest during the treatment, do not waste; this atrophy is sometimes not recovered from on convalescence. It would seem to be in some way connected with injury of the sesamoid bone of its tendon.

OUT-PATIENT DEPARTMENT (MR. REEVES).

*Otitis and Granular Throat.*—Otitis had followed the removal of a polypus. The importance of examining both ears and the throat was insisted on. Here the throat was found to be "granular", and the seat of follicular adenitis. Mr. Reeves referred to a class of cases in children where the throat is granular and the tonsils enlarged, caus-



ing considerable obstruction to the breathing. Painting with astringents or iodine does but little good, and the following radical method has been proposed and practised by Mr. Reeves with success. Place the child under chloroform, keep the mouth open with a gag, draw the tongue forward and scrape the granular pharynx with a sharp spoon; then apply nitrate of silver.

*Early Scirrhus of the Breast* in a woman aged 56.—She had had eight children. During the last month she had felt a little aching pain in the breast. On examination, there was slight puckering of the skin near the nipple, but not involving it. Both breasts were carefully examined, the hand being laid flat over the gland. The mass was movable and not larger than a hazel-nut, but the axillary glands were already affected. Her general health was good. The patient was advised to submit to removal of the tumour and glands without delay.

*Lumbar Colotomy* for slowly growing cancer of the rectum had been performed by Mr. Reeves in a woman two years ago. At that time she was suffering from hectic fever resulting from chronic suppurating sinuses about the anus. Though the local disease has progressed, she has been in comparative comfort, the sinuses having healed after the operation.

*Inherited Syphilis* in a child, indicated by interstitial keratitis and other signs.—The child complained of pain and tenderness over the shins and patella, apparently due to subacute periostitis. The pain was worse at night, not necessarily indicating, however, a syphilitic origin. The common "growing pains" of young people are worse when warm in bed, probably owing to increased congestion due to dilatation of the vessels by warmth.

*Sarcoma of Breast and Glands of Neck* (in-patient).—This woman, aged 51, has had somewhat failing health during the last seven years. Eighteen months ago, the glands in the right side of the neck began to enlarge, with pain and constitutional failure. Seven months ago, a tumour developed in the left breast; this enlarged much more quickly than the glandular tumour. Both masses enlarged; the skin gave way, and the breast tumour sloughed out completely; there is now only a small granulating surface left. The glandular tumour in the neck has grown to the size of a foetal head at term, and is covered with a granulating surface. It is remarkable that the secondary tumour in the breast spontaneously sloughed out, the primary glandular tumour increasing the while, though very slowly. The extreme rapidity of its early growth and the soft consistence of the tumour did not permit the hope of a result so unexpectedly favourable thus far. The treatment was general and expectant.

*Lymphadenoma (post mortem examination by Dr. Sutton).*—A lad aged 15 was admitted under Dr. Woodman, six weeks before, complaining of "rheumatic pains and increasing deafness". In hospital, he was found to have double optic neuritis; he became weaker, more deaf, and completely blind. Latterly, the glands under the jaw, and in the axillæ and groins, enlarged rapidly, as did also the spleen. The number of white blood-corpuses was greatly increased; the urine was occasionally albuminous. A systolic bruit developed over the heart, and there was occasional hæmorrhage from the mouth.—*Post mortem examination.* The spleen measured seven inches vertically, and weighed twelve ounces: it appeared hypertrophied, but its texture was "too fleshy". The peritoneum presented ecchymoses. The kidneys were very large and white, resembling parsnips: each measured five inches and a half vertically, and weighed nine ounces and a half; the surface and section were studded with ecchymoses. The distinction of medulla and cortex was nearly lost; but, on careful examination, the cortex was seen in parts nearly an inch thick. This enlargement was probably due to adenoid growth. The liver was mostly healthy, but in parts there were semigelatinous masses, probably connected with Gliston's capsule. The lymphatic glands in the groins were much enlarged: some were swollen, dark, hæmorrhagic-looking; others were more enlarged, pale, mottled by a white material infiltrated through the congested part, more grey, less congested. The lumbar glands were also enlarged and grey. The thymus was very large, extending on the pericardium between the lungs nearly to the apex of the heart, thus much enlarging the area of præcordial dulness—a condition that might during life resemble pericardial effusion. The gland adhered to the pericardium: its substance was not healthy; in colour and consistence it resembled parsnip. The thyroid was healthy. There was chronic pericarditis, with ecchymoses on the epicardium. The lungs were mostly healthy, but in patches highly congested on the seat of hæmorrhage; there were also a few hard pea-like masses darkly pigmented. The dura mater was dull and milky; there were numerous ecchymoses along the course of the meningeal vessels. On its inner surface was a considerable amount of extravasation, principally in the course of the vessels; also seen on section of the dura mater, which was thickened.

In other parts, the inner layers were cedematous. The sinuses contained pale clot. The surface of the brain was anæmic; there was no effusion, but one small ecchymosis over the cerebellum. There was no evidence of morbid growth or other disease of the brain. The retina and optic discs were studded with hæmorrhagic extravasations.—Dr. Sutton remarked that in lymphadenoma it is notorious that the glandular hypertrophy is usually general; but in one case he had found a single adenoid mass growing from the pelvis and scarcely any glandular enlargement. In a second case, bearing upon the present, the kidneys were enlarged, and the pericardium immensely hypertrophied beneath the thymus, the disease extending from it to the pericardium and lungs. In a third case, the kidneys were much enlarged, and affected as in the present case; the spleen was much increased in size; and the glands scarcely affected. The simply enlarged spleen tends to a larger size than that with "parsnip-deposit".

## GENERAL COUNCIL

OF

### MEDICAL EDUCATION AND REGISTRATION.

SESSION, 1877.

Thursday, May 24th, 1877.

DR. ACLAND, President, took the chair at 2 P.M.

*Report of Finance Committee.*—The financial report for 1877 was read. [We omit the tables appended, with the references to them.]

"The Finance Committee report that the income of the Council during the year 1876 has been £6,286 : 6 : 9, a sum exceeding the income of the preceding year by £408 : 7 : 1. The expenditure during the year has been £5,911 : 19 : 2, a sum less than the expenditure of the preceding year by £375 : 0 : 4. It will thus be satisfactory to observe that, whilst in the year 1875 the expenditure of the Council exceeded its income by £820 : 19 : 10, in the year (1876) now brought to a close, the income has exceeded the expenditure by a sum of £374 : 7 : 7....."

"The amount of fees paid to the Council during the last year was larger than that of the preceding year by £309 : 15, a result due to the meeting of 1876 lasting eleven days, whilst that of 1875 occupied nine days.

"The fees paid to the Executive Committee are in 1876 in excess of those paid in 1875 by £111 : 6. The item for printing has again increased in 1876; it amounts for that year to £1,161 : 4 : 8, being in excess of the preceding year by £173 : 11 : 8. The subject of the cost of printing claims special attention from the Council. In 1874, it was £582 : 11 : 6; whilst in 1876 it has doubled this amount, being, as just stated, £1,161 : 4 : 8.

"The items showing a diminished expenditure for the year 1876 will be found to occur in the sums paid to Visitors of Examination (£718 : 4), in printing the Reports of Visitors of Examination (£219 : 8), and in house expenses (£171 : 10).

"A table shows the comparative income and expenditure of the Council during the last seven years. It will be seen that, with two exceptions, the income of the Society has been in excess of the expenditure.

"The Committee is unwilling to believe that the Council, when it expressed to their late Registrar, on his retirement, the deep sense they entertained of the courtesy and ability with which for eighteen years he discharged his duties to the Council, desired that no other acknowledgment of his valuable services should be offered to him. On the contrary, the Committee believes that it speaks the general wish of the Council in recommending that two hundred guineas be presented by the Council to their late Registrar, Dr. Hawkins, in recognition of his long and faithful services."

DR. QUAIN moved, DR. PITMAN seconded, and it was resolved, that the report be received and entered on the minutes.

DR. QUAIN moved the adoption of the report. The expense for printing was large; but it was hoped that this would be diminished. He would direct special attention to the concluding paragraph of the report, which, he believed, expressed the general wish of the Council. The Council had no power of granting retiring pensions; in which respect it was an exception to all other public and private offices. It might be a question for consideration at some time whether retiring pensions should be established. This want of power to give a pension might have been a source of difficulty, had not the late registrar been a conscientious man, and retired when he found that he could no longer perform the duties of his office. Dr. Hawkins had given up other offices to take the appointment of registrar, and had performed the



duties of that office for eighteen years without an increase of salary. The sum was a moderate one which the Committee recommended to be given to him in recognition of the valuable services which he had rendered to the Council.

Dr. PITMAN seconded the motion. No one could have been more anxious to discharge his duties than Dr. Hawkins; and, though he (Dr. Pitman) had not long had direct opportunity of observation, he had no doubt that he had performed them to the satisfaction of the Council.

Dr. AQUILLA SMITH moved that the last paragraph of the report be not adopted. He did so from a sense of duty, and not in any way undervaluing the services of Dr. Hawkins. If the proposal were a proper one, it should have been made last year; but it was first brought forward in the Executive Committee after the session of 1876, and he opposed it throughout as a member of the Executive and Finance Committees and as a member of the General Council. The Council were trustees of the moneys in hand on behalf of the profession; and, even if they had ten times as much, he did not think such a vote justifiable. He thought also that it was illegal. Dr. Andrew Wood, as Chairman of the Business Committee, had devoted more time to the affairs of the Council than any three other members. He would willingly vote a sum of two hundred guineas or even more to Dr. Wood; but he did not think that the Council had power to do so.

Sir DOMINIC CORRIGAN seconded the amendment. He said that the proposal was illegal, and that the payment to Dr. Hawkins would not be approved by the Treasury. In voting the money, the Council would make themselves individually responsible.

Dr. ANDREW WOOD pointed out that on two previous occasions gratuities (of one hundred guineas and fifty guineas respectively) had been voted to Dr. Hawkins, and no objection had been made. Mr. Ouvry, the solicitor of the Council, had told them that the proposal was quite legal.

The amendment was lost; three members only voted for it. The report was adopted as given above, with the tables.

*Report of the Pharmacopœia Committee.*—The following report of the Pharmacopœia Committee, having been read, was received and adopted on the proposal of Dr. QUAIN, seconded by Dr. A. SMITH.

"The Committee beg to report that, in accordance with the resolutions of the Council adopted at its last meeting, the *Pharmacopœia* has been reprinted, to the number of 5,000 copies. The cost of reprinting, together with the amount paid to Dr. Redwood for seeing the work through the press, amounts to £513:5. Since February 19th, when the work was ready for sale, 680 copies have been sold. The gross sale of the *Pharmacopœia*—edition of 1867—amounts now to 30,680 copies."

*Prosecution of Unqualified Practitioners.*—The Council considered the following resolution, passed by the members of the North of England Branch of the British Medical Association: "That it is the duty of the General Medical Council to prosecute unqualified medical practitioners."

Dr. STORRAR proposed, and Dr. HALDANE seconded:

"That the attention of the North of England Branch of the British Medical Association be drawn to Minute 3 of the Proceedings of the General Medical Council of August 3rd, 1859, and to Minute 5 of the 4th of August, 1859, copies of which the Registrar is requested to transmit, and to inform them that, after mature deliberation, the Council sees no cause to alter the determination then arrived at."

Sir DOMINIC CORRIGAN agreed that the Council could not become public prosecutors; but it was their duty to take notice of a disagreeable fact—the custom of employing unqualified assistants. He thought that the Council resembled Mrs. Jellyby in Dickens's *Bleak House*, who neglected the poor of her own country and her own family to indulge in telescopic philanthropy for the benefit of the inhabitants of Africa. The Council took care for the provision of medical attendance for the rich visitors at Nice and Mentone, but did not look to the proper provision of practitioners for the poor at home. In Ireland, no dispensary medical officer could employ an unqualified assistant, as was done in England. He moved as an amendment:

"That, while the Council [as expressed in the preceding resolution] cannot undertake the duty of prosecuting unqualified practitioners, they nevertheless think it their duty to draw the attention of the Local Government Board of England to a practice, which it would appear exists in England, of practitioners in charge of medical relief districts employing unqualified assistants, tending to the detriment of the public, and other evils; and they would suggest to the Local Government Board of England the consideration of the rule in Ireland, that no medical officer in charge of any dispensary district is permitted to have a substitute to perform his duties unless for a limited time, and unless such substitute is fully qualified to the satisfaction of the

dispensary board, and with the sanction of the Local Government Board."

Dr. SMITH seconded the amendment.

Mr. TURNER said that the motion and the amendment pointed to two different things. The motion referred to unqualified persons practising on their own account. He suggested that the attention of the North of England Branch should also be called to certain parts of the report of the Medical Acts' Committee, in order that it might be seen that the subject had been brought under the notice of the legislature.

Mr. SIMON agreed with Sir Dominic Corrigan in commending the Irish system, and in disapproving of the employment of unqualified assistants to treat the poor. But he thought that the case was different from that referred to in the motion. He suggested that there were scarcely facts enough at hand on which a representation to the Government might be founded.

Sir D. CORRIGAN agreed to put his amendment as a separate motion.

The motion proposed by Dr. STORRAR was then carried in the following form.

"That the attention of the North of England Branch of the British Medical Association be drawn to Minute 3 of the Proceedings of the General Medical Council of August 3rd, 1859, to Minute 5 of the 4th of August, 1859, and to Section (C) of the Report of the Medical Acts' Committee, May 17th, 1877, adopted by the Council, copies of which the Registrar is requested to transmit, and to inform them that, after mature deliberation, the Council sees no cause to alter the determination then arrived at."

Sir DOMINIC CORRIGAN then proposed his amendment as a substantive motion, inserting the words "as expressed in the preceding resolution".

Sir WILLIAM GULL thought that the question raised by Sir D. Corrigan was too large for immediate consideration.

The motion proposed by Sir D. Corrigan was put to the vote and lost; six voting for, and eight against it.

*The Conjoint Scheme for England.*—Sir JAMES PAGET moved:

"That the sanction of the General Council be given to the union of the Universities of Oxford, Cambridge, Durham, and London, and of the Royal College of Physicians of London, the Royal College of Surgeons of England, and the Society of Apothecaries of London, for the purpose of co-operating on the basis of the amended scheme herewith presented, in conducting the examinations required for qualifications to be registered under the Medical Act."

In 1872, the sanction of the Council had been given to a somewhat similar scheme, which did not, however, include the Society of Apothecaries. The difficulties which prevented the Apothecaries' Society and also the Royal College of Surgeons from taking part in the scheme had been removed by Acts of Parliament. The delay of two years since the passing of the Acts had arisen from the necessity of considering certain matters of detail, which did not, however, affect the general character of the conjoint scheme presented four years ago. There were still some further points for consideration; but he asked the Council to approve of the basis of the scheme.

Sir WILLIAM GULL seconded the motion, and congratulated Sir James Paget, as Chairman of the Conference, on having got so far through the labours of preparing the conjoint scheme.

In reply to some remarks on the question of admitting women to the examination, Sir JAMES PAGET explained that the matter was under consideration, with the view of meeting the objection of the Royal College of Surgeons to admit women as members.

Dr. ALLEN THOMSON asked how it was secured that the examiners nominated by the Committee of Reference would be appointed by the licensing bodies.

Dr. QUAIN said that the several bodies were to appoint the Committee of Reference, and this Committee was to elect the examiners.

Mr. LISTER thought that it would have been better if the corporations had formed a conjoint board without the Universities. A system such as that proposed for England could not be carried out in the other divisions of the kingdom. To attempt to carry it out in Scotland, would be to inflict a most heavy blow on medical education in the Universities. He thought that the influence of the Universities would be to raise unduly certain points of education. He objected also to the proposal that those desiring degrees, as of the University of London, should be compelled to undergo two examinations. He thought it premature to approve of a scheme, the details of which were not yet settled.

Mr. SIMON thought that the co-operation of the Universities in the scheme was most fortunate.

Mr. MAXNAMARA asked if it was intended that women should not be admitted to the conjoint examination; and as to the subjects of examination.



Sir JAMES PAGET said that the Committee of Reference would endeavour to adopt the recommendation of the Medical Council with regard to the subjects of examination. The question of the admission of women was still under consideration. The College of Surgeons objected to any scheme which would enable women to claim the membership of the College.

Dr. ANDREW WOOD wished the English bodies good speed with their conjoint scheme. A better plan, however, would be the co-operation of the corporations in each of the three kingdoms; and that the Universities should co-operate to grant the higher degrees. He feared that, on the one hand, the standard of examination for general practice might be raised too high; and, on the other, that the examinations of the Universities might be lowered.

Dr. HUMPHRY said that the examination for University degrees would be altogether independent of the Conjoint Board; but those desiring the degrees must have previously passed the examinations of the Board. He did not think there was any reason to fear that the standard for legal qualification to practise would be unduly raised. It was a principle of the Medical Act that the Universities should take part in the education and examination of candidates for the medical profession. The Universities had not forced themselves on the corporations; but their co-operation had been invited by the Colleges of Physicians and Surgeons after the plan had been originally drawn up. The co-operation of the Universities would bring them into closer contact with the profession—a thing much to be desired; and it would give them an opportunity of raising the standard for degrees, which must be to some extent kept down so long as the degrees gave licence to practise.

Dr. PITMAN was surprised that any objection to the scheme could be raised after the Council had approved of a similar one on a former occasion, and several years had been spent in the endeavour to complete it.

The PRESIDENT said that, in the unavoidable absence of the representative of the University of Oxford (Dr. Rolleston), who would, if present, approve of the scheme, he would state that he believed that the combination of all the bodies was advantageous.

The motion was carried.

Sir WILLIAM GULL gave notice that, in the next session of the Council, he will inquire why conjoint examining boards have not been formed in other divisions of the kingdom.

*Education of Midwives in England.*—The following report from the Medical Acts' Committee on the proposals of the Obstetrical Society with regard to women acting as midwives in England was read.

"1. The last subject on which the Committee has to report, as referred for such purpose by the Council, is the subject of certain proposals which the Obstetrical Society has submitted to Her Majesty's Government, and on which the Lord President has requested the advice of the Medical Council, as to imposing special conditions on women who desire to act (in England) as professed midwives.

"2. The proposals of the Obstetrical Society, regarded in their general intention, may apparently be defined as having these two essential aims: first, that means under legal sanction should be provided for giving credentials of qualification to competent midwives; and secondly, that the lives of women in labour should be protected as far as practicable from the incompetent.

"3. It appears to the Committee that these aims are such as must commend themselves to all reasonable persons who are acquainted with the wants of popular life in England; and that the Obstetrical Society has done well in submitting to her Majesty's Government representations which as coming from that Society cannot fail to be of influence, in favour of objects so important.

"4. It was perhaps hardly necessary that the Obstetrical Society, in advocating those objects, should present so detailed a scheme of the provisions which it would propose for attaining them; and the Committee is most anxious not to seem in any degree to disparage the aims of the Society when it reports, as it now must report, with regard to the proposed details, that they, in the opinion of the Committee, require reconsideration.

"5. Particularly the Committee would observe that, in its opinion, not even a permissive, much less an obligatory general law, for the examination, registration, and regulation of midwives in England, could, with any prospects of success, found itself on such very imperfect local arrangements as are proposed in the present scheme. If the question were one of voluntary local associations to give certificates of merit to midwives, such might require no stronger local machinery than those which the present scheme proposes; but the intention being what it is, and requiring to be well secured under legal sanctions, the nature of the case would, in the opinion of the Committee, require that the local administration of the law should be assigned (in sufficiently large jurisdictions) to strongly constituted lay authorities, each appointing a

medical board for the medical purposes of the law, and having a public office where the business of the registration could be carried on, and having funds at its disposal for such necessary expenses as the registration-fees of midwives would probably not cover. The consideration of the scheme in that point of view is evidently not for the Medical Council, but for those who advise Her Majesty's Government on matters of local administration; and it is therefore only in order to illustrate the meaning of the above remarks, that the Committee would refer to the local authorities—courts of quarter-session and the like—which are found necessary for working the respective laws concerning lunatic asylums, food-adulteration, etc.

"6. In a different point of view, the Committee would bring under notice of the Council that the penal provision which the Obstetrical Society proposes for enactment would in two respects be an exception to the spirit of the present law concerning unqualified medical practice for gain: first, as proposing in respect of midwives that the mere act of the unqualified practice should be a misdemeanour; and secondly, as reserving liberty to male persons to do what the law would forbid female persons to do. The Committee is not prepared to say that no sufficient reasons can be urged for the proposed exceptional legislation; but as readers who might regard the proposals in their merely legal relations would perhaps here be struck with the appearance of anomaly, the Committee would suggest that, if the general scheme is hereafter reconsidered by the Society, this part of the proposals, if it is to be maintained, should be supported by adequate arguments.

"7. The Committee does not feel itself required to report on the details which sections 18-24 of the scheme propose for the examination and regulation of midwives; but having regard to the great public importance of a matter which it finds not mentioned in those sections, the Committee has to observe that, in its opinion, the rules would be insufficient, both as to the knowledge and as to the conduct of midwives, if they did not, under both heads, expressly refer to the ways in which puerperal and other fevers are spread, and to the faults by which persons in attendance on lying-in women have often carried deadly infections from house to house.

"8. In some parts of the proposed scheme, the Obstetrical Society seems to the Committee to contemplate that the General Medical Council should stand in administrative relations to the scheme; but the Committee is not aware of any reasons for which this connection would be desirable, and is of opinion that the Council, with its present organisation and resources, could not lightly agree to have any such administrative responsibility imposed on it. The Committee does not clearly see that, if county registers of certified midwives were kept under the proper local authorities, adequate reasons would be found to require, or even to justify, the further cost of a central registration; nor does the Committee suppose that, if the law made due provision for the required local organisation and action, much (if any) room would remain, in so simple a matter, for supervision or other action by a central administrative authority. Doubtless, so far as it may be found necessary to submit the working of the law to the supervision and control of the central government, the Medical Council would be called upon to advise the Government on any questions of an educational and disciplinary kind wherein general rules may have to be issued; but, in the opinion of the Committee, it would not be expedient that the Council should accept any more detailed responsibility than this with regard to the midwives of England.

"9. In conclusion, it appears to the Committee that, subject to the above remarks, the Council may properly express an opinion in favour of legislation for such objects as were described in the second paragraph of this report; but whether, if the objects are to be aimed at by legislation, the legislation should be obligatory or merely permissive in its relation to the local authorities, is a question which the Committee has not felt itself required to consider. Any proposed legislation would probably be shaped by the Local Government Board; and that Board, if undertaking a Bill, would no doubt be glad, as regards its details, to confer with the representatives of the Obstetrical Society. The Committee has reason to believe that legislation in regard of midwives would, in the present session of Parliament, be impossible. And if such be the case, the postponement may, in the Committee's opinion, have two advantages: first, that the proposals of the Obstetrical Society may in some respects be amended on reconsideration; and secondly, that legislation regarding midwives will perhaps be easier for those who undertake it, when the licensing bodies of the medical profession shall have settled questions, which they now have open, with regard to women who desire to be on the *Medical Register*, with qualifications higher than that of midwives."

The Council having resolved itself into Committee for the consideration of the Report, Mr. SIMON moved, and Sir W. GULL seconded, its adoption.



Dr. ANDREW WOOD moved as an amendment :

"That it seems expedient that the Council delay communicating to the Government any definite decision, and that the Report of the Committee, along with copies of the suggestions of the Obstetrical Society, be forwarded to the licensing bodies, with the request that they would consider the subject and forward to the Executive Committee their observations upon it on or before the 1st January, 1878; and that this resolution be forwarded to the Government."

There was no urgency; and the matter was too important for the Council to decide until the licensing bodies had considered it. Much benefit would arise from sending the report to them, along with the proposals of the Obstetrical Society. Many points in the report were, in his opinion, very questionable. If there were any legislation at all on the subject, it should be imperial legislation, and not be confined to England. There must be a central register, otherwise the plan would be worth nothing. The fee of a shilling for registration, proposed by the Obstetrical Society, was, he thought, too low. As to the examining boards, who were so qualified to appoint them as the medical licensing bodies? If local boards were appointed here and there, uniformity would not be attainable. He did not agree with the opinion expressed in the report, that the Medical Council should not take the subject in hand. The object of the Medical Act was the benefit of the public; and, if the Council encouraged the education of midwives, it ought to have supervision over them. As regarded the last clause, he objected to giving as a reason for not legislating that a moot question had not been settled which might not be decided for a long time.

Dr. A. SMITH seconded the amendment. In Ireland, licences had for some time been granted to midwives and nurse-tenders by the King and Queen's College of Physicians in Ireland.

Sir DOMINIC CORRIGAN supported the amendment, and remarked that the dispensary medical officers in Ireland were required to have licences in midwifery.

Mr. MACNAMARA read extracts from a letter from Dr. Sinclair, describing the results of the education of army midwives in Sir Patrick Dun's Hospital in Dublin. Three hundred and eleven of these women had been qualified and received appointments.

Sir JAMES PAGET said that any system of registration of midwives that might be adopted should be under the direction of the Council.

Dr. PITMAN opposed the amendment. The Council had been asked to express an opinion on the subject, and he doubted whether it ought to refer the matter to other bodies.

After some remarks from Sir W. Gull, Sir D. Corrigan, and Mr. Simon, the amendment was put to the vote and lost; nine voting for, and eleven against it.

Dr. ANDREW WOOD required that the names and numbers of those who voted for and against the amendment, and those who did not vote, be taken down.

*Majority, 11:* Dr. Pitman, Sir James Paget, Dr. Humphry, Dr. Pyle, Dr. Storrar, Mr. Turner, Dr. Thomson, Mr. Macnamara, Dr. Leet, Sir William Gull, Mr. Simon. *Minority, 9:* Dr. Haldane, Dr. Andrew Wood, Dr. Fleming, Dr. A. Smith, Dr. Apjohn, Mr. Teale, Mr. Lister, Sir D. Corrigan, Dr. Hudson. *Did not Vote:* The President. *Absent:* Mr. Bradford, Dr. Rolleston, Dr. Quain.

The original motion was withdrawn; and the following, moved by Mr. SIMON, and seconded by Sir WILLIAM GULL, was agreed to :

"That the Council, without assenting in all details to the scheme of the Obstetrical Society, is of opinion, with the Society, that it would be desirable to provide by legislation for the following two objects : first, that means under legal sanction should be provided for giving credentials of qualification to competent midwives; and secondly, that the lives of women in labour should, so far as practicable, be protected from the incompetent."

It was moved by Mr. SIMON, and seconded by Dr. STORRAR :

"That the above resolution be transmitted to the Lord President of Her Majesty's Privy Council, and that it be suggested to his Grace to consider whether it might be of advantage that the proposals of the Obstetrical Society, together with a copy of the present resolution, should be communicated by his Grace to the Local Government Board."

Mr. TURNER moved, as an amendment, and Sir JAMES PAGET seconded :

"That the above resolution be communicated to the Lord President of Her Majesty's Privy Council."

This was carried; and, being put as a substantive motion, was agreed to.

*The Cruelty to Animals Act.* The following letter was read, and ordered to be entered on the minutes.

"37, Dorset Square, May 10th, 1877.

"Sir,—At the annual general meeting of the Physiological Society,

held this evening, I was directed to communicate to you, for the information of the General Medical Council, the following facts relating to the working of the 'Cruelty to Animals Act, 1876'.

"Numerous applications have been made by members of this Society for permission to conduct physiological or medical researches. The applications have been supported in each case by certificates signed in accordance with the Act.

"In some cases, the applications have been refused; in others, the certificate has been indefinitely suspended, without cause assigned.

"The administration of the Act has seriously embarrassed real physiological inquiry; and it bids fair to render impossible various investigations which have direct and important bearing on the saving of human life.

"I beg leave to express, on the part of this Society, the hope that the Council will take such action in the matter as may to them appear expedient. (Signed) "GERALD F. YEO."

"The President of the Medical Council."

Mr. SIMON moved :

"That the Council learns with regret that the Cruelty to Animals Act of last Session, as hitherto administered, is complained of by several highly meritorious cultivators of physiology and pathology in this country, as seriously impeding them in their legitimate studies."

"That the further consideration of this subject be remitted to the Executive Committee to take cognisance of the further operation of the Act, and, if complaints continue, and in the opinion of the Committee are well-founded, to bring them under the notice of the Home Secretary, with such suggestions as may be suitable under the circumstances."

He referred to nine cases—the particulars of which had been furnished to him—in which complaints were made by persons well known as investigators in physiology, that sanction to perform experiments had either been refused to them or had been greatly delayed. The persons to whom he referred were well known to members of the Council, and were quite incapable of recklessness in experiments on animals. It had been said that the Cruelty to Animals Act was not intended to interfere with research by competent persons. In the list of nine persons before him, it was stated that applications had been made for licences to perform experiments with respect to the connection between the chemical composition and the therapeutic action of drugs; on the repair of bone; on the action of various new remedies; on the pathology of rheumatism and of diabetes; on intestinal secretion; on the excitation of muscles; and on the secretion of bile. For several of these researches, grants had been made by the British Association and British Medical Association; several of the applicants were teachers in medical schools, some were Fellows of the Royal Society, and all were properly recommended. If unreasonable hindrance were put in the way of investigation, it would be necessary to get the work done by proxy or to go abroad; and the study of physiology would be arrested, or the law would be evaded. He would look with regret on a mutiny against the law; but unjust working of a law was apt to produce this. Persons who felt aggrieved by experiments on animals, should have their cases well examined by competent bodies in order to ascertain whether the complaints were well founded. An eminent physiologist had pointed out to him that certain of the cases which he had mentioned referred to medical and therapeutical investigations by persons long acknowledged as teachers, who had published important investigations, and whose purposes and methods of research had been approved by the highest authorities in the country. What could the Council do? His first impression had been that they should communicate with the Home Secretary; but, perhaps, it would be best for the present to take a middle course.

Sir WILLIAM GULL seconded the motion. The Council could not leave the matter alone; all its members had a duty to perform as directors of medical education. Medical knowledge must be advanced by careful research, and placed on a physiological basis.

The motion was agreed to.

*Continuation of Business.* Mr. LISTER moved, and Mr. THORNTON seconded :

"That it is undesirable that any teaching or licensing body should insist on the student taking more than one course of lectures on any one subject."

Mr. SIMON moved as an amendment, and Dr. APJOHN seconded :

"That it is undesirable that any teaching or licensing body should insist on the student attending more than once the same course of lectures on any one subject."

The amendment was negatived. The original motion was put to the vote and carried.

*Resolution of the Council.* The following resolution was moved by Dr. ANDREW WOOD, seconded by Mr. TURNER, and agreed to :

"That the table of results of physiological experiments be a degree of



diplomas, and licences granted in 1876 by the bodies in Schedule (A) to the Medical Act, be received, entered in the minutes, and transmitted to the licensing bodies." (See JOURNAL of May 19th, p. 613.)

*Statistics of the Medical Profession.*—The following documents were ordered to be received and entered on the minutes: 1. Observations on Statistics, and Suggestions respecting "the Supply of Medical Men", in the President's Address delivered at the meeting of the Medical Council on May 24th, 1876, by Dr. Aquilla Smith; 2. Remarks on Dr. Smith's Observations, by Dr. W. Farr, F.R.S.; and 3. A Letter with Statistical Tables from Dr. Robertson, of the Register House, Edinburgh.

*Various Business.*—A communication from the Apothecaries' Society of London was referred to the Executive Committee.

The official notices of the reappointments of Dr. Leet, Mr. Bradford, Mr. Macnamara, and Sir D. Corrigan, were received for record in the minutes.

An answer from the University of London to the questions on Professional Examination, proposed by the Executive Committee, was ordered to be received and entered on the minutes.

*Executive Committee.*—It was agreed, on the proposal of Dr. Aquilla Smith, seconded by Dr. Andrew Wood:

"That the powers and duties heretofore delegated to the Executive Committee shall be vested in the said Committee until the next meeting of the General Medical Council."

*Votes of Thanks.*—The following votes of thanks were unanimously agreed to on the proposal of Dr. Aquilla Smith:

"That the cordial thanks of this Council are eminently due, and are hereby tendered, to Dr. Andrew Wood, for his services as Chairman of the Business Committee during the present session of the Council."

"That the thanks of the Council are due, and are hereby tendered, to the Treasurers, Dr. Quain and Dr. Pitman, for their services."

"That the thanks of the Council are hereby cordially tendered to Dr. Acland, the President, for his efficient services during the present session of the Medical Council."

## REPORTS OF SOCIETIES.

### PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 15TH, 1877.

CHARLES MURCHISON, M.D., F.R.S., President, in the Chair.

*The Arteries in Bright's Disease.*—THE PRESIDENT announced that a committee had been formed to investigate and report on the condition of the arteries in Bright's disease, and that it consisted of Drs. Burdon Sanderson, Bristowe, Gowers, Charles, and Mr. Schäfer.

*Leprous Nerve-Disease.*—DR. DOUGLAS POWELL read for Dr. VANDYKE CARTER some memoranda on the diseases of the nerves in true leprosy. It was a form of neuritis, and was the most constant phenomenon connected with the disease. In one-half of a number of recent *post mortem* examinations of lepers, alterations of the cutaneous nerves were found; especially were the radial, ulnar, long saphenous, and similar nerves affected. Certain of the nerve-filaments were of a brown colour, and these were connected with spots or sores. The nerve-changes commenced in the skin first, and then proceeded centrally. Brown bodies were found amidst the nerve-fasciculi. These foreign bodies probably excited the neuritis, which spread under some anatomical condition not yet made out, but probably through the lymphatics. These brown bodies ultimately became absorbed, and the neuritis was left.—THE PRESIDENT said that these conclusions were the same as were arrived at by some other authorities.

THE PRESIDENT announced that Mr. Nunn had under the microscopes the illustrations of certain nerve-diseases belonging to Professor Charcot, which were described in the report of the last meeting.

*Cystic Disease of the Testicle.*—MR. J. W. HAWARD then gave an account of the case, which occurred in a man aged 30, who had had syphilis. The left testicle grew hard, and became of the size of an average lemon; the glands of the groin being also affected. The skin was traversed by veins; then the skin ulcerated and fungated, the testicle remaining unchanged. At the *post mortem* examination, the left lumbar glands were found involved and the seat of medullary cancer. The disease of the testis was entirely cystic, the cysts varying in size from a pin's head to a pea. There was little intervening tissue, and in it were a few epithelioid cells. The contents of the cysts consisted of debris and nuclear cells. The disease was of mixed character, there being dilated tubes, cartilage, and cancer.

*Morphæa.*—MR. MORRANT BAKER exhibited a living specimen of

morphæa. It occurred in a woman aged 50, married. It commenced six years ago in a small spot, and gradually extended till it now formed a considerable patch. It had always produced intolerable itching.

*Bromide Rash.*—DR. DAVID LEES exhibited an infant aged nine months with a pronounced bromide rash. A month ago, it had convulsions, and had five grains and a half of bromide of potassium given every three hours, under the opinion that it was suffering from acute hydrocephalus. Under this treatment, the symptoms quite disappeared. The rash appeared in spots like the points of acne, with a yellow spot in the centre. These spots then coalesced and formed patches; these patches again became covered with a crust, which was really a dried secretion. Where these crusts were exposed to friction, as on the neck, long papillæ might be seen. These minute yellow spots were characteristic. In this case, the rash came on as the bromide was being given up.—THE PRESIDENT remarked that it was curious how these rashes were produced in some persons, while others could take any amount of the bromide without any such result.—MR. M. BAKER said perhaps the early age had some effect.—DR. DOUGLAS POWELL pointed out that bromide of potassium was soon eliminated. How did the rash come on as it was being given up?—DR. MAHOMED had seen a case where the child died of kidney-disease. Were the kidneys healthy in this case?—DR. BARLOW said the early age had something to do with it. He had seen an identical rash in a child of six months, where the bromide of ammonium had been given in small doses. In that case, there was also a filiform rash on the neck.

*Cirrhosis of the Liver.*—DR. GRIFFITHS of Swansea exhibited a typical specimen of liver-cirrhosis. It occurred in a man aged 50, of fine physique, but who suffered from valvular disease of the heart. The liver was distinctly smaller than normal; but, later on, it appeared to increase in size, and the question arose, Could a cirrhotic liver enlarge? It went on increasing till death. After death, it was found still smaller than normal, but half rotated on its own axis, which created the impression of an increase in size. Such a condition was not uncommon in women who had borne large families. The liver measured ten inches by eight inches, and was two inches and a quarter deep at its thickest part.

*Melanotic Sarcoma of Choroid.*—MR. SPENCER WATSON described a case of this disease which was diagnosed by the ophthalmoscope, and the eye removed.

*Chondroma of Submaxillary Gland.*—MR. BUTLIN brought before the Society a case of this disease which showed itself in a girl aged 15. It had been growing for four years. There was no marked pain. The mass protruded from under the lower jaw, and was very hard. It was easily removed. When cut into, it was found to consist of hyaline cartilage with stellate cells and remains of acini. It was probably cartilaginous. Such tumours were common in the parotid gland, but very rare in the submaxillary. Virchow held that such growths had their origin in some blow or injury.—MR. RUSHTON PARKER spoke of the origin of these tumours, and of the remains of acini and of true gland-structure found in them. He related a case of a tumour which was thought to be submaxillary, but which was really a growth from the parotid. They arose from the connective tissue of the glands. It had been asserted that they arose from some remains of the cartilage of Meckel.—MR. ALBAN DORAN said the glands were not formed from this cartilage, in which opinion MR. BUTLIN concurred.

*Pericardial Omental Hernia.*—MR. M. BAKER related the history of this case, which occurred in a man aged 50, who was the subject of urethral stricture. He was taken into St. Bartholomew's Hospital, where the stricture improved, but the man died. His chest had been examined by the house-physician, and nothing abnormal remarked. On *post mortem* examination, a mass of omentum as large as the outspread hand and fingers was found covering the heart. The opening in the diaphragm would admit a finger. The pericardium was quite normal, and the omentum was but slightly adherent. Corresponding to this perforation of the diaphragm was to be seen a scar on the skin, and under it the fifth rib had been cut through. Here evidently was an old wound long healed. The case was of interest as to the mode of occurrence of the hernia. No history was attainable, except that the man had been in America. If there had been no wound, the case would have been thought congenital. Other traumatic cases were on record. Another point was, how did so large a mass get through so small a hole? Mr. Baker went into an ingenious argument as to the "negative pressure" in the thorax. The lungs tended at each respiration to draw away from their parietes, including the pericardium. This negative pressure was increased by the heart's reduction in bulk on each contraction. The omentum had thus probably been pulled in gradually.—MR. WAGSTAFFE remarked that active indrawing could be seen in ordinary herniæ.

*Nerve Centres in Hydatidæ.*—DR. GOWERS showed a series of



microscopical sections illustrating the changes in the medulla oblongata and spinal cord in four cases of hydrophobia. The changes found resembled those found by Benedikt in the convolutions in the dog, and by Coats in the lower centres in man. In all four cases, the vessels of the grey matter were greatly distended. In three of these cases, the larger veins presented aggregations of small cells within their perivascular lymphatic sheath. In some cases, they formed a single layer; in other cases, they were so densely packed as to compress the vessel they surrounded. In most parts, similar cells were scattered through the tissue among the nerve-elements, and in some places near the hypoglossal nuclei, they were so dense as to form "miliary abscesses". Adjacent to many vessels were areas of granular degeneration. In two of the cases, many of the larger vessels, chiefly veins containing clots, parts of which were evidently of *ante mortem* formation. By some of these, the appearance of embolism was closely simulated. Attention was drawn to the indications of formation *in situ* afforded by the gradation between the normal and the altered clot, and by the curved lines of pressure to which the clot had been subjected immediately after its formation. In one specimen, the inner coat of a vein was thickened opposite the older part of a clot, which was reduced in size correspondingly, as if formed secondarily to the change in the coat of the vein. In the vessel, there were several cells in the perivascular sheath, and leucocytes within the old clot and also in the inner coat of the vein, affording strong evidence that the cells outside were migrated corpuscles. The nerve-cells presented comparatively slight changes, being merely swollen and granular in some cases, and surrounded with granular degeneration here and there. These were most marked in and about the hypoglossal, pneumogastric, and glosso-pharyngeal nuclei; slighter in the nuclei of the auditory, facial, and fifth nerves; slight also in the cord, and even less in the upper part of the pons. Dr. Clifford Allbutt had also found less definite changes to be most distinct in the medulla. In his own cases, the changes were most marked in the region of the respiratory centre in the medulla. The paroxysms of spasm in hydrophobia were paroxysms of respiratory spasm. In the case in which the changes in the respiratory centre were most intense, there was violent inspiratory effort. Dr. Gowers concluded by alluding to the difficult question whether the vascular changes were the initial lesion, or whether they were secondary to the changes in the nerve-elements.

*Lymphoma of the Intestine.*—Dr. F. TAYLOR gave an account of a child aged six which lost flesh while its abdomen grew larger. The mass was slightly movable. There were no striking symptoms, and the child died of exhaustion. The mass was seven inches long, six broad, and two thick. The left half consisted entirely of the growth from the mesentery; while the right half of the mass contained some intestine. The walls of the intestine were altered.

*Tumour of the Thigh.*—Mr. MYERS gave an account of a tumour which grew in the thigh of a man; when first seen it was of the size of a clenched fist. It pulsed from pressure on the artery. It grew into a large tumour, which was removed. It was easily removed, only being attached at its upper part to the sheath of the common femoral. The wound healed well, but the disease is returning. The tumour weighed 3 lbs. 11 oz., and to the naked eye was a myxoma. Microscopically, it could be seen to have a basis of round-celled sarcoma. There was a hyaline matrix in some parts with small nuclei; in other parts it was not so advanced.

*Epiphyseal Disease.*—Dr. GOODHART exhibited a case of this disease in the lower end of each humerus in a congenitally syphilitic child. There was an abscess round the bone. The spleen was large, the other viscera healthy. The swelling in the arm was only noted five or six days before death.

*Various Specimens.*—Dr. CRISP exhibited a large abdominal tumour, weighing eight pounds, from a female of fifty. She had been treated for liver-disease. It was a hard fibrous tumour connected by a band with the left ovary. He also showed a duck's egg with another egg inside it; also a calculus from the urethra of an ox. It occurred in an ox fed on rice-meal. Oxen so fed were liable to these calculi, and to die of rupture of the bladder therefrom. He further showed some lungs of fowls which were affected with pneumonia. They were consolidated, and the air-cells full of lymph.

*Shawl-pin in the Pharynx.*—Dr. J. DUNBAR showed a shawl-pin which slipped into the pharynx of a boy in March 1876. He coughed, and got rid of all sensations. After a time, he had a paroxysmal cough, with pricking in the neck. There was no alteration of the voice. He had forgotten all about the pin. In January 1877, there was also a slight redness in the neck. On February 8th, when at work, he coughed up one half, and soon afterwards the other half of the pin, which was much corroded. A week after this, no symptoms were left. The question arose, Where could the pin have lodged all this time? The only solu-

tion seemed that it must have got into the mucous membrane, a fold of which must have fallen over it and covered it.

*Cancer of the Prostate.*—Mr. NUNN gave details of a case of a young man, aged 20, who only suffered for two months altogether. The prostate was infiltrated with a new growth, which was carcinomatous. There were numerous small cells of uniform size. There were also nodules on the pleura.

*Tumour of both Ovaries.*—Mr. KNOWSLEY THORNTON showed a specimen of tumour of both ovaries which he had removed. The disease was cystic, and one cyst had ruptured. The peritoneum was covered with small growths. A small cyst was seen on the free edge of the omentum. It was removed, and was found to be a multilocular cyst.

*Fibrinous Clot in Heart of Child.*—Dr. MONRO exhibited a clot from the heart of a child aged 7. It was taken suddenly ill, and thought to have a bilious attack. On *post mortem* examination, a clot was found in the right heart, of which the largest part was in the auricle. It was narrowed at the tricuspid orifice. A question arose as to how far this clot was due to some sewer-gas which the child had in all probability inhaled.

This closed the session of the Society, the meeting having been adjourned beyond the usual hour. The President announced that a grant had been made by the Society of £350 for an investigation on pyæmia. The investigation would be conducted by Mr. Marcus Beck, Dr. Greenfield, Mr. McCarthy, and Dr. Ralfe.

#### BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

FEBRUARY 24TH, 1877.

T. H. BARTLEET, M.B., F.R.C.S., President, in the Chair.

*Three Cases of Excision of the Astragalus.*—Mr. MESSITER showed the specimens, in the absence of the operator, Mr. HYDE HOUGHTON of Dudley. The first case was that of a boy aged 14. The fracture was compound, and the bone protruded through a wound on the inner side of the foot, and was attached only to the tibia. The astragalus was removed at once. The patient recovered, and went to work ten months afterwards. The second case was that of a man aged 53; a simple dislocation, irreducible. The skin over the astragalus sloughed. The bone was then removed. The patient recovered, and was able to work in twelve months. The third case was that of a man aged 25. The dislocation was simple; the bone was comminuted. The astragalus was removed at once. The patient was doing well.

*Excision of Os Calcis.*—The patient, exhibited by Mr. ORWIN, was aged 46. He had had slow caries of the os calcis for some years. The bone was excised by Mr. Hyde Houghton of Dudley, who made an incision, beginning one inch below the outer malleolus, continuing round and underneath the heel to a corresponding point below the inner malleolus. The patient did well, and can now walk several miles daily with the help of a high-heeled boot.

*A Specimen of Scirrhus of Male Breast* was exhibited by Mr. ALFRED JONES of Dudley.

*An Exostosis Removed from the Scapula* was exhibited by Mr. MESSITER of Dudley.

*Morbus Cordis: Mitral Obstruction.* Two cases were shown by Dr. RICKARDS.

*Treatment of Abortion.*—Dr. MALINS opened a discussion upon the treatment of abortion. He said that the treatment of abortion was an important subject. The proportion of abortions to labours at the full period observed in his practice was as one to six or seven. If neglected, abortion became a frequent source of uterine disease. After discussing the meaning and applicability of the term abortion and quoting various authorities, Dr. Malins considered the fairest explanation to be premature expulsion of the ovum. Abortion might be—1. Passive or latent; or 2. Active or inevitable. 1. *Passive.*—The important symptoms were pain and hæmorrhage. For the pain, he would give full doses of opium, preferably in the form of liquor opii sedativus. For the hæmorrhage in this form, rest was necessary. It having been repeatedly noticed that women who were sick aborted least, Dr. Malins, acting on this indication, had found the administration of five minims of vinum ipecacuanhæ, every hour for twelve or fourteen hours, a safe and simple remedy. 2. *Active.*—When there was great hæmorrhage and pain, bold treatment must be followed; the vaginal or uterine plug being used, with ergotine hypodermically. No towels or handkerchiefs should be used as plugs, but the vagina should be well and carefully packed with pledgets of tow or cotton. Neither sponge nor stays of lint were



so good as these. Where the embryo was dead and was retained for an indefinite time *in utero*, rapid dilatation of the os uteri by means of sponge-tents should be employed.—Dr. BASSETT preferred the term miscarriage. He recognised the importance of miscarriage as a cause of uterine disease. He had never seen more than one case rapidly fatal. He thought no account should be taken of hæmorrhage unless pain were present. He would use a sponge-tent or sea-tangle plug in the uterus, in preference to any form of vaginal plug. He would decidedly not give ergot, which would close the os uteri and retain the placenta.—Dr. SAVAGE said that miscarriage often did not come under the doctor's notice at all. He thought rest in bed very important, as much so as after ordinary labour, to avoid the dangers of subinvolution of the uterus. He considered vaginal plugs unscientific. He would plug the os uteri.—Dr. MALINS, in reply, said he did not consider the vaginal plug unscientific. Even as an irritant in the vagina, it was useful. Ergotine was best given subcutaneously; it was more rapid and certain in its action. Gelseminum had been spoken of as a dilatant; but of its action not much was known.

## GLASGOW PATHOLOGICAL AND CLINICAL SOCIETY.

TUESDAY, APRIL 17TH, 1877.

THOMAS REID, M.D., Vice-President, in the Chair.

*Athetosis*.—Dr. W. T. GAIRDNER showed a girl, aged 7, with athetosis. The patient was well nourished, and her general health was good; there was no history of any nervous disease among her relatives. The athetosis dated one year back, and was obscurely connected with a story of a fright received at that time. Eleven months ago, the left foot was observed to be lame, and the speech became slow. The speech was now quite natural, but the left hand and leg were still affected, though to a lesser degree than at first. Her condition, when she was shown to the Society, may be defined as follows. The tongue, when protruded, deviated rather to the left side; the left arm and hand were never still, but were constantly in motion, the movements being those both of flexion and extension alternately, with a preference for those of flexion. There was no considerable power of prehension; but by watching and, as it were, lying in wait for the movement of grasping, the patient could lay hold of objects in an awkward way. The serratus magnus and scapular muscles participated in the movements. No decided hypertrophy of the affected muscles could be said to exist. As to the left leg, there was a tendency to walk upon the outside of the foot, and there was an indefinite awkwardness in the use of the leg. If the foot were held fixed, a slight tendency was manifested towards movement, especially of the great toe. No evidence could be obtained of hereditary syphilis, or of previous convulsions or paralysis. The only thing bearing on the disease was the hint as to a former fright, and a story of a bygone pain in the left frontal region. Dr. Gairdner observed that this was the third case which he had seen of this rare disease. He referred to the various cases recorded; and, while admitting the possibility of other cases having been observed and possibly recorded under another name, he yet contended that the disease was one of great rarity. All the other cases on record were in adults, and most of them were associated with irregular habits. The case under notice at the meeting was probably the least complicated one ever published.—Dr. FINLAYSON showed a girl, aged 9, for comparison with Dr. Gairdner's case. The illness dated back to the winter of 1874, and began with a feverish attack and frontal headache. In 1875, some awkwardness in walking was noticed, and the power of the left hand became less; and it is said that the face was affected and the vision double about that time, without, however, any squint. After a period of slight improvement as regards the face and legs, the hand, fingers, and thumbs began to assume a fixed position. Vision was then pretty good, but the ophthalmoscope showed old neuro-retinitis on both sides, with a trace even of the choked disc appearance. When admitted into hospital in November 1875, there was no marked atrophy or coldness of the limbs, and the muscles responded well to the Faradic current. The general health was also good. Under treatment by electricity, a slight but decided improvement took place in the hand. The treatment was supplemented by tonics, and latterly by iodide of potassium. In February 1876, the eyes were examined again, and hypermetropia of one-twelfth was detected. In September 1876, there was occasional frontal headache, and the rigidity of the flexors of the fingers and thumb had become more extreme. The patient walked habitually on the toes of the paralysed limb, but, on measuring from the ilium to the ankle, there was no shortening found. In April 1877, the walking was reported worse, and, although the general condition was so good as to allow her being at school, yet the tendons of the forearm were if anything more contracted, and there was superadded to the other symp-

toms a set of spasmodic movements in the paralysed arm, of which it might be said that, if it could not be definitely denied that they were formerly present, they were now much more marked. These movements took place when the hand was put into certain fixed positions, preventing her from maintaining such positions; and they also occurred when the patient was asked to perform certain movements. The case presented an intermediate state between posthemiplegic rigidity and the peculiar spasms of athetosis. The urine was free from albumen or sugar; the heart was normal, except for a very slight systolic *bruit* at apex.—Dr. ROBERTSON referred to Dr. Gairdner's cases, two of which he had seen. The disease was very rare, no case having occurred in the Town's Hospital, in his experience, at all like either of the cases. He argued, from the fact of the mental faculties remaining clear, that the lesion would more probably be found in the corpus striatum than in the cortical substance.—Dr. GAIRDNER remarked that no lesion had as yet been seen in these cases.

*Laryngeal Tumour*.—Dr. DAVID FOULIS showed a tumour which he had recently removed from the larynx of a man aged 27. The tumour was sessile by a broad base, just below the anterior end of the left vocal cord. To remove it thoroughly, it was found necessary to split the thyroid and cricoid cartilages in the median line, when the tumour was successfully removed. The site of the growth was touched with the actual cautery, and the lips of the wound carefully united by sutures. Union by first intention took place satisfactorily, except at the extreme lower end of the incision, and the case was progressing favourably. The tumour was of the nature of a papilloma.

*Sarcoma of the Femur*.—Dr. WILLIAM MACEWEN showed a sarcoma of the lower end of the femur, from a woman in the Royal Infirmary. The growth dated back for three months, and seemed to have been less rapid of late. On admission, the lower end of the femur was found bulbous, and, after a week's observation, an increase of one inch was found to have taken place in the circumference of the tumour. Amputation was performed in the upper third of the thigh. The growth appeared to involve both the periosteum and the medulla, and, under the microscope, showed itself as a mass of spindle and oval cells. The wound healed well, and the patient left with a sound stump.

*Cartilaginous and Bony Masses*.—Dr. MACEWEN also showed some small masses of cartilage and cancellated bone, which he had removed from the vicinity of the ankle-joint. These masses seemed to be outside the joint; but as a considerable quantity of synovial fluid escaped during the operation, he was inclined to think that there had been some communication between the ankle-joint and the small joint on which the masses referred to hinged.

*Intracranial Tubercle*.—Dr. GAIRDNER showed the parts from a case of tubercle in the cerebellum and tubercular meningitis.

## PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, MARCH 3RD, 1877.

THOMAS HAYDEN, F.R.C.S.P., President, in the Chair.

*Acute Bright's Disease*.—Dr. MACSWINEY showed specimens illustrative of the pathology of this affection from the body of a man aged 46, of temperate habits. He had had oedema of the lower extremities five years ago; but his fatal illness lasted for only twelve weeks. There were general anasarca, headache, and chest-symptoms. The kidneys were large and mottled; their capsule was easily removed. The cortical portion was enlarged, and of an ivory-whiteness. It dipped in places into the pyramidal structure, in which were specks of hyperæmia. There was hypertrophy of the left ventricle of the heart, but the valves were healthy. The urine had been dusky, of specific gravity 1016, faintly acid in reaction, and highly albuminous. It contained much renal epithelium, fatty and granular, also tube-casts having similar characters. The kidneys were in a state of fatty degeneration; and there was choking of the uriniferous tubules, with epithelium and exudation.

*Meningitis of the Convexity of the Brain*.—Dr. NIXON presented the calvarium and brain of a man aged 42, who had served for twenty-one years in the army, including eleven years spent in India. There was some history of syphilis. He became subject to fainting attacks, and epileptiform convulsions affecting the right side, but unattended by loss of consciousness. A few days before death, right facial paralysis appeared. The third nerve on the left side was also paralysed. Tactile sensibility on the right forearm was impaired. Pain in the head, chiefly affecting the left side, became constant. The axillary temperature was half-a-degree lower on the right side. The right arm was rigid. There was no albuminuria. Lymph was found deposited on the internal surface of the calvarium to the right of the longitudinal fissure, where the dura mater was stained and adherent. Clear serum existed in con-



siderable quantity in the left lateral ventricle. Dr. Nixon alluded to the "discharge" theory of cerebral convulsions as propounded by Dr. Hughlings Jackson in relation to the case.

*Compound Comminuted Fracture of Femur.*—Mr. WILLIAM STOKES showed an extensive injury of this kind. A man, aged 28, fell with a ladder, to which he was tied, from a hayrick. A terrible injury happened in consequence to the lower part of the thigh. An oblique fracture separated the femoral condyles and opened into the knee-joint. There was extreme comminution of the broken bone, which was smashed into twelve or fourteen larger fragments, and almost pulverised in places. A flap amputation was performed near the middle of the thigh.

*Pathology of Urethral Stricture.*—Dr. BARTON exhibited the genital organs and bladder of a man aged 39, who died from the effects of rupture of the urethra. The patient had served in the West Indies as a soldier. In 1875, he contracted a gonorrhoea, which led to stricture. While straining in the endeavour to pass urine on the night of February 12th, 1877, he felt something give way, with immediate relief to his suffering. Next morning, unequivocal signs of extravasation of urine showed themselves. After some days, a rigor, followed by a rise of temperature, occurred. Diffuse cellulitis set in throughout the gluteal region; then effusion of pus into the knee-joint took place, the limb became oedematous, an erysipelatous blush appeared on the groin, and the patient sank. The seat of stricture was at the anterior part of the spongy portion of the urethra. The bladder was vastly hypertrophied, its muscular walls resembling the columnæ carneæ of the heart. Its very strength had caused the man's death by inducing rupture of the urethra and extravasation. The stricture had not continued long enough to produce disease of the kidneys and ureters, which were apparently healthy in every respect.

#### MEDICAL SOCIETY OF THE COLLEGE OF PHYSICIANS OF IRELAND.

WEDNESDAY, MARCH 7TH, 1877.

HENRY KENNEDY, M.B., in the Chair.

*Notes on Anhidrotics.*—In the absence of Dr. HAYDEN, Dr. DUFFEY, the Honorary Secretary, read a paper by him on anhidrotics, a term by which Dr. Milner Fothergill (*Practitioner*, December 1876) appropriately designated medical agents capable of arresting or controlling morbid perspiration. Anhidrotics were most frequently demanded in the advanced stages of pulmonary phthisis—those, namely, of softening and excavation. If the perspiration occur during sleep and towards morning, it is most effectually controlled by five grains of Dover's powder, given once or twice in the course of the night. If the perspiration be due to excessive coughing, the inhalation of ten to twenty minims of chloroform, or a full dose of chlorodyne and liquor morphine (ten minims of each) is the best remedy. Tepid sponging of the face, neck, chest, and hands, with equal parts of toilet vinegar and water at bedtime, is useful and agreeable. Cold or tepid drinks and sucking ice are aids in checking perspiration. The night-dress should be put on hot. Belladonna (extract, half a grain; or tincture, thirty minims, at bedtime) checks in some degree the night-sweats of phthisis. Oxide of zinc in combination with Dover's powder seems inferior to the latter given alone. In one case, profuse and obstinate sweating in convalescence from enteric fever, was checked by insisting on the patient leaving his bed and sitting up. For sweating of the hands, feet, and axillæ in those otherwise healthy, frequent washing and sponging with "tan-yard liquor" (*i.e.*, a strong cold infusion of oak-bark) is very efficacious. Perspiration may be checked directly by means of topical astringents or by cold, but these means are of only temporary efficacy, and induce active reaction of the sweat-glands. Inhibition of blood-supply to these glands through the vaso-motor nerve-system, as exemplified in Bernard's experiments of galvanising the sympathetic nerve of the submaxillary gland, constitutes the scientific plan of treating general hidrosis. The medicinal agents by which this may be accomplished are anhidrotics in the true sense of the word. It is a question of much interest whether, following the clue afforded by Bernard, physicians may not find in electricity an agent still more potent than medicine in the treatment of hidrosis. It would seem that cold liquids introduced into the stomach, being rapidly absorbed, act as anhidrotics by cooling the blood, whilst external heat acts as a peripheral irritant of the vaso-motor centre, whence, by inhibition of the cutaneous vessels, the functional activity of the sweat-glands is restrained or suspended.—Dr. FINNY had used dilute sulphuric acid and liquor ferri perchloridi in phthisical sweating; also three grain doses of Dover's powder and sulphate of atropia (one-eighth of a grain for a dose). He mixed half a grain of the sulphate with sugar of milk, and divided the mass into forty pills. He bore witness to the value of atropia in the treat-

ment of local sweating, and referred to a case of bromo-hyperidrosis of the feet reported by Dr. Grimshaw (*Irish Hospital Gazette*, 1872, p. 52) as being cured by atropia. It had not, however, in his (Dr. Finny's) experience, checked the sweating in enteric fever.—Dr. MACSWINEY had been taught to use the diluted mineral acids with bitter infusions, acetate of lead, and belladonna as anhidrotics. Sponging the body with warm diluted vinegar was very efficacious. Having regard to the correlation of diarrhoea and perspiration in phthisis, he did not think it desirable to use energetic and continuous means of arresting diaphoresis in the third stage of the disease.—The CHAIRMAN said that remedies like cod-liver oil, which improved the condition of the system, often checked perspiration in a remarkable manner. Evening drinks should be forbidden as far as possible. Cotton worn next the skin and tepid sponging were useful. A remedial nerve like strychnia would lessen perspiration; but such remedies lost their effect after a time.—Dr. FINNY did not think diarrhoea and perspiration were correlative in phthisis.

*Intrathoracic Tumour simulating Aneurism.*—Dr. FINNY detailed with great accuracy the particulars of the case of Kate D., a servant aged 30, who had been admitted into the City of Dublin Hospital on October 9th, 1876, complaining of a swelling and pain in the upper part of the chest. She died in that institution on December 29th following, chiefly from the effects of pressure from an enormous lymphosarcoma primarily occupying the anterior mediastinum. The diagnosis was attended by considerable difficulty. When admitted to hospital, the case was judged to be one of tumour springing from and connected with the manubrium. The diagnosis of intrathoracic tumour was based upon—1. The patient's age and sex; 2. The want of proportion between the prominence of the tumour and the amount of impulse; 3. The eccentric nature of the pulsation being so small; 4. The great rapidity of the pulse; 5. The existence of *bruit*, not limited, but audible over so much of the thorax; 6. The position of the tumour being to the left of the sternum. Subsequently, the nature of the case became less certain, for many of the signs and symptoms of aneurism of the arch of the aorta were well-marked. However, from a general retrospect of the case in all its features, as reviewed by the all-important light of *post mortem* revelation, the author believed a diagnosis of intrathoracic tumour, rather than aneurism, might have been not only made, but persevered in, on the following grounds. 1. The age and sex of the patient; for aneurisms are very rare in persons under thirty, and especially so in females. 2. The tumour was large and hard, and the area of percussion dulness very wide, and yet the impulse was not commensurate with either its seeming superficiality or size; the shock was not (as Dr. Balfour calls particular attention to in cases of aneurism) markedly stronger than that of the heart, although it was quite as strong, and the pulsation was not as distensible as might be expected of an aneurism of such position and dimensions. 3. The sounds of the heart were audible in the tumour (with the first well-marked *bruit*), but there was no accentuation of the second sound (Walshe), nor was the *bruit* of a booming character (Hayden), or confined to the tumour. 4. The oedema of the neck and thorax decidedly preceded that of the arms and hands by many days—the reverse of what would occur in pressure upon the superior vena cava by an aneurism. 5. The constantly rapid pulse (over 130) for two months and a half. 6. The temperature being always subfebrile. 7. The hydrothorax, with collapse of the left lung, the result of obstruction to the pulmonary veins.—On the motion of Dr. MACSWINEY, the discussion on Dr. Finny's communication was postponed; and the Society adjourned.

#### HARVEIAN SOCIETY OF LONDON.

MAY 3RD, 1877.

T. CARR JACKSON, F.R.C.S., President, in the Chair.

*Hæmatoma of the Ear.*—Mr. HENRY CASSON exhibited a cast of othæmatoma. Both on the inner and the outer surface to the touch it gave the impression of cartilage, suggesting the hypothesis that the cartilage of the ear was split. The patient was not insane.—Mr. LENNOX BROWNE stated that this affection of the ear was now known not to be of traumatic origin in most cases.—The PRESIDENT and Mr. GEORGE FIELD also spoke; after which Mr. CASSON replied.

*Hermaphroditism.*—Dr. MILNER FOTHERGILL gave some details of the case of Caroline *alias* Carl Hofmann, and exhibited some drawings of the malformation. This being exhibited with a male lover from the age of nineteen to forty-six, when the change of life came on. After that, she began to feel preferences for females, and used to have intercourse with both men and women indifferently, but finally settled down to male attire and took a wife. He or she was examined by all the great authorities in Germany, and the changes carefully watched. A



full account of the case is given in the *American Journal of Obstetrics* for February 1876, by Mr. Mundié, the Editor, who knew this unique being first in Germany, and lastly in America.—Dr. GRIFFITH and Mr. WESTMACOTT referred to the case of a boy who was brought up in a home for soldiers' daughters till he was 14.—Mr. CASSON spoke of numerous cases of this malformation to be seen in the Museum of Pisa.—Dr. ALFRED WILTSHIRE exhibited a number of coloured drawings of the mutilations of the genitals, in both sexes, practised by the Russian sect of *Skopskies*. This mutilation was performed after the individual had once procreated.—Dr. FARQUHARSON and Mr. W. B. OWEN spoke; and Dr. FOTHERGILL replied.

*Otorrhœa*.—Mr. G. FIELD read a paper on the graver forms of otorrhœa. He said otorrhœa might be merely a discharge from the outer ear, or it might spring from grave disease of the internal ear. It was then a sign of disease which might lead to serious, indeed to fatal, consequences. It was a symptom of several morbid changes. It was mostly found with a strumous diathesis. It occurred chiefly after the exanthemata and after exposure to cold, either air or water. The relations of the tympanic cavity were then described, showing how disease might spread therefrom. In acute cases, the knife ought to be resorted to when the tympanum bulges. Some cases were then given in detail. Popular feeling was opposed to the arrest of discharges from the ear, which often led to irretrievable mischief being done. Abscesses of the lungs (embolic) and of the liver (metastatic) were not uncommon consequences of serious otorrhœa. Epilepsy and even insanity might arise from ear-disease.—The PRESIDENT, Mr. LENNOX BROWNE, Dr. FARQUHARSON, Mr. CASSON, Dr. WILTSHIRE, Dr. MAHOMED, Mr. DOUGLAS HEMMING, Dr. GRIFFITH, and Dr. WOAKES took part in the discussion; after which Mr. FIELD replied, and the meeting then adjourned.

MAY 17TH, 1877.

T. CARR JACKSON, F.R.C.S., President, in the Chair.

*Hair-Pin in Bladder*.—Mr. CARR JACKSON related briefly a case where he had recently had to extract a hair-pin from a girl's bladder. He used rapid dilatation of the urethra in the extraction. This, he held, was better than gradual dilatation, as being less liable to lead to incontinence of urine. Sometimes even temporary inability to pass urine was induced by rapid dilatation.—Mr. WAKEFIELD said he had seen it persist for some days after forcible dilatation.

*Fracture of the Skull*.—Mr. JULER read notes of two cases of fracture of the skull. In the first case, the man fell off a water-cart and had a cut above the right ear. He was taken to a hospital in a state of unconsciousness. The results were felt on the same side, viz., facial paralysis, with deafness. The diagnosis made was fracture of the base of the skull, with injury to the trunks of the seventh and other nerves. The man was exhibited. In the second case, the man was struck by a horse. There was a severe cut over the right orbit. The case grew worse; and, after trephining, died. There was found a large abscess in a position which explained the peculiarities of the resultant paralysis.—Drs. FITZPATRICK, BUZZARD, GRIFFITHS, and the PRESIDENT took part in the discussion; after which Mr. JULER replied.

*Tetany*.—Dr. BUZZARD read an account of a case of tetany. It was an ailment of no gravity, though often mistaken for something serious. It occurred in a girl aged 13. The right hand was swollen, and the thumb was rigidly extended against the forefinger. There were choreiform movements in the hand. The family history was good. There was a grin almost sardonic on the girl's face. The spinal muscles were weak, but there was no tenderness of the spine. When the hand was placed in cold water, great pain was induced. There was no action in the dorsal interossei even to a powerful current. Trousseau's cases were mostly in young adults, especially nursing women. Pressure on the artery of the limb increased the contractions. He then gave an account of an epidemic of tetany in a French school. The pathology of the condition is still obscure.—Drs. BROADBENT, GRIFFITH, and FITZPATRICK spoke; and Dr. BUZZARD replied.

*Uræmic Convulsions*.—Dr. MAHOMED read a paper on uræmic convulsions. It was taught that they arose from anæmia of the brain from arteriole spasm, the consequence of the presence of urinary excreta in excess in the blood. It was due to vaso-motor spasm, and, he thought, to rupture of minute vessels. He then related some cases in support of this view, where there were minute apoplexies, with enlarged heart and diseased vessels. There were also similar minute hæmorrhages in the spleen. Such hæmorrhages were intelligible along with chronic Bright's disease. Larger hæmorrhages were generally admitted to be so associated. These smaller hæmorrhages were often overlooked, even when sought for. Small hæmorrhages were more common in acute Bright's disease; larger in the chronic forms.

## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, JUNE 2ND, 1877.

### THE CANAL POPULATION.

DURING the past four years, public attention has been frequently directed to the manners and customs of a special class of our labouring population, and to many serious evils, moral, social, and sanitary, that have been gradually evolved through the peculiar conditions under which this class has for too long a period been allowed to exist. In 1873, Mr. George Smith of Leicester inaugurated a series of vigorous appeals on behalf of the inhabitants of the barges and boats that are worked on the extensive network of canals in the midland and northern counties, and on the Grand Junction Canal, by which water-communication is kept up between Birmingham, with other large manufacturing towns, and the banks of the Thames. This system of canals, four thousand seven hundred and ten miles in extent, is navigated by about twenty-five thousand boats, the aggregate population of which, women and children included, has been estimated as being over a hundred thousand. These canal-boatmen constitute somewhat of a caste, and present the following peculiarities. They belong to no parish, and pay neither rent nor rate; their whole life is spent on the boats. They and their wives are, as a rule, the descendants of generations of boatmen; their children are born on the canal, and in their turn take up the family occupation. Through the peculiar conditions of their existence, these people are usually beyond the reach of minister and instructor, and, as may be readily imagined, are but little likely to give rise to any mutual trouble or inconvenience in connection with local authorities. Judging of this class from a point of view midway between that of the social reformer on the one hand and the official observer on the other, we find the canal-boatmen to be, on the whole, a simple and in-offensive people, honest and industrious, not unmindful of the interests of their employers, and willing and ready to give help to their fellows. There can be no doubt, however, that much vice and ignorance prevail amongst this class. Very few, we learn, can read; drunkenness is common with both men and women; and they are much given to swearing. There is little, if any, attention paid to religious duties, and church or chapel is rarely visited. The most serious evils, however, and such as require legislative interference, are the extreme laxity of the views of these people as to conjugal relations, and the inevitable results of a domestic community, under conditions of restricted space and shelter, of many grown persons of both sexes.

In addition to the moral evils and the educational difficulties associated with the present conditions of life on canal-boats, there is also a sanitary aspect that demands serious consideration. In dealing with this portion of the subject, it seems to us to be desirable that clear and definite information should be obtained as to the effects, in the first place, of the hygienic conditions of the canal-boat, and the kind of living on board, on the health of the boatman and his family; and as to the probability, in the second place, of this floating population constituting, through the carrying of contagious diseases, a source of danger to the districts through which the boats are floated. It would be interesting to learn also the rate of mortality amongst these people, and the facilities for medical attendance in case of sickness and of registration in case of death. The most recent information as to the first point will be found in the seventh and last Report of Dr. Harry



Leach, the Medical Officer of the Port of London, who in the autumn of last year arranged for a special visitation of the barges moored at the outlets of the Grand Junction and Regent's Canals. Statistical tables, giving the particulars noted on inspection of seventy-five of these barges, show that "the space allotted to cabin-accommodation averages about 280 cubic feet, and that in these spaces are housed families consisting of from three to seven persons". There can be no difference of opinion as to the statement that the cubic spaces recorded in these tables "set all sanitary notions at defiance". But to this evil of confined space may be added those of faulty ventilation, artificial heat (from stove), storing of all kinds of food, and want of attention to cleanliness of person and clothes. This small cabin, with all its evils, is in most cases the only home of the boatman and his family, and the only shelter which they can make use of in times of prolonged wet and cold. A condition of things such as this must certainly influence for bad the weaker members of the family crew, and tend to increase infant mortality; and it seems highly probable that in extreme cases of overcrowding, where ten, nine, or eight persons live, sleep, and are cooked for in a cabin of the average size, the health of every one must suffer sooner or later. No reliable evidence, however, has as yet been gathered as to this point. To all appearance, these people are, as a rule, a most healthy class. The boatman himself looks strong and in the best of health, and all the members of his family seem sound and vigorous. It is probable that the injurious influences of the canal-cabin may be counteracted to some extent by such favourable influences as active exercise and long maintained locomotion in the country. Dr. Leach, alluding to this point, states that "some few circumstances are, in a sanitary sense, favourable to these people, as they are constantly in the open air, and the barges usually carry what may be called clean cargoes". That canal-boats may constitute sources of danger to people living on land there can be no doubt. According to Dr. Leach, these boats are known to have been carriers of contagious diseases; and an instance is mentioned in which small-pox was introduced into one of these floating houses and attacked all the inmates (nine in number), who nevertheless all remained in the barge during their illness. We learn from other sources that typhus, typhoid, and the eruptive fevers are not uncommon on board canal-boats; and that living subjects of variola are frequently carried through rural districts. The Nantwich sanitary inspector reported in 1874 that he had found in one boat a child dead from typhus fever lying in the same cabin with the mother, who was ill of the same disease. No attempt is now made to isolate an infected boat, which, at the end of its journey, may be allowed to enter a basin crowded with other boats, and situated, perhaps, in a thickly peopled suburb. "In this way," says Mr. Davenport of Nantwich, "fever and small-pox, like the cholera, creep along the water-courses; and, while we are keeping the water itself pure and clean, the living freight it bears is carrying infection with it."

With the object evidently of dealing with most of the above-mentioned evils, Mr. Sclater-Booth has recently submitted a Bill for the registration and regulation of canal-boats used as dwellings. This, though it represents that permissive stage of legislation through which most sanitary reforms have to pass, promises, if it become law, to effect a fair start in the amelioration of the present system. It is provided that no canal-boat be used as a dwelling at night unless it has been registered by certain authorities, which may, with the approval of the Local Government Board, make regulations for registration, fixing number of persons, promoting cleanliness, and preventing infectious disease. We are glad to find, as an indication that an ancient corporation is expected to undertake important duties as well as to maintain its honours and privileges, the Port Sanitary Authority of the Corporation of London at the head of these authorities. The powers in relation to provisions against infection conferred by the Public Health Act of 1875 are proposed, in Clause 4 of this Bill, to be applied to canal-boats, and the officers of the registration or sanitary authorities mentioned in Clause 7 are authorised to visit, inspect, and, if need be, detain any

boat. With the object of bringing the young members of the boatman's family under the provisions of the Education Acts, Clause 6 proposes to deem every child dwelling on a canal boat as a resident in the place in which the boat has been registered.

#### THE GENERAL MEDICAL COUNCIL.

THE General Medical Council concluded on Thursday, the 25th instant, a session of thirteen days' duration—the longest on record. The *BRITISH MEDICAL JOURNAL* of May 19th contained, at page 623, a partial summary of the proceedings, which we now proceed to complete.

A "Medical Acts' Committee", appointed early in the session, with Mr. Simon as Chairman, brought up from time to time reports on the several matters remitted to it: viz., the recognition of foreign and colonial degrees; Mr. Russell Gurney's Act and the College of Surgeons' Act (1875); the application of penalties accruing under the Medical Act; the registration of dental surgeons; Dr. Lush's Medical Acts Amendment Bill; and the proposals of the Obstetrical Society regarding the instruction and registration of midwives.

With regard to the recognition of colonial and foreign degrees, the Council agreed to the recommendations of the Committee, that it is advisable that authority should be obtained to register degrees granted in other parts of Her Majesty's dominions than the United Kingdom, and the qualifications obtained in foreign countries by foreigners desirous of practising within the United Kingdom; each of these classes being placed in a separate department of the *Medical Register*. A resolution was also passed, in terms of the report, disapproving of the registration of British subjects on the basis of foreign qualifications; but advising that the Council should have power in special cases to register persons who have been long established in practice abroad, on their settling in the United Kingdom, although not possessing the qualifications ordinarily required for the registration of British subjects. The Committee disapproved of the proposal to register foreign qualifications obtained by registered practitioners; and the Council endorsed the disapproval—a decision which will, we believe, disappoint many of the holders of foreign degrees.

The report of the Committee on Mr. Russell Gurney's Act had reference to a technical difficulty produced by a departure from the letter of a recommendation of the Council in 1876, to the effect that "the qualifications conferred" should not confer certain privileges; whereas the Act states that the fact of being *registered* shall not entitle to such privileges. With regard to the College of Surgeons Act (1875), a doubt has arisen whether its first clause would not oblige the College to receive as members persons who might, after an examination by a conjoint board, become licentiates in midwifery. The Committee recommended the addition of certain words to the clause, to define the status respectively of persons entitled to become members or licentiates in midwifery; and the Council decided to remit the matter for further consideration to the President and Vice-Presidents of the College of Surgeons and to the representative of the College in the Medical Council (Sir James Paget).

Regarding the appropriation of penalties inflicted under Section 40 of the Medical Act, it has long been a ground of complaint that in many cases the provision in Section 42, that the penalties shall be paid to the Treasurer of the Medical Council, is superseded by the action of the Police Courts Act and other local Acts. The Council, on the recommendation of the Committee, resolved to suggest to the Government the addition of certain words to Section 42 of the Medical Act, for the purpose of removing the anomaly.

A deputation, consisting of the President, Mr. Simon, and Dr. Andrew Wood, on May 17th, presented to the Lord President of the Privy Council the report of the Medical Acts' Committee on the subjects above mentioned, with the resolutions of the Council thereon. From the account of the proceedings given by the President (see p. 648 of last week's *JOURNAL*) there seems to be but little hope that



any change in the legislation affecting the medical profession will take place during the present session. One suggestion, however, with reference to a pressing subject—the hardships affecting colonial graduates acting as ship-surgeons—that the difficulty might be met by an alteration in the Merchant Shipping Act and Passenger Act, may yet be carried out as a means of meeting the present emergency. It is to be hoped, however, that the legislative settlement of the questions laid before the Lord President will not be delayed longer than is unavoidably necessary.

A memorial of the Royal College of Surgeons of Edinburgh, founded apparently on a misconception of the intentions of the Royal College of Surgeons of England respecting the registration of dental surgeons, was simply referred to the latter body for their information; a proposal to disapprove of a separate *Register* for dental surgeons being lost, on the ground that the question had not been distinctly brought before the Council.

Dr. Lush's Medical Acts Amendment Bill deals with three subjects: the restriction of unqualified practitioners; the appropriation of penalties; and the registration of colonial and foreign degrees. On the last two subjects, the Committee had already expressed their opinion; and as regarded the first, they disapproved of Dr. Lush's proposal, and advised that any attempt to improve the penal clauses of the Medical Act should be deferred until "the Acts shall have received all essential legislative amendments in the provisions relating to the profession itself, and shall then be in readiness for consolidation". The Council adopted this suggestion. It seems therefore that, so far as the Medical Council is concerned, there is little chance of the penal force of the Medical Act being rendered more efficient.

The last topic which engaged the attention of the Committee was the qualification of midwives in England. The report on this subject, which will be found at page 680 of the present number of the *JOURNAL*, dealt with the proposals of the Obstetrical Society. It was brought up on the last day of the session, and, had time permitted, would probably have been the subject of much discussion, since, while there was a general consent as to the necessity for regulating the practice of midwives, there was evidently a considerable difference of opinion as to the details of the manner in which this should be carried out. Ultimately, this report was not adopted; but the Council passed a resolution in favour of procuring legal sanction for giving credentials of qualification to competent midwives, and directed the resolution to be communicated to the Lord President of the Privy Council. A proposal that the report of the Committee, with the scheme of the Obstetrical Society, should be sent to the licensing bodies for consideration, was negatived by a majority of 11 to 9.

The recommendations of the Council respecting preliminary and professional education and examination underwent careful revision; and we print on another page the recommendations as they now stand. Several changes of more or less importance have been made. In the chapter on preliminary examination in subjects of general education, a recommendation has been added to the effect that cases of decided ignorance in general subjects—such as spelling—manifested by candidates at the professional examinations should be noted and reported to the General Medical Council. This recommendation originated in some remarks made by Dr. Haldane in the session of 1876, pointing to the great deficiency in subjects of general education manifested by some candidates for diplomas. In the list of subjects of preliminary examination, the restriction of geometry to the first two books of Euclid has been relaxed by the recognition, as an equivalent, of the subjects treated in these books; and for the expression Natural Philosophy there has been substituted "The Elementary Mechanics of Solids and Fluids"—Hydraulics being added to the subjects required. Considerable discussion took place as to the place which Natural Philosophy should occupy in the examinations. Mr. Lister and Mr. Simon urged the importance of a knowledge of this subject to the physician and surgeon; but a proposal to add this to the subjects of professional education, and also one to make it a compulsory subject

of preliminary examination, were negatived. A proposal that Physics (meaning thereby heat, light, and electricity) should be one of the optional subjects of preliminary examination, was at first agreed to, but the resolution was afterwards rescinded; and Physics was ultimately placed on the list of subjects of professional education and examination.

In the chapter on registration of medical students, it is now provided that the student must not only have passed a preliminary examination, but must produce evidence that he has commenced medical study. A form of certificate for this purpose is added; and it is distinctly implied that the certificate of any registered practitioner whose pupil the student may be at the time, will be recognised. Pupilage or apprenticeship at a county hospital, or to a registered general practitioner, is thus sanctioned as a mode of commencing medical education.

In the recommendations respecting the duration of professional study, forty-five months have been substituted for forty-eight months or four years. This has been done to meet the case of students desirous of proceeding to the final examination at the end of the summer session of the fourth academical year. The Council have also limited the time necessary to be spent in a medical school to three winter and two summer sessions; leaving the remainder of the four (academical) years to be spent either in pupilage or in a medical school.

The list of subjects of professional education and examination has been revised. "General Anatomy" has been omitted, as being taught with Physiology. To Chemistry has been added "Chemical Physics—meaning thereby, Heat, Light, and Electricity". Therapeutics has been separated from Materia Medica and Pharmacy, and is included under the term Medicine; while Pathology has been separated from Medicine and holds a place by itself.

Some important alterations have been made in the chapter on professional examination. The licensing bodies are invited to hold in future *three* examinations in place of two. These are to be arranged in two divisions; the first including the elementary subjects—Chemistry and Chemical Physics, Anatomy, Physiology, and Materia Medica and Pharmacy; the second the more practical subjects. The Council recommend that an examination in elementary subjects be held at the end of the first year; but it seems to be at the discretion of the boards to subdivide either the first or the second division of the examinations into two parts.

A proposal of Dr. Humphry, ably argued by him, and supported by Sir James Paget, that the Council should undertake the visitation of medical schools, met with little favour, and was defeated by a large majority. Possibly, however, the Council will at some future time see its way to the carrying out of Dr. Humphry's suggestion.

The conjoint scheme for England was laid before the Council, and, on the proposal of Sir James Paget, a resolution was passed expressing general approval of it.

The system of requiring more than one course of lectures on the same subject was brought before the Council by Mr. Lister, and a resolution was passed to the effect that the practice was undesirable.

A letter from Dr. G. F. Yeo, on behalf of the Physiological Society, complaining of the refusal of permission, in several instances, to conduct physiological researches, and of the impediments thus offered by the working of the Cruelty to Animals Act (1876), was laid before the Council. The subject was commented on by Mr. Simon, who had a list of nine well-known physiologists who were thus prevented from making various useful investigations. The matter was remitted to the Executive Committee, with power to investigate the cases, and bring them, if necessary, under the notice of the Home Secretary.

The report of the Finance Committee, presented on the last day of the meeting, contained a recommendation that a sum of two hundred guineas should be presented to the late Registrar, Dr. Hawkins, in recognition of his valuable services to the Council during a period of eighteen years. Some opposition was raised on the ground of illegality; but to this it was replied that gratuities had, on two previous occa-



sions, been paid to the late Registrar without question; and the proposal, which was gracefully urged by Dr. Quain, the senior Treasurer, and supported by Dr. Pitman, the successor of Dr. Hawkins as Registrar of the Royal College of Physicians, was carried by a very large majority, three only voting against it.

The action of the Council in regard to various other matters will be found in our reports of the daily proceedings.

THE President of the Royal College of Physicians has issued cards for a *soirée* at the College, on Wednesday evening, June 20th.

THE Harveian Oration will be delivered at the Royal College of Physicians, London, by Dr. Sieveking, on Wednesday, the 27th of June next, at five o'clock.

THE Marquis of Hertford, in presiding at the opening of the Nursing Home and Children's Association at Stratford-on-Avon on Saturday afternoon, announced the bequest of £4,000 to the funds of the charity from Mr. Gibbins of Ethington.

EARL COWPER has made a present to the infirmary at Hertford of the freehold of the site on which the institution stands. In doing so, his lordship states that the institution is so useful that he was glad to be able to give it this assistance. The infirmary has hitherto been held on a lease for ninety-nine years, and nearly the half of that period had expired. The Chairman (Robert Smith, Esq.) has also most liberally undertaken to build a chapel, at his own expense, for the benefit of the patients in the infirmary.

THE General Council of Medical Education and Registration has, by a resolution, which we have reported, recommended that medical men possessing certain colonial diplomas and degrees shall be placed upon the *Medical Register*. This, however, can only be done by an amendment of the Medical Act. It will be tantamount to classing them "registered medical practitioners", and is a concession affecting a large body of men, many of whom serve, or desire to serve, as surgeons on ordinary passenger or emigrant ships. The Board of Trade, up to within a recent date, has allowed not only unregistered but unqualified doctors to sign articles and proceed to sea in medical charge of large numbers of passengers; and the Canadians have, during the last few months, been particularly annoyed because the Board of Trade, in the exercise of powers which ought to have been exercised long ago, now declares that all ship-surgeons must be registered. The *Pall Mall Gazette* points out that there are in Canada nine Colleges of good repute conferring medical degrees, and there are also educational Colleges at Barbadoes, Tasmania, Canterbury and Otago, in New Zealand, and Adelaide, South Australia. Most, if not all of these institutions, will be favourably affected if the proposed amendment be adopted.

#### THE MEDICAL ACTS AMENDMENT BILL.

WE read the following in a daily paper: "Dr. Lush, M.P. for Salisbury, having introduced a Bill containing a clause prohibiting counter-prescribing by chemists, several meetings to protest against it have been held. The Plymouth Chemists' Association, however, received a communication from Dr. Lush, consenting to withdraw the clause, and saying it was never his intention to interfere with that which the chemists are anxious to retain, but only to protect them against the competition of incapable persons." One or two correspondents have sent us similar paragraphs cut from country papers, and ask what it really means.

#### ENTRANCE SCHOLARSHIPS.

Two new entrance scholarships are announced at Guy's Hospital School, to be competed for in September next. They are of the value of £100, and are each tenable for one year. The subjects of the examination for the one in science are: 1. Physics; 2. Inorganic Chemistry; 3. Botany; 4. Zoology. The subjects for the

other, called "Open Scholarship in the Subjects of Preliminary Education", are: Latin, Euclid, Algebra and Arithmetic; French; Greek or German. The examination commences on Tuesday, Sept. 25th.

#### GUY'S HOSPITAL.

THE *Guy's Hospital Gazette* gives the following account of the new buildings in progress. The excavations that have been going on for the last fortnight in front of Bett's museum, are for the reception of a new block of buildings in connection with the school. In the first place, what has hitherto been known as the practical physiology room, is to be pulled down, and the ground it covered will be thrown into the "park", and the new wing will be brought forward level with the end of the dissecting-room as it now is. The additions will consist of five new rooms, distinguished in the following way. On the ground floor are two rooms, each thirty-seven feet long, twenty-one broad, and fifteen high, and separated by a passage leading to the vestibule in front of the anatomical theatre. The room on the right will be lighted by five large windows, two facing the park, and three facing Hunt's house. The first floor will consist of three rooms, each fifteen feet high, one very large, one nearly fifty feet long and twenty-one broad, and lighted from above by two skylights, in shape like the section of a decagon. The remaining two smaller rooms will also be provided with a similar skylight each. Ascent will be made to the first floor by a staircase which is to occupy the place of the little ante-room, which now contains the collection of skulls. The vestibule will thus be much enlarged. In the basement on the left there will be a slight continuation of the "catacombs", and all this underground system is to be ventilated by an air shaft supplied with gas-burners; all the effluvium will thus be effectually disposed of. The whole block will have a front elevation of thirty feet; the pediment and cornices will be of Portland stone, and the *façade* being supported by Corinthian and Doric columns, the addition will be handsome as well as useful. The whole structure is to be fire-proof, and the present system of hot air pipes will be continued into the various rooms. It is not yet specified to what the uses the different rooms will be put, but we understand that the large room on the first floor is to be the practical physiology room.

#### THE SOCIETY FOR THE PROTECTION OF ANIMALS LIABLE TO VIVISECTION.

MISS FRANCES POWER COBBE, the Secretary of the Society for the Protection of Animals liable to Vivisection, appears to have succeeded in inspiring the Council of that Society with the truly feminine failing of petty malice. The writings of this lady on this subject have been so outside the pale of ordinary decency of sentiment, and she has allowed herself in signed and unsigned papers to make attacks of such virulent personality upon those who differ from her as to the propriety of advancing medical knowledge by the means of experiments on living animals, to which medicine is indebted for the greater part of its progress, that no excess of language or of stratagem would be surprising on her part in conducting the campaign to which she has devoted herself. It is, however, not a little surprising to find that this Society, which includes some men of experience in public affairs, has allowed itself to permit her to write letters to the governors of the Glasgow Royal Infirmary, threatening that institution with an attack upon its funds, if the professors in the medical school are permitted to carry on the limited experiments necessary for the instruction, for which they have a licence under the recent Act. Miss Cobbe well knows that this is done and will be done in every medical school throughout Great Britain, and that any of the great London schools would laugh to scorn this mean attempt to influence a decision which had been obtained by appeals to the reason, by a base menace to the pocket. Such tactics have, however, always failed, and always will fail. Certain it is, that the sick poor in the hospitals are not the persons who should suffer, if any are to suffer, for the supposed misdeeds of the professors in the schools; and it may be taken as equally certain, that those who



cannot be convinced or moved by the passionate appeals and gross misstatements of character, object, and uses of experiments on animals in promoting the advance of medical science and the diagnosis and treatment of disease, will not be moved by these petty threats of a party who seem to think that the worst means are permissible to obtain what even they must consider an end of doubtful advantage.

#### THE WOUNDED IN THE WAR.

IN the war now proceeding, all methods for the better treatment of the wounded in recent wars have been studied carefully and improved upon. The other day, a train of what may be called railway-ambulances were sent to the Danube. They were constructed in the American style, with a passage up the centre and beds on both sides, and a kitchen and commissariat and surgeons' apartments in each. The beds are spring mattresses of the very best description. The tenderness that has exercised its ingenuity in meeting every want of the poor sufferers is admirable.

#### THE NATIONAL AID SOCIETY.

COLONEL R. LOYD-LINDSAY writes explaining the objects of the National Aid Society, which are to give aid to our own armies should England be involved in war, but, when neutral, to give aid impartially between the sick and wounded of the belligerent armies. In the present war, he says, the Committee have come to the conclusion that they can best apply their funds by sending a well-assorted consignment of articles to be distributed by English surgeons to the Russian and Turkish military hospitals. For this purpose a steamer has been chartered. Hospitals are being established in Roumania, and the Turks will probably form hospitals at Varna and in Bulgaria, and at Trebizond in Asia Minor. English surgeons were the means of first introducing the use of chloroform at the head-quarters of the Turkish army at Alexinatz, and subsequent operations were always performed under it. Costly drugs and medicines, such as quinine, morphia, carbolic acid, and chloroform, are unattainable in hospitals hastily established by people reduced to their last necessities in carrying on a war. The same may be said of air-pillows and cushions, waterproof sheeting, and other surgical appliances, which will certainly not be found in military hospitals on the Black Sea. The letter concludes by an appeal for funds.

#### SERVIAN HOSPITALS.

A VERY painful story is told in the *Glasgow Herald* with reference to the outcome of the efforts of those English doctors and others who, during the Servian war of last autumn, tried their utmost to make good some of the deficiencies of the Servian medical staff. Through the intervention of Dr. Atwood and others, a hospital was established at Belgrade, which at first received some shadow of support from the National Society for the Relief of Sick and Wounded; but, in consequence of the attitude assumed by the English Government and a large body of public opinion, that society determined to abandon the enterprise. Dr. Atwood thus found himself in a strange country, in the middle of a wholly unsympathetic people, with some seventy wounded Servians on his hands, and for whom their own Government absolutely declined to exert themselves. Weeks and months passed on, and by degrees the wounded and sick men were in a condition to leave the hospital; but, before the last man was sufficiently recovered, Dr. Atwood found himself burdened with some £400 of debt, for which he was personally responsible, and of which no one now comes forward to bear the burden. This leaving in the lurch of a fellow-countryman who had voluntarily set himself an arduous task which common humanity urged him to take up, is not altogether creditable to the large section of gushing humanitarians who, on one side or the other, have been expressing at various times their sympathy with one or other side. And it is still more discreditable to the Servian Government that they should openly avow, as they did, their total indifference to the sufferings of the soldiers who had been wounded in their cause.

#### DEATH IN THE JURY-BOX.

THE recent sad and terrible end of Mr. Charles Stewart, a man of advanced age, in the jury-box of the Central Criminal Court, may at least call attention to the law as it now affects jurors. Before going into the box, the deceased begged to be excused on the ground of his advanced age, but Mr. Commissioner Kerr refused his appeal, because the appellant had not availed himself of the means placed at his disposal to obtain the removal of his name from the jury list. Mr. Stewart discharged his duties on Monday, and on Tuesday, while a fraud was being tediously exposed, fell off his seat and was found to be dead. Death had been instantaneous, and resulted from organic disease of the heart, which had probably been aggravated by the foul and close atmosphere of the little den in which Mr. Commissioner Kerr sits.

#### DEATH FROM OPIUM.

AN inquest was some days ago held at the Portsmouth Dockyard on the body of Mr. Jacob E. Dyas, fleet-surgeon of the *Warrior*. He had been in the habit of taking doses of tincture of opium varying from twenty to thirty minims. On Saturday, the deceased went his rounds as usual, signed the sick list, and then lay down in the dispensary. During the morning, he was heard to breathe heavily, and, as some time afterwards the door was found fastened, the sick berth attendant, who had to call the deceased in order that he might examine a man, broke open the door. He then found Mr. Dyas in a state of insensibility on the sofa, with his face very flushed and covered with perspiration. The jury found that the deceased died from taking a poisonous dose of tincture of opium, but that there was no evidence to show the circumstances under which he took it.

#### THE MEDICAL CERTIFICATE QUESTION.

DR. HARDWICKE on Monday held an inquest in the Holloway Road Coroner's Court, on the body of Edith Ward, eleven months old, residing formerly with its parents at No. 3, Packington Street, Islington. Whilst the mother was following her usual avocations, deceased pushed over its chair and fell into the fire, burning itself severely on the head, arms, etc., on the left side, from the effects of which it died. The coroner observed, that a medical man had most improperly given a certificate of death from burns, which the registrar had refused to receive. It would never do to allow doctors to be surgeons, jury, and coroners too. He was bound to resist the giving of certificates by medical men under such circumstances. Had the medical man in this case reported the matter to the coroner in the usual way he would have secured his fee.—The jury agreed to a verdict of accidental death.

#### THE INTERNATIONAL MEDICAL CONFERENCE.

THE fifth session of the International Medical Conference will be held in Geneva, under the presidency of Dr. Vogt. It will commence on September 9th, at 1 P.M., and sittings for the reading and discussion of papers will be held twice daily until September 15th. The business will be conducted in six sections: 1. Medicine; 2. Surgery; 3. Obstetrics; 4. Public Medicine; 5. Biology; 6. Ophthalmology; and there will also be an exhibition of medical and surgical instruments. In Medicine, papers are promised by Professor Lebert on Ulcers of the Stomach, and by Dr. Hardy on Parasitic Skin-Disease. Other papers will be read on the Etiology of Enteric Fever and its Treatment by Cold Baths; the Indications and Value of Tracheotomy in Croup; and on an Universal Pharmacopoeia. In Surgery, Professor Esmarch will read a paper on his Haemostatic Process; and six other papers are promised on subjects of more or less special interest; viz., the Influence of Pregnancy on Operations, and *vice versa*; Resection of Joints; etc. In Obstetrics, Dr. Odier will read a paper on the Growth of Infants during the first Year of Life, and the Physiological and Pathological Deviations from this Law. The other papers refer to Placental Bruit, Artificial Feeding of Infants, Anæsthetics during Confinement, and Pseudomembranous



Dysmenorrhœa. In Public Medicine, only four papers have been promised: two on Alcohol; the others on Medical Geography and the Influence of Emigration from the Country into Towns. In Biology, a paper will be read by Dr. Broadbent of St. Mary's Hospital, on Cerebral Localisation; others on Physiological Antagonisms by Dr. Prevost, and on Entozoa in Man by Dr. Vogt, etc. Instruments for exhibition are to be sent to Dr. J. L. Reverdin, Place du Lac, Genève, before September 1st; notice having been given by August 15th as to how much room will be required, and all expenses to be paid by the exhibitor. Tickets can be taken out on September 8th, and on the morning of each day of meeting. The cost of them will be 20 francs; and the holder may take part in the discussion on the papers, and will receive a copy of the report of the meeting. Free tickets will be granted to students. All information in relation to the meeting may be obtained on application to Dr. Prevost, 8, Rue Eynard, Genève.

#### HEALTH OF THE POPE.

No noteworthy change has taken place in the health of Pius IX during this month, in spite of the great fatigue he has undergone in the reception of the pilgrims who have come from all parts of the world to celebrate his episcopal jubilee. Indeed, we do not hear now of the attacks of syncope which caused so much alarm when he first began to receive the pilgrims early in May. Great care, however, is taken to husband his strength, and his physicians seem to spend most of their time in the Vatican. He is invariably carried into the audience-room, and sits while delivering his addresses, rising only to give the benediction. The addresses, too, are much briefer than formerly, and he retires immediately after them, the pilgrims not being admitted to the privilege of kissing his hand or foot, as it is thought too trying an ordeal for the Pope at present. On the other hand, his voice is as clear and audible as ever, and his appearance is unchanged. There seems to be much vitality in Pius IX, enabling him to resist the progress of the chronic renal and cardiac mischief from which he is said to suffer.

#### UNCERTIFIED DEATHS.

THE improved sanitary condition of our largest towns is reflected in their declining death-rates, although the national death-rate was comparatively stationary during the two decades 1851-60 and 1861-70. The Registrar-General has frequently pointed out that this result is mainly due to the constant waste of life going on in the new urban aggregations in mining and manufacturing villages of South Wales and the northern counties, and especially in Lancashire, Durham, and the West Riding of Yorkshire. In a large proportion of these new urban aggregations, defects of drainage, water-supply, and housing, and general sanitary neglect, produce excessive death-rates. It appears, moreover, that in many such neighbourhoods the excessive number of uncertified deaths affords conclusive evidence that a large proportion of the persons deceased receive no attendance from registered medical practitioners during their last illness. The Medical Officer of Health to the Durham Rural Sanitary Authority recently reported that, during the first quarter of this year, of two hundred and ninety-six deaths registered within his district, eighty-five, or 28.7 per cent., were uncertified either by registered medical practitioner or by coroner. It is probable that a large proportion of these eighty-five persons (mostly children) died without any kind of medical attendance; but the local registrars state that a majority of the cases had been attended by unqualified practitioners, either practising on their own account or as the assistants of registered practitioners. It is worthy of comment, that no less than 62.8 per cent. of these eighty-five deaths were of children under five years of age, the fatal prevalence of scarlet fever and of measles contributing largely to this exceptional mortality among children. The medical officer of health attributes without hesitation the excessive mortality in the townships of Brandon and Tudhoe to the practice of unqualified medical practitioners. A large number of the uncertified deaths in some of the colliery villages situated within the Durham Rural Sanitary District are due to the fact that an unqualified practitioner is in extensive practice, acting as the nominal assistant of

a registered practitioner resident at Chester-le-Street, many miles distant from these colliery districts. In the interests of the public as well as of the profession, it is beyond all question important that the cause of all deaths not certified by a registered medical practitioner should be carefully and scientifically investigated; and it may be hoped that this matter will be fully considered when the mode of appointment and the duties of coroners are revised and regulated by promised legislation. In the meantime, however, it is well to bear in mind that the Births and Deaths Registration Act gives no facilities for the suppression of unqualified practitioners, who in great measure owe their opportunities for practice to their employment as assistants by registered practitioners, often living at a distance. Such an alliance between unqualified and registered practitioners cannot be too strongly deprecated, and affords one of the serious obstacles to the suppression of irregular practice, which can only be effected by the cordial co-operation of registered practitioners, and by an increase in the number of inquests held in cases where no qualified medical man has been in attendance during the last illness of the deceased.

#### UNQUALIFIED MEDICAL PRACTITIONERS.

AN inquest was held in St. Giles's upon the body of a child aged two years, which had before death been prescribed for by a druggist to whom it was taken by the mother, who thought it was Dr. Welch's surgery; and it was not until the child died and she had asked for the certificate of death that she knew the young man who had given her medicine for it was not a qualified medical man. The coroner censured Mr. Harle, the druggist in question, and said his conduct had deprived the child of properly qualified medical assistance and rendered an inquest necessary. The cause of death was congestion of the lungs, accelerated by bad food, air, and water, etc., peculiar to the locality where the child died. Five persons had occupied one room.

#### THE PUBLIC HEALTH.

DURING the week ending Saturday, May 26th, 5,338 births and 3,647 deaths were registered in London and twenty-two other large towns of the United Kingdom. The annual death-rate was 23 per 1,000 in Edinburgh, 30 in Glasgow, and 24 in Dublin. In London, 2,158 births and 1,392 deaths were registered. The annual death-rate from all causes, which in the two previous weeks had been equal to 23.8 and 23.1 per 1,000, further declined last week to 20.6. The 1,392 deaths included 69 from small-pox, 56 from measles, 21 from scarlet fever, 3 from diphtheria, 34 from whooping-cough, 24 from different forms of fever, and 13 from diarrhœa. Thus, to the seven principal diseases of the zymotic class, 220 deaths were referred, against 245 and 246 in the two preceding weeks. These 220 deaths were 7 below the corrected average number from the same diseases in the corresponding week of the last ten years, and were equal to an annual rate of 3.2 per 1,000. The fatal cases of small-pox, which in the two preceding weeks had been 78 and 70, were 69 last week; 28 were certified as unvaccinated, 17 as vaccinated, and, in the remaining 24 cases, nothing was stated as to vaccination in the medical certificates. The 69 included 36 which were recorded in the Metropolitan Asylum Hospitals. Twelve of the 69 deaths from small-pox were of children under five years of age, of whom 4 were certified to be unvaccinated, and, in the other 8 cases, the medical practitioners gave no information as to vaccination. A child aged sixteen months died of small-pox on May 12th, in Stratfield Road, Bromley, and was returned as vaccinated. The child had had the operation performed, but it did not take, so the child was not successfully vaccinated. Medical vaccinators should never sign certificates of successful vaccination unless they see on the arm the well-defined marks of cow-pox. "Vaccinated", used alone in a medical certificate of the cause of death, is an ambiguous term, as it is often applied to the mere insertion of lymph on a lancet under the skin, and in this sense the word is misleading, as in the case referred to. The Metropolitan Asylum District Hospitals contained 964 small-pox patients on Saturday last, showing a further increase upon the



numbers in the four preceding weeks, which had risen from 824 to 925. The number of new cases admitted during the week was 219, against 246, 219, and 254 in the three previous weeks. The deaths referred to diseases of the respiratory organs were 303 last week, against 355 and 338 in the two previous weeks. In greater London, 2,607 births and 1,643 deaths were registered, equal to annual rates of 31.1 and 19.6 per 1,000 of the population. Five deaths were referred to small-pox in the outer ring. At the Royal Observatory, Greenwich, the duration of registered sunshine in the week was 13.5 hours out of the 111.4 hours that the sun was above the horizon.

#### EPSOM COLLEGE.

FROM a notice which appeared last week in our advertisement column, it will have been seen that a movement is on foot for the purpose of forming an "Epsomian Club". The objects are to kindle and maintain an *esprit de corps* feeling amongst those who have been educated at Epsom College, to afford an opportunity for their meeting, and generally to further the interests of the school. Old Epsomians are invited to attend the meeting, which is to be held this (Saturday) evening, at St. James's Hall, Regent Street, at eight o'clock, for the purpose of starting the Club; and, as an influential number of the earliest Epsomians have already signified their intention of assisting the project, it will doubtless be warmly supported.

#### THE MIDLAND MEDICAL BENEVOLENT SOCIETY.

THE annual meeting of the Midland Medical Benevolent Society was held last week at Birmingham, Dr. Balthazar Foster presiding. The annual report was very satisfactory. The income of the Society during the year was £517, and the grants £420:1. The total property of the Society was £8,900. During the last year, forty-one new members were added, making in all two hundred and ten members. Dr. Foster pointed out that, with one thousand five hundred medical practitioners in the district, and in the fifty-fifth year of its existence, they might hope and expect to have a very much larger numerical strength. The President specially referred to the absence of donations from the general public. With the exception of two large donations of £1,000 and £500 respectively, during the fifty-five years of their existence they had had the small sum of £270 given them in donations from the general public, or rather more than £5 a year. He did not think that was a position in which they should stand. They were doing a large amount of public work gratuitously, and it was more or less the duty of their neighbours to help them and prevent the children of some of the members of the profession dropping out of the social scale in which they had been brought up through the poverty of their parents. He thought the lack of public support arose because there had been no systematic appeal to the public, and because they had a very incorrect idea of the monetary position of the profession. Because a doctor lived in a good house and sometimes drove a good horse, the general impression was that he must have a large income and be saving money. In reality, they were part of his stock-in-trade, and were forced upon him by the necessities of his position. He thought that, if the circumstances of the profession were better known, they would receive more aid from the benevolent public.

#### PRIZES OF THE ACADEMY OF SCIENCES.

THE Paris Academy of Sciences has awarded the following prizes: The Montyon prize for statistics—very honourable mention to M. Bertillon, honourable mention to MM. Heuzé and G. Delaunay; the Jecker prize for chemistry to M. Cloez; the Barbier prize for medical botany to M. Planchon; the Desmazières prize for botany to M. Bornet, and a premium of 500 francs to M. Muntz; the Thore prize for anatomy and zoology to M. Oustalet; the Bréant prize for medicine and surgery—a premium of 2,000 francs to M. Duboué, and of 1,000 francs to M. Stanski; the Montyon prize for medicine and surgery to MM. Feltz, Ritter, Paquelin, and Perrin—mentions to MM. Mayençon, Bergeret,

Mayet, and Sanson—certificates, MM. Farabœuf, Frank, Gayon, Badal, Baréty, Brochard, Jolly, Labbé, Coyne, Laveran, L. Leclerc, Pointcaré, and Poncet; Montyon prize for experimental physiology—prize, MM. Morat and Toussaint—medal, with 500 francs, M. Mialhe; the Montyon prize for sanitary science to M. Melsens; the Cuvier prize to M. Fouqué; the Delalande Guérineau prize to MM. Filhol and Velain.

### SCOTLAND.

A NEW candidate for the Edinburgh Chair of Clinical Surgery has appeared on the field in the person of Mr. E. H. Bickersteth of Liverpool, a well known provincial surgeon, and an ardent believer in the virtues of the antiseptic system. It is stated that he is meeting with some support, notably that of Mr. Lister himself.

THE report that Dr. Macleod of Glasgow is likely to be nominated to the office of Surgeon to the Queen in Scotland, has given great satisfaction to the many professional friends and admirers of that able and popular surgeon.

A NUMBER of valuable cows, belonging to a farmer in the parish of Darris, have been seized with illness, after pasturing in a field of new grass, which had been recently manured with nitrate of soda. Two of the cows have died.

A MAN committed suicide last week, in Edinburgh, by hanging. He wound a handkerchief round his neck, and attached it to the handle of a door, the place of attachment being not more than three feet from the ground.

#### A HEALTHY QUARTER.

THERE were only two deaths from small-pox registered in Scotland during the first quarter of the present year. Both of these occurred in Glasgow, one being in the month of February, the other in March. Only 12.5 per cent. of all deaths from specified causes were due to zymotic diseases, while 28.5 per cent. were caused by diseases of the respiratory system, exclusive of consumption.

#### THE LATE SIR JAMES Y. SIMPSON.

LAST Saturday afternoon, the bronze statue, procured by public subscription, as a memorial of the late Sir J. Y. Simpson, and recently placed in position on a pedestal at the west end of the Princes Street Gardens, Edinburgh, was unveiled by Lady Galloway, in the presence of a large gathering of subscribers and of the general public. The statue represents Sir James in a sitting posture, as if in the act of addressing his students; the face is turned towards the left shoulder, the right hand supports a large book, which rests on the knees, and the left hand is engaged in turning the pages. Modelled to the scale of a twelve foot figure, the statue is eight feet high. A professional robe and a D.C.L. hood give opportunity for some effective arrangement of drapery. It is the work of Mr. W. Brodie, R.S.A., and appears to give great satisfaction. The ceremony of formally handing over the statue to the care of the town was performed by Dr. Alexander Wood, in a capital speech. He spoke of Simpson as one who, by the force of his original genius, combined with rare energy and endurance, won his way from the lowest place in the social scale to become the honoured of princes and the beloved of his fellow-citizens, and one who exercised a wonderful power over all who came in contact with him, by reason of his sympathetic heart and the helping hand he extended to all in distress. The Lord Provost, in a few sentences, accepted the trust on behalf of the Corporation.

#### SUICIDE IN A POLICE-CELL.

A DETERMINED suicide took place in a cell of the New Police Office, at Stranraer, on the 20th ultimo. On the previous evening, the police, suspecting that a man, representing himself as blind and begging, was



an impostor, arrested him and took him to the surgery of a medical practitioner, who examined the man and stated that he could see perfectly well. He was accordingly lodged in a cell. When the constable went his rounds at two o'clock on the following morning, he was found hanging from the gas-pipe quite dead. The unfortunate man had gone about it with great deliberation. The gas-pipe was six feet four inches from the floor, and to reach it he got a basin and a small can, which were in the cell, and with these he raised his head above the level of the pipe; having tied a napkin, which he took from his neck, to the pipe, and then fastened it round his neck, he must have kicked away the utensils from below him, and was thus left fully a foot from the ground. He had answered the constable at eleven o'clock.

#### EDINBURGH UNIVERSITY CLASS OF BOTANY.

THE number of students entered for the present session has, we are told, completely outgrown the accommodation provided in the Botanical Class-room, where the lectures are delivered, as all old Edinburgh men will well recollect, at eight o'clock in the morning. Not only is it impossible to provide for all the students attending, but not unfrequently some are altogether shut out from the lecture. Much inconvenience is thus occasioned both to professor and to students. On the 23rd, Professor Balfour intimated that he had brought the difficulty under the attention of Dr. Lyon Playfair, with the view of getting the Government to take action in the matter. If Dr. Playfair's representations were not successful, something, he thought, might be done in the way of a memorial by the students themselves.

### IRELAND.

DR. J. J. TRAYER, who was lately superannuated as medical officer of Bagnalstown Fever Hospital, Carlow, died in Dublin on May 16th, aged sixty-one.

#### ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

THE thirty-fifth annual meeting of this most estimable society will be held on Monday, June 4th, at the College of Physicians; the chair to be taken by Dr. George H. Kidd.

#### BELFAST ROYAL HOSPITAL.

LAST week, a public meeting of the working classes of Belfast was held in the Working Men's Institute to consider certain resolutions passed at a meeting of trades' delegates held on the 5th instant for the purpose of establishing an annual fund on behalf of the Belfast Royal Hospital. Nearly every trade organisation in Belfast was represented, the meeting being principally held for the purpose of inducing those who do not belong to trade organisations to support the resolution agreed to at the previous meeting. The sum obtained from the working classes in Belfast last year amounted to about £200, an extremely small sum, considering the number of operatives in that town. A resolution was adopted to the effect that it was the duty of the working classes to subscribe annually to the support of the hospital, the following tariff being arranged:—Tradesmen, 1s.; shop-assistants, 1s.; labourers, 6d.; female workers in mills, factories and shops, 3d.; apprentices, 3d. Up to the present, the support given to the institution by the class who altogether benefit by the charity has been exceedingly trifling; but, now that the matter has been taken in hand, we are confident that the result will be most satisfactory. The first week in August of each year has been fixed for annual subscriptions, which will be collected by the employers and handed over to the parties appointed to receive it. We regret that Dublin is so far behind Belfast in this matter, and trust that before long the working classes in that city may be persuaded to follow the example of their brethren in the north.

#### THE TRAFFIC IN DISEASED MEAT.

AT a meeting of the guardians of the North Dublin Union last week, a communication was received from Dr. Cameron in reference to the sale of diseased meat, in which he stated that he did not consider the

flesh of every animal slightly diseased as unfit for food; but that he should continue to oppose the sale of the carcasses of animals killed in the second stage of contagious pleuropneumonia, the lungs of which are hepatised and infiltrated with purulent matter. He referred to the miscarriage of justice in the inquiry lately held at Blanchardstown Petty Sessions, and considered it incredible how any person who had heard that evidence could believe that the meat was fit for food. He mentioned also that medical men, with but rare exceptions, pronounced such food to be dangerous; that the Registrar-General for Scotland attributes the enormous increase of carbuncular disease in that country to the use of the flesh of animals affected with pleuropneumonia; that Mr. Simon, one of the greatest sanitarians in Europe, had made a similar observation; and that veterinary surgeons of eminence agree with human physicians that it is not safe to use the flesh of such animals. The Chairman of the Board (Mr. MacFarlane), instead of being thankful for the valuable information conveyed to the guardians on such an important subject by so distinguished an authority as Dr. Cameron, expressed his surprise at what he termed the lecture addressed to them, and seemed to believe that the opinion of their inspector, a veterinary surgeon, ought to be quite as good as that of Dr. Cameron, whose special duty as a physician is to guard the community against unwholesome food. Dr. Cameron, in a recent letter commenting on Mr. MacFarlane's injudicious observations, states that, in the dispute which has arisen between him and the guardians, he has not interfered with them or their inspector in their application of the Cattle Diseases Prevention Acts, in not one of which is there a reference to the sale of diseased animals as food. But, when they or their inspector undertook to sell the carcasses of diseased animals in Dublin, it was clearly his duty, as the officer appointed for that purpose, to see that those animals were such as might be properly used for food. That the guardians sold an animal in an advanced stage of a loathsome disease has been proved on sworn testimony, and their conduct in thus acting, and trying to palliate their proceedings on this and similar occasions, is most discreditable. The whole matter will shortly be brought under the notice of Parliament by the member for Glasgow, when we trust that the publicity given to the proceedings, and the discussion on the case at Blanchardstown, will have the effect of showing the illegal nature of the traffic carried on, and that practices so unworthy will be discontinued.

#### LUNATIC ASYLUMS, IRELAND.

IN the twenty-sixth annual report just issued by the Inspectors of Lunatic Asylums in Ireland, we learn that, at the end of last year, there were 12,123 persons insane in the various asylums and in workhouses—6,001 males and 6,122 females—showing an increase of 346 over that of the preceding year; whilst, as regards the insane at large, there appears to be a diminution of 241 from that of 1875. The total number of insane amounted, therefore, to 18,730, against 18,625 in 1875; so that, allowing for the increase in population, there is little or no alteration. There were in the various unions 1,429 hopeless cases, 1,787 being idiots, imbeciles, or epileptic. The inspectors conclude that idiocy is declining in Ireland, the workhouses containing only 93 idiots under 14 years of age, while, above that age and up to 30, there were 514, and above 30 1,180: facts which bear out their statement most conclusively. During the past twelve months, 970 cases were discharged as cured, 225 were improved mentally, and 47 were incurable. The mortality during the year amounted to 765, but 4 cases arising from suicide. The importance of early treatment in cases of insanity is strongly advocated, and is borne out by the fact that 579 out of the 970 reported as cured had been admitted into asylums within three months from the time that delusions first appeared. The causes which led to derangement were numerous, the principal being grief, poverty, and reverse of fortune, religious excitement, and disappointment in love. During the year, 1,239 were committed by magistrates as dangerous lunatics, several, the inspectors state, on the most frivolous pretexts.



## THE MOFFAT DEFENCE FUND.

A MEETING was held at the Chester Infirmary Library, on Monday, May 28th, at twelve o'clock noon; Dr. DAVIES-COLLEY in the chair. There were present: Dr. E. Waters, Dr. Dobie, Dr. Jephcott, Dr. Kenyon, Dr. Haining, Dr. McEwen, Dr. Stolterfoth, Mr. Henry Churton, Mr. James Taylor, Mr. J. E. Moreton (Tarvin), Mr. C. W. Watson, Mr. A. Reade, Mr. Thomas Brittain, Mr. Williams (Holywell). Apologies were received from several gentlemen unable to attend. The following resolutions were passed.

1. Proposed by Dr. WATERS, and seconded by Mr. HENRY CHURTON, and resolved unanimously: "That this meeting desires to offer to Dr. Moffat its sincere sympathy with him in the severe ordeal to which he has been exposed by the base and unfounded charge recently made against him, and to congratulate him most cordially on the triumphant vindication of his character by the result of the late law-suit."

2. Proposed by Mr. JAMES TAYLOR, seconded by Dr. KENYON, and resolved unanimously: "That this meeting form themselves into a Committee to use their best endeavours to raise a fund to be called 'The Moffat Defence Fund', to assist in defraying the heavy legal expenses of the late law-suit, and that Dr. McEwen (Chester) be requested to act as treasurer and honorary secretary."

3. "That a copy of this day's proceedings be forwarded to Dr. Moffat, and inserted in the local papers, and in the London medical journals."

4. Proposed by Mr. READE, and seconded by Mr. BRITAIN: "That the best thanks of the meeting be offered to Dr. Davies-Colley for his kind acceptance of the chair."

A very handsome subscription was announced.

We publish with great satisfaction this record of the movement of the profession in support of the character and resources of a physician, whose reputation was assailed, in the most palpably unjust and cruel manner, on a false charge, of which he was triumphantly acquitted. Perhaps, there never was any case in which a more evidently cruel and base charge was brought against a practitioner in the discharge of his ordinary professional duties. It is most distressing to find that any one could have the heart to make so wretched a pretext the means of assailing the professional reputation of a medical man in the discharge of the most necessary and ordinary functions of his daily work. No one is safe from such an attack as this. It would by no means always be possible, even for the most innocent man, to be able to adduce such overwhelming evidence of the utter falseness of the charge as Dr. Moffat was able to bring forward in this case; and his danger of yesterday may be the danger of anyone to-day or to-morrow. His case is, therefore, one that must meet with peculiar sympathy. Moreover, in his age, his character, and in all the surrounding circumstances of the case, there is much that claims universal interest. It was fitting that the members of the profession who live in his vicinity, who know him best, should initiate and head this movement; but we trust that what they have so well begun will be carried on elsewhere, and that a striking testimony will be afforded, in this instance, to the determination of the medical profession to uphold any member of their body who has been, as in this case, basely and unjustly assailed in the discharge of his duties. We trust that, at least, Dr. Moffat will be indemnified from any pecuniary loss, and that the sympathy and support of the general body of his profession will be shown in such a manner as to afford him some consolation for the suffering and distress which have been inflicted upon him.

## MILK IN THE LONDON HOSPITALS.

IN again, after the lapse of five years, calling attention to the condition of the milk in the hospitals of London, we note a very great improvement.

Our present report shows, that out of the seven milks which we have examined and reported upon, only one, viz., the milk from the London Hospital, is certainly watered, and that to the extent of about 17 per cent. The six other milks do not in any instance exhibit more than 6 per cent. of extraneous water; and, as is well known, small

figures expressive of watering have no reliable meaning, and are to be disregarded. As to richness, we cannot, however, give quite so favourable an account. Not one of the seven, it is true, falls below half-skim; but only three of the milks reach or exceed normal milk. The hospitals whose milk comes up to the mark in this particular deserve especial mention; they are the University College, the London Hospital, and Middlesex.

As aforesaid—and as may be seen on turning back to our report in 1872—there has been a very great improvement in the milk-supply to the London hospitals.

We have to record that, whereas everywhere else our messenger was well received and freely furnished with samples of milk, he found it impossible to obtain samples at St. Bartholomew's Hospital. In 1872, we found that the milk in St. Bartholomew's Hospital yielded only 7.58 and 7.62 per cent. of total solids, and was, therefore, watered to a most disgraceful extent.

*Analytical Report for May 1877.*

Name and Description of the Samples of Milk.	In One Hundred Cubic Centimètres of the Sample.				
	No. of grammes of total solids.	No. of grammes of fat.	No. of grammes of ash.	No. of grammes of "solids", not "fat".	No. of grammes of "real milk".
London Hospital Milk.					
London Hospital .....	11.39	3.42	0.70	7.97	83
Royal Free Hospital ..	11.78	2.58	0.72	9.20	95
University College Hos.	14.60	5.40	0.76	9.20	95
St. Thomas's Hospital..	11.58	2.42	0.76	9.16	95
Westminster Hospital..	12.62	2.50	0.76	10.12	100
Middlesex Hospital....	12.14	3.10	0.74	9.04	94
Charing Cross Hospital.	12.95	2.76	0.74	10.19	100
Normal milk .....	12.80	3.15	0.73	9.65	100

## DUBLIN BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

WE are glad to announce that an important and influential Branch of the Association has been organised in Dublin. Its by-laws have been drawn up and forwarded to the Committee of Council for their approval, prior to the formal recognition of the Branch as an integral portion of our corporate Association. Heretofore, the large body of members of the Association residing in Dublin and its vicinity have had no representation on the Council of the Association, in consequence of the want of branch organisation; and have also lacked those obvious advantages which will now be afforded by an official and intimate union with so powerful a body, both politically and professionally, as the British Medical Association. One of the most important advantages we anticipate from the Dublin Branch, will be the assistance it will undoubtedly be able to give the Irish Medical Association. Already the two Associations have frequently worked together. Only last week, the British Medical Association was represented at the interview which the deputation from the Irish Medical Association had with the Chief Secretary for Ireland relative to the Public Health (Ireland) Bill; and we believe we are correct in stating that the deputation have acknowledged the assistance which it was the pleasure of the British Medical Association then, and at all other times, to afford their Irish sister association. There is nothing antagonistic in the objects or workings of the two Associations, a circumstance which, if any evidence was required, is shown by the fact that several of the most active official members of the Irish Medical Association have joined the new Dublin Branch, and that some of them are also amongst its officers.

Owing to the small number of medical men in the majority of Irish towns, and their distances from each other, the formation of a great number of local branches, such as exist in England, would not be practicable in Ireland. We hope, however, to see before very long a branch of the British Medical Association established for each of the four provinces. The existing South of Ireland Branch—the premier Irish Branch of the Association—includes the greater portion of Munster, but might perhaps be induced to take in the entire province, and the Dublin Branch has, judiciously we think, been made to include all Leinster; so that, if branches were now formed for Ulster and Connaught, Ireland would be unitedly joined with Great Britain in one of the most powerful associations ever formed for promoting the interests of a common profession. Although the first public meeting at which it was resolved to establish the Dublin Branch was only held on the 18th of May, eighty-two members of the profession residing in Leinster have already signified their intention of joining the Branch, and we expect this number will be soon considerably augmented. The appended list of the officers of



the branch—who were elected at a special adjourned meeting held on May 25th, in the King and Queen's College of Physicians, Dr. Gordon, the President, in the chair,—shows that the movement has received the support of the leaders of the profession in the Irish metropolis, and we augur for the Branch a great success.

The following are the officers and council of the Branch: *President*: Alfred Hudson, M.D., ex-President K.Q.C.P.I., Member of the General Medical Council, etc. *President-Elect*: Geo. H. Porter, F.R.C.S.I., Surgeon in Ordinary to the Queen in Ireland, ex-President R.C.S.I., Surgeon to the Meath Hospital, etc. *Vice-Presidents*: S. Gordon, M.B., President K.Q.C.P.I., Physician to the House of Industry Hospitals, etc.; and Robert McDonnell, M.D., F.R.S., Vice-President R.C.S.I., Surgeon to Stevens's Hospital, etc. *Council*: Thomas Hayden, Vice-President K.Q.C.P.I., Physician to the Mater Misericordiae Hospital, etc.; Rev. S. Haughton, M.D., F.R.S., Fellow and Medical Registrar, Trinity College, Dublin; L. Atthill, M.D., Master of the Rotunda Hospital, etc.; T. Darby, F.R.C.S.I., Bray; A. H. McClintock, M.D., F.R.C.S.I., Ex-Master Rotunda Hospital, etc.; H. H. Head, M.D., Physician to the Adelaide Hospital; E. Hamilton, M.D., Surgeon to Stevens's Hospital, etc.; T. W. Grimshaw, M.D., Physician to Stevens's Hospital, etc.; E. D. Mapother, M.D., Surgeon to St. Vincent's Hospital, etc.; W. Stokes, M.D., Surgeon to the Richmond Hospital, etc.; E. H. Bennett, M.D., Surgeon to Sir Patrick Dun's Hospital, etc.; I. Ashe, M.D., Resident Medical Superintendent, Dundrum Criminal Lunatic Asylum. *Honorary Secretary and Treasurer*: George F. Duffey, M.D., Physician to Mercer's Hospital, etc., 30, Fitzwilliam Place, Dublin.

## SPECIAL CORRESPONDENCE.

### MANCHESTER.

[FROM OUR OWN CORRESPONDENT.]

*The Manchester Infirmary.—Surgical Cases.—New Form of Drainage.—The Children's Hospital.—Small-pox.*

THE future of the Infirmary still remains unsettled and uncertain. The architects selected to furnish statements regarding the requisite alterations of, and additions to, the present building are expected to present their reports some time next month. In the meantime, the weekly board is engaged in discussing certain side-issues, which are not very relevant to the more important question of removal. The amount of expenditure and the cost per bed have occupied the attention of more than one of its members, and it is interesting to see the very different results to which they have brought their calculations. The frequent and urgent representations of the Medical Board as to the insufficiency of the present accommodation for male medical cases have at last been attended to; twenty more beds are to be allotted to the physicians; these additional beds are obtained by appropriating a surgical ward and a nurses' dormitory to medical uses. The nurses, in consequence, will have to be housed in a tent which was originally intended for erysipelas cases, and the latter will be provided for by erecting another wooden tent.

Mr. Heath has under his care several interesting cases: one of aneurism of the common femoral artery, in a man 42 years of age, who had syphilis twenty years ago. Symptoms of aneurism showed themselves last February, and followed closely upon an accident to the hip of the same side. A considerable amount of pressure on the external iliac artery is required to control the circulation through the tumour. We believe Mr. Heath purposes placing a ligature on the external iliac.

A fortnight ago, Mr. Heath amputated a young man's thigh for a slowly growing tumour, which developed at the seat of a fracture about the middle of the thigh seventeen weeks since. Upon microscopic examination, the tumour proved to be a spindle-celled sarcoma apparently springing from the periosteum of the outer side of the femur. The fracture was not united, and the ends of the fragments were rounded off and sclerosed. The case is progressing uninterruptedly towards recovery.

Mr. Heath has of late employed a form of drainage introduced into practice some months ago by Mr. Chiene of Edinburgh. Several threads of catgut are tied together in a bundle and placed across the incision-wound; the ends are brought out at the most convenient points for drainage, and the edges of the wound adjusted by catgut or wire sutures in the usual manner. In five or six days, slight traction on the ends of the catgut skein will remove it in two pieces, and it will be found that the threads have been dissolved in the wound. In amputation of the breast, one end of the catgut drain-threads is

brought out at the inner angle of the wound and the other through a separate opening in the most dependent part of the lower flap. By this new method of drainage, we have lately seen primary union of the skin-wound in two cases of removal of the breast.

The Board of Governors of the Children's Hospital have wisely and generously resolved to throw open the practice of their hospital and dispensary to the Owens College medical students. The dispensary in town affords rare opportunities for the study of the various forms of children's diseases, both medical and surgical. Advanced students are invited to take advantage of this, and to enter their names for a three months' clerkship. It is further intended to supplement the course of instruction in the out-patient department by clinical lectures at the hospital. With this view, Dr. Borchardt will deliver one lecture a week at the bedside during the remaining months of the summer session. We are glad to hear that several students have already joined Dr. Borchardt's class.

Small-pox, although on the decline in Salford, has appeared in a somewhat alarming form at Patricroft, a village distant about six miles from Manchester. During the week, twenty-three cases have been sent to the fever hospital at Monsal. We hope the authorities at Patricroft will have learned a lesson from the experience of Salford, and that they will at once provide means for thoroughly isolating all cases of the disease.

## THE MEDICAL PROFESSION IN INDIA.

[FROM OUR OWN CORRESPONDENT.]

*The Voyage out: Malta: The Suez Canal: Red Sea: Bombay.*

IN my last letter, I gave a brief description of one of Her Majesty's Indian troop-ships. Each one of the five goes out to India, and returns, twice during the cold season. The voyage to Bombay generally occupies thirty days. Gibraltar is usually reached in five days, and, if the Bay of Biscay have been passed without a good deal of rolling, so much the better for the passengers. In rough weather, these big ships sometimes roll a good deal; but they are too long to pitch much. After passing the celebrated "rock" without stopping, the Mediterranean Sea is entered; and it is very enjoyable to sit on the deck and luxuriate in the delicious climate. Probably the last glimpse of Old England has been obtained through one of her own peculiar fogs, and everything around has been cold and damp; but, after passing Gibraltar, lovely blue sky overhead, glorious deep blue sea beneath, and a warm balmy atmosphere, make it delightful to sit still and enjoy existence. If one have left England with a bad cold, the change is more thoroughly appreciated, and those who suffer from weak chests soon feel benefited. Experience has fully proved that, at least, the comfort of phthisical patients is much increased by a residence in warm climates during the winter months. For those who can afford it, few things are more pleasant than a cruise during those months in the Mediterranean, where they can have the advantages of warm sea-air and warm salt-water baths. Five days' steaming takes the ship to Malta, after passing Gibraltar. The harbour of Valetta is entered, and anchor dropped for twenty-four hours for the purpose of coaling. Boats are soon alongside, laden with vegetables, fruit—the Maltese oranges are celebrated—sponges (for which the Maltese ask an enormous price), and a great variety of articles. But most of the passengers have gone on shore; of course, the soldiers are not allowed to go, or some of them might not come back. There are a good many very interesting things to be seen at Malta. I could write a long description of the beautiful church of St. John, in which many of the Knights of Malta are interred; the Armoury; and the Gobelines tapestry, some of the finest in Europe; the Catacombs, with the preserved bodies of the monks, and other things worthy of note; but they might be considered out of place here. Plenty of accounts of the island can be perused by those specially interested. About five days after leaving Malta, Port Said is in sight, and here is the entrance of the Suez Canal. This extraordinary channel, which cost much labour and money, and the successful completion of which was generally deemed an impossibility, is eighty-four miles in length. It has a minimum depth of twenty-eight feet of water. The Indian troop-ships are the largest vessels that go through, and in some parts there are very few feet of water underneath the keel. In the narrowest portions of the canal, a person could almost jump on to either bank from the vessel's side. In the Bitter Lakes, there is a very wide expanse of salt-water. The basin of these lakes is below the level of the surrounding sand, and it is said that the water was rushing into them for three months, through the canal, before they were filled, as the sand absorbed so much. About midway, there is the town of Ismailia, which looks pretty in the distance. Steamers are not allowed to proceed faster than five miles an hour, as the wash of the water



would injure the banks. It was calculated that a large sum would have to be spent annually in dredging the canal; but it has been found that the steady flow of the water through it keeps it clear, and that very little dredging is required. Vegetation has sprung up along the banks, and for some distance into the desert; and shrubs and clumps of coarse grass now grow where never a blade was seen before. The canal also has had an effect on the meteorology of the district, for showers of rain now fall where formerly they were unknown. This splendid piece of work, entirely due to the energy and perseverance of a French engineer, M. de Lesseps, seems likely to improve the "land of Egypt" physically as well as financially. These few details may be interesting to English readers, as the purchase by the British Government of shares in the canal attracted public attention not long ago. To give an idea of the expenses attending the transport of troops to India, the dues paid to the proprietors of the canal, by each troop-ship every voyage, amount to nearly *two thousand pounds*; and as each of the five troop-ships makes four voyages during the year, the sum paid can be easily calculated. It usually takes about one day and a half or two days to pass through. As the canal is very narrow in most parts, vessels could not pass each other, if there were not sidings excavated at fixed distances along the banks. Into these, vessels are moored while others pass. There is a French pilot on board, and signals arranged by telegraphs inform him whether the vessel is to be moored or to pass on. Sometimes, a steamer touches one of the banks and sticks, which causes a good deal of excitement, as considerable delays have occurred occasionally. Until it is got off, traffic is stopped both ways. A tender always accompanies a troop-ship, to tug it off if necessary, but its service is not often required.

At Suez (which is seen some little distance away on the right on leaving the canal), the Red Sea is entered. This is generally the most trying part of the voyage, as the heat is always more or less oppressive. White clothing is in request, and cotton trousers and tunics are worn during the day and at mess. Cases of heat-apoplexy are not unfrequent among the soldiers; but how any of the unfortunate stokers down below escape it seems a marvel. As the sea becomes narrower towards the Straits of Bab-el-Mandeb, and the rocks are seen from each side of the deck, the heat becomes worse. But there is the consolation that it will be soon over. Four days and nights of stewing have brought us opposite the Island of Perim, garrisoned by a company of native troops, with one officer and a doctor. Consoling ourselves with the reflection that we are better off than those poor fellows, we steam through the Straits towards Aden. We do not touch there, and, judging from the look of the coast and what we hear of the place, we are rather glad of it. Formerly, a regiment used to be kept there for three years; but now one year is deemed sufficient by the authorities, and both officers and men who are quartered there think so too. It is said to be the crater of an extinct volcano.

And now nine days more, with cool breezes during the day and pleasant starlit nights, and we enter Bombay harbour. We pass the two iron floating batteries, the Abyssinia and Magdala, slide past the light-house and the pretty trees and bungalows of the suburb of Colaba, see the Island of Elephanta (where the famed caves are) in the distance, wonder at the queer boats and curious looking natives by whom we are soon surrounded, and are quickly moored to a buoy. An account of our disembarkation and progress up country will form the subject of my next letter.

## ASSOCIATION INTELLIGENCE.

### THAMES VALLEY BRANCH.

A MEETING of the above Branch will take place at the Griffin Hotel, Kingston, on June 14th, at 5 o'clock.

Members who may be willing to contribute papers are requested to notify the same to the Honorary Secretary, as soon as possible.

There will be a dinner at the above hotel at 7 o'clock. Charge, 7s. 6d. each, exclusive of wine.

F. P. ATKINSON, M.D., *Honorary Secretary*.  
Surbiton Road, Kingston-on-Thames, May 17th, 1877.

### BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE annual meeting of this Branch will be held at the Midland Hotel, New Street, Birmingham, on Tuesday, June 26th, at 3 P.M. An Address will be delivered by the President, SAMPSON GAMGEE, Esq., F.R.S. Edin.

The annual dinner will also take place at the Midland Hotel, at 5 P.M. precisely, for the convenience of country members. Dinner

tickets, exclusive of wine, 7s. 6d. each. Members intending to be present are requested to communicate with the Honorary Secretaries on or before June 23rd, in order that suitable arrangements may be made.

JAMES SAWYER, M.D., } *Hon. Secretaries*.  
EDWARD MALINS, M.D., }

Birmingham, May 29th, 1877.

### EDINBURGH BRANCH.

THE annual general meeting of the above Branch will be held at 5, St. Andrew's Square, on Tuesday, June 12th, at 4 P.M.

CHARLES E. UNDERHILL, *Honorary Secretary*.

Edinburgh, May 30th, 1877.

### CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.

THE annual meeting of the above Branch will be held in the Board Room of the Saffron Walden Hospital, on Tuesday, June 26th, at 2.15 P.M.: HENRY STEAR, Esq., President, in the Chair.

Gentlemen intending to read papers, or be present at the dinner, are requested to inform the Secretary on or before June 19th.

Dinner will take place at the Rose and Crown Hotel, at 6.15 P.M. Tickets (including wine), 12s. 6d. each.

J. B. BRADBURY, M.D., *Honorary Secretary*.

Corpus Buildings, Cambridge, May 28th, 1877.

### EAST ANGLIAN BRANCH.

THE annual meeting of the above Branch will be held at the Magistrates' Room, Diss, on Thursday, June 28th, at 2.30 P.M.: T. E. AMYOTT, Esq., President, in the Chair.

Dinner at the King's Arms Hotel at 5 P.M. Tickets, 12s. 6d. each. The President kindly invites members to luncheon at his residence at One o'clock.

Members intending to read papers and cases, or to exhibit pathological specimens, or to join the dinner, are particularly requested to communicate as early as possible with one of the Honorary Secretaries, in order that proper notices may be given.

B. CHEVALLIER, M.D., Ipswich. } *Honorary Secretaries*.  
J. B. PITT, M.D., Norwich. }

Norwich, June 1st, 1877.

### BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE fifth ordinary meeting of the Session was held at the Royal Hotel, College Green, Bristol, on Thursday, April 12th; H. F. A. GOODRIDGE, M.D., President, in the chair. There were present forty-five members and four visitors.

*New Members*.—James Taylor, Esq., and Dr. John Broom were elected members of the Association and of this Branch.

*Militia Surgeons*.—It was proposed by Dr. DAVEY, seconded by Dr. ATCHLEY, and resolved:

"That, in consequence of militia surgeons who have served under the late Act of Parliament being deprived of nearly the whole of their incomes by the Royal Warrant, dated War Office, July 19th, 1876, the Bath and Bristol Branch of the British Medical Association is of opinion that measures should be adopted whereby adequate compensation should be afforded them.

"That the Honorary Secretaries be requested to call the attention of the members of Parliament of this district to the conditions of the said Warrant and the hardships it inflicts on militia surgeons, and request them to use their influence in Parliament to obtain such compensation as the nature of the case deserves."

*Discussion at Next Meeting*.—It was resolved: "That the next meeting be devoted to the discussion of Hæmorrhage, and that Mr. Dobson be requested to open the discussion."

*Communications*.—I. Mr. BARTRUM read a case of Paraplegia or Spinal Exhaustion.

2. Mr. FOWLER read notes of a case of Abdominal Abscess, in which many pints of bile were discharged through an opening at the umbilicus.—Messrs. Mason and Board, and Drs. Fyfe and Goodridge, made some remarks.

3. Dr. LAWRENCE read a paper on the Diagnosis and Treatment of Miscarriage.—Drs. Swayne and Davey took part in the discussion which followed.

4. Mr. G. THOMPSON read Remarks on Epidemics of Typhoid Fever at the Bristol Lunatic Asylum, opening the question of infection by water-supply with or without specific poison.—Mr. N. CRISP mentioned some cases to prove the latter theory; and Dr. SIDDALL asked some questions, but time would not allow a longer discussion.



## NORTH OF ENGLAND BRANCH : SPRING MEETING.

THE spring meeting of this Branch was held at the Royal Hotel, South Shields, on Wednesday, April 25th. In the absence of the President, Matthew Brumell, Esq., through indisposition, the chair was occupied by Dr. FRANK of South Shields; and there were present twenty-seven members.

*New Member.*—Dr. W. Sutherland of Muirlaw House, Capheaton, Northumberland, was elected a member of the Branch.

*Unqualified Medical Practitioners.*—Dr. EASTWOOD of Dinsdale Park proposed: "That it is the duty of the General Medical Council to prosecute unqualified medical practitioners." Dr. REID of Newbiggin-by-Sea seconded, and Dr. LEGAT of South Shields supported the resolution. Dr. EASTWOOD suggested that a copy of the resolution should be forwarded to the General Medical Council. The resolution was then put, and carried unanimously.

*Habitual Drunkards Bill.*—Dr. EASTWOOD presented a petition in favour of the Habitual Drunkards Bill, 1877, which he invited every-one present to sign.

*Papers.*—The following papers were read.

1. Dr. E. C. ANDERSON: Objection to the use of the term "Typho-malarial Fever", that it is not a hybrid of the enteric and malarial forms of fever, but a manifestation of two separate concurrent diseases, one of which may cease to exist in the system, and the other pursue its course.

2. Dr. E. C. ANDERSON: Notes upon a Case of Rheumatic Fever, in which, after apparent complete recovery, the patient suffered from a relapse.

3. Dr. J. C. REID: Milk, as a Therapeutic Agent.

4. Dr. M. M. BRADLEY: The relative merits of the several methods used for the Treatment of Prolapsed Funis, illustrated by Cases.

5. Dr. T. W. CRASTER: A Peculiar Case of Epileptiform Convulsions.

*Vote of Thanks to the Chairman.*—On the motion of Dr. REID, seconded by Dr. EASTWOOD, a vote of thanks was accorded to the Chairman.

*Dinner.*—The members afterwards dined together in the hotel. Dr. Frain presided; and the vice-chair was filled by Dr. Philipson, Honorary Secretary.

## WEST SOMERSET BRANCH : SPRING MEETING.

THE spring meeting of this Branch was held at the Railway Hotel, Taunton, on Thursday, April 5th, at five o'clock; FREDERICK FARMER, L.K.Q.C.P.I., President, in the chair. Fifteen members were present.

*Letters of Regret.*—The SECRETARY laid before the meeting seven letters and two telegrams from members accounting for their absence.

*President-elect.*—A letter from Mr. Alford was read, stating that, being out of health, he felt quite unequal to the duties of office; and he, therefore, begged that some other member might be appointed as President-elect in his stead. Great regret was expressed by the meeting on hearing Mr. Alford's letter read. Samuel Farrant, Esq., was then proposed as President-elect, and unanimously elected.

*Legislation for Habitual Drunkards.*—A petition to Parliament on this subject was signed by all the members present. The Secretary was requested to obtain the signatures of other members of the Branch to the petition, and to have it presented to Parliament before the end of the month.

*Militia Surgeons.*—A letter and statement on this subject, forwarded on behalf of the Parliamentary Committee by the Chairman, were laid before the meeting.

*Artificial Feeding of Infants.*—To the question (as sent by circular to each member)—"What in your opinion is the best mode of feeding infants artificially, both as regards food and method?"—written answers from Dr. Cordwint and Mr. Alford were read by the Secretary; and the members present severally stated their views on it.—Mr. WINTERBOTHAM embodied his answer in a carefully written paper, the title of which is given below.—THE PRESIDENT summed up, passing in general review the answers which had been given; and remarking that it was quite clear that our great resource was milk from the cow, diluted as required by the constitution of the child.

*Papers.*—The following were read.

1. On Condensed Milk and Liebig's Food as Articles of Infant Diet. By W. L. WINTERBOTHAM, Esq. (Bridgewater).

2. A Case of Hydrophobia, or its "Eikon". By HUGH NORRIS, Esq. (South Petherton). The case presented features involving doubts

whether the patient, a man aged 42, who died after seven days' acute illness, had really been bitten; and, if so, whether his dog, which he had caused to be destroyed six weeks previously, really was affected with rabies.

3. On the Advantages of Minehead as a Winter Residence. By THOMAS CLARK, Esq. (Dunster). Mr. Clark highly eulogised the salubrity of Minehead; and, from the extraordinary mildness of its climate, which, he believed, was greater during the winter months than that of any of the other British health-resorts, he considered it well worthy the attention of the profession as "an outlet for all kinds of chest-diseases".

4. On Some Osseous Remains found in Dulverton. By R. B. ROBINSON, Esq. (Dulverton).

A paper on a Case of Dangerous Poisoning by Carbolic Acid, which ended in Recovery, by the PRESIDENT, was postponed for want of time.

*Vote of Thanks.*—The cordial thanks of the meeting were awarded to the readers of the several papers.

## CORRESPONDENCE.

## COMMISSIONERS IN LUNACY.

SIR,—The information on which you have based your annotation, under this heading, in the last week's JOURNAL, is so inaccurate that I must ask leave to remonstrate against its insertion on untrustworthy authority, and to tell you the true story. So far from its being true that a defence was made, and that the jury, after hearing the evidence of Dr. Bucknill and Dr. Tuke, did not think it necessary to hear the defence or to see the lady, the truth was that no defence was made or contemplated. Mr. Digby Seymour, acting upon the advice of "a well-known alienist", who is incorrectly said to have "appeared for the defence", admitted entirely the propriety of placing the lady under the protection of the Court of Chancery, agreeing to accept a verdict after one witness had been formally examined, as was necessary; but he contended that to place her, as she had hitherto been placed, in a cottage under the charge of two attendants, with no person of her own class in life to associate with, was not desirable treatment for a lady who was a courteous and, apart from her delusions, a singularly intelligent person; and who, having been accustomed to travel a great deal, to dine at *tables d'hôte*, and to mix freely in society, felt bitterly her isolation. He hoped the jury would append to their verdict the expression of their opinion—and Master Warren concurred cordially in the propriety of their doing so—that she should not be left to the care and companionship of mere servants, but should be placed in some suitable family, or allowed to reside with a lady-companion at the seaside or elsewhere. It was to support this view of the matter by his evidence, if necessary, and not "for the defence", that "a well-known alienist" appeared; and that was the purport of his affidavit. The jury assented unanimously and heartily to this view, Dr. Bucknill having admitted under cross-examination that the lady was fitted for the sort of care proposed, and appended to their verdict, in writing, a strong recommendation to that effect.

The Master took occasion to express, in emphatic terms, his entire approval of the course which Mr. Seymour had adopted, and of the medical advice under which he had acted; assuring the jury, from his official knowledge of those who were acting for the lady, that they might rest perfectly satisfied that her interests had been carefully considered; and that they, therefore, need have no hesitation in returning their verdict, without going further into a painful inquiry, and without seeing the lady. One reason which he gave for this course was that Mr. Seymour was acting with the advice of a well-known physician.

I will not now discuss the statement which you make, that "the conjunction of insane delusions with civil capacity is a possibility which the law does not at present recognise", in face of the fact that a person with an insane delusion may make a sane and valid will, and, for aught I know to the contrary, a valid marriage. I am disposed to think that the absolute statement is not founded on competent knowledge of the law; my present purpose is simply to correct a paragraph, which, as it stands in your last number, is, as you will now see, an improper misrepresentation of the facts, and very much like an unwarranted slander of your obedient servant,

"A WELL-KNOWN ALIENIST".

\*.\* We have before us the affidavit of this writer, in which he states his opinion that, "although the said J. S. is undoubtedly labouring under delusions regarding her family"..... "I do not think the said J. S. unfit to manage her affairs". It was, however, given in evidence



that the said J. S., acting solely under the influence of her delusions, made a will in October last, by which she left the whole of her property away from her family. It is the duty of the Lord Chancellor and the Lords Justices, advised by their officers, to direct the treatment of Chancery lunatics; and the jury of an inquisition, which pretends to interfere with this duty, is attempting that which is plainly *ultra vires*.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### THE DUBLIN POOR-LAW MEDICAL OFFICERS.

SIR,—I find in your last issue that a correspondent objects to the annotation written by me at page 334 of the JOURNAL for March 17th; but I believe that, if any unbiassed individual will take the trouble to refer to the paragraph in question, he will find that I have merely stated what occurred, without any exaggeration whatsoever. That the guardians *unanimously* refused the request for increased remuneration shows unmistakably that there was not a single individual in favour of the proposed increase.—I am, etc.,  
Dublin, April 1877.

"DUBLIN CORRESPONDENT."

### PUBLIC HEALTH MEDICAL APPOINTMENTS.

\*BRISCOE, Wm. Thos., M.B., C.M., appointed Medical Officer to the Chippenham Workhouse, *vice* Henry M. Jay, M.B., resigned.  
KENNEDY, D. Sinclair, M.B., appointed Medical Officer for the Lochaber District of the parish of Kilmonivaig, Invernessshire.

## MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on May 24th.

Allen, H. L., L.S.A., St. John's Wood  
Barker, F. R., Aldershot  
Batchelor, G. A., Bancroft Road, E.  
Battams, J. S., Stoney Stratford  
Brown, F. W., L.S.A., Hackney  
Canthie, James, M.B. Aberd., Keithmore, Banffshire  
Carlyon, T. B., L.S.A., Falmouth  
Davy, D. H., Wanstead  
Eliot, George, L.S.A., Limsfield, Red Hill  
Ewen, H. W., L.S.A., Manchester  
Friend, H. E., St. Stephen's Crescent, W.  
Haynes, P. O., Evesham, Worcestershire  
Hunter, C. B., Grafton Street  
Ivens, A. S., Cydor, near Banbury  
Jefferson, W. D., Northallerton, Yorkshire  
M'Reddie, G. D., L.M. & S., Calcutta  
May, A. E., Clifton Gardens, W.  
Owen, C. J. R., L.S.A., Cleveland Square, W.  
Phillips, S. P., Queen's Gardens, W.  
Sherburn, John, M.B. Edin., Howden, Yorkshire  
Wilson, A. F., Loddington, Leicestershire

Seven candidates having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months.

At the half-yearly primary examination of candidates for the Fellowship of the College, held on May 28th, the following gentlemen were successful.

Messrs. Walter Ottley, of University College; Richard Brayne, of King's College; Gerald F. Yeo, of the Dublin, Paris, Berlin, and Vienna Schools; Jas. K. Kerr, of the Belfast School; John Brown, of the Aberdeen and Edinburgh Schools; Harold B. Boulter, of St. Bartholomew's Hospital; Clinton T. Dent, of St. George's Hospital; and Horace Manders, of St. Mary's Hospital.

Eight candidates were rejected.

The following gentlemen passed on May 29th.

Messrs. Joseph Ranschoff, M.D. Ohio, M.R.C.S. Eng. (April 1877); Morgan Davies, of the London Hospital; H. R. Whitehead, of the Charing Cross Hospital; Wm. H. Battle, of St. Thomas's Hospital; W. C. S. Bennett, of the Middlesex Hospital; E. J. Morley, of Guy's Hospital; H. Ernest Bowman, of King's College; Richard Gill, of St. Bartholomew's Hospital; Alfred Harvey, of the Birmingham School; Richard Margerison, B.A. Cantab., of St. George's Hospital; Chas. E. Baddeley and Percy Close, of King's College; Chas. J. Ogle and G. Holden Sylvester, of St. Bartholomew's Hospital; and Wm. F. Hearnden, of Guy's Hospital.

Eight candidates were rejected.

The following gentlemen passed on May 30th.

Messrs. George Coates, B.A. Oxon., Marmaduke Prickett, M.A. Cantab., and D. Astley Cresswell, B.A. Oxon., of St. Bartholomew's Hospital; M. P. M. Collier and William F. Haslam, of St. Thomas's Hospital; Frederick Wadham, of St. George's Hospital; Valentine Matthews, of King's College; William W. Webb, of the Charing Cross Hospital; T. W. O. Pughe, of the Liverpool School; and Angel Money, of University College.

Twelve candidates were rejected.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 24th, 1877.

Baker, Thomas, Cosham, Hants  
Cæsar, Julius, East London Hospital for Children  
Cuming, Charles Henry, Oakley Square  
Elmslie, William Wallace, Seafield Villas, West Brighton  
Hockridge, Thomas Granville, Goulbourne Road, Westbourne Park  
Koyaji, Beramji Nosarvanji, 1, Gower Place, W.C.  
Smith, Thomas Frederick Hugh, 82, Wimpole Street

The following gentlemen also on the same day passed their primary professional examination.

Barrow, Lancelot Andrews, St. Bartholomew's Hospital  
Bunting, Robert Obadiab, Guy's Hospital  
Smith, Edward Last, Charing Cross Hospital  
Williams, Hugh Harries, Guy's Hospital  
Williams, Miles Melbourne, Manchester Infirmary

### MEDICAL VACANCIES.

THE following vacancies are announced:—

CARNARVONSHIRE AND ANGLESEY INFIRMARY—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be sent in on or before the 14th instant.  
CITY OF LONDON LYING-IN HOSPITAL—Consulting Surgeon. Applications to be sent in on or before the 19th instant.  
EAST RIDING ASYLUM, Beverley—Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, and attendance. Applications to be sent in on or before the 23rd instant.  
NEW HOSPITAL FOR WOMEN, Marylebone Road—Junior Physician; also, Resident Medical Officer. Women only eligible. Salary, £50 per annum, with board, lodging, washing, and attendance.  
NORTH LONDON CONSUMPTION HOSPITAL—Physician. Applications to be made on or before the 7th instant.  
NOTTINGHAM GENERAL HOSPITAL—Assistant House-Surgeon. Salary, £80 per annum, with furnished apartments and board. Applications to be made on or before the 11th instant.  
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL—Administrator of Anæsthetics and Registrar. Salary, £100 per annum. Applications to be made on or before the 6th instant.  
SALOP INFIRMARY, Shrewsbury—Resident House-Surgeon. Salary, £100 per annum, with board and residence. Applications to be made on or before the 15th instant.  
WEST SUSSEX, EAST HANTS. AND CHICHESTER INFIRMARY—Surgeon-Dentist. Applications to be made on or before the 18th instant.  
WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL—House-Surgeon. Applications to be made on or before the 11th instant.

### MEDICAL APPOINTMENTS.

*Names marked with an asterisk are those of Members of the Association.*

BENNETT, A. Hughes, M.D., appointed Physician for Out-patients to the Hospital for Epilepsy and Paralysis.  
\*FERRIER, David, M.D., F.R.S., appointed Physician for Out-patients to the Hospital for Epilepsy and Paralysis.  
HOVELL, T. Mark, M.R.C.S. Eng., appointed House-Surgeon to the London Hospital, *vice* W. B. Johnson, M.R.C.S. Eng., resigned.

### BIRTHS, MARRIAGES, AND DEATHS.

*The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.*

#### BIRTH.

PARROTT.—On May 25th, at The Thorn, Hayes, Middlesex, the wife of \*Edward J. Parrott, M.R.C.S., of a son.

#### MARRIAGE.

RABAGLIATI—MCLAREN.—On May 25th, at Newington House, Edinburgh, the residence of the bride's father, by the Rev. John Robson, D.D., Aberdeen, Andrea Honyman Rabagliati, M.A., M.D., of Bradford, to Helen Priscilla, youngest daughter of Duncan McLaren, M.P., and granddaughter of the late Jacob Bright, of Green Bank, Rochdale.—No cards.

BEQUESTS.—Mrs. Esther Bunning, late of Holland Park, Bayswater, has bequeathed to the Asylum for Idiots, the National Hospital for the Paralysed and Epileptic, the Royal Hospital for Incurables, St Mary's Hospital, the Nursing Sisters' Institution, and to two other hospitals to be chosen by her executors, £300 each. The testatrix also directs her executors to invest £5,000, the interest and dividends on which are to accumulate until Herbert George Gaudet attains twenty-one, when the following bequests take effect—viz., to St. Bartholomew's Hospital and to the Royal Free Hospital, £1,000 each; to the Royal Hospital for Consumption, Ventnor, £600; to the Royal National Hospital or Sea-Bathing Infirmary, Margate, the Dover Convalescent Home, the Association in Aid of the Deaf and Dumb, £300; and the Royal Hospital for Incurables, £200, in addition to the former legacy of £300.—Mr. Jacob Mocatta, late of Norfolk Crescent, Hyde Park, has bequeathed to University College Hospital, the Cancer Hospital, the Consumption Hospital at Brompton, and the Hospital for Sick Children, Great Ormond Street, £100 each.—The late Mr. Hedgman has left £3000 to the West London Hospital.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—Charing Cross, 2 P.M.
FRIDAY.....	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Specimens. Dr. John Williams, "On the Pathology and Treatment of Membranous Dysmenorrhœa"; and other communications.

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## A CAUTION TO MEDICAL MEN.

SIR,—I have been recently visited by Mr. Fullagar twice within the space of a week. The first time, he made an appointment; the second time, he altered the appointment, which was for his wife. He gave his address as at Wickham; and, on my asking him if it were "West Wickham," he hesitated, and said "No! Wickham, that is to say, East Wickham." His uncertainty about his own address, his seedy aspect (rather dirty face, unbrushed hair, crumpled shirt-collar, and second-hand trousers insufficiently long), and his reiterated visit ending as before in smoke, made me suspicious of him; and I told him rather sharply that I hoped he would not make another of these visits to me, but would make any appointment he desired by letter as a saving of my time and a still more considerable saving of his. I have not as yet seen him again. These visits were made a fortnight ago. I thought so ill of him that, although I had not then read of his visits to others, I had the room in which he had waited examined, to see if he had made any requisitions. It did not appear, however, that he had taken anything. This I attribute to the fact that some persons came into the room before him and others after his arrival, so that he saw that he would not be left alone in the room. I feel sure he would have borrowed something if he had found the opportunity, although I have no doubt he would have returned it when he sent the fee by his wife to

"ONE WHO WAS LET OFF."

## A REFUGE FROM THE EAST WIND.

SIR,—Like your correspondent "Victim," and unlike the late Charles Kingsley, I have no love for the east wind, and would suggest that a genial shelter may be found in the Valley of Old Hastings; which, being protected on the east by Fairlight, six hundred feet above the sea, and on the north by other high hills, presents a natural amphitheatre open only to the sea on the south.

I know no other part of England where an equal protection is afforded, and this renders May quite a favourite month at Hastings.

If there be an elysium on earth, perhaps it is this!—Yours, etc.,

ST. SIMON THE SNUG.

## THE CABINET TURKISH BATH.

A good substitute for this is the old plan of burning some spirit in a small saucer placed under the chair on which the bather sits, covered with a blanket folded round the neck, and reaching to the floor on every side. This tent becomes filled with hot air, and the bather soon bursts into a profuse perspiration. I have not tried, but probably it would be an improvement, to burn the spirit more gradually in a lamp, instead of very quickly in a saucer; but the blanket-tent keeps in the heat so well, that any more complex arrangement seems needless. This very simple and generally effectual remedy for a cold is not as well known as it should be; if it were, it would be far more frequently used.

PHILO.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## ANTI-VIVISECTIONISTS.

SIR,—Perhaps, in fairness, you will spare me room for a word or two of explanation in your next issue. I promise you it shall be my last demand upon your courtesy. I wish, however, to repudiate the idea of being one of those conceited beings who think no one has any sense but themselves. I dare say Dr. Baker was as well able as myself to see what are the issues raised in the vivisection question; but what I meant may be illustrated by the practice in the law courts, where, before argument, pleadings must be delivered, and to the issues thus raised the arguments are strictly confined—only in that way can controversy lead to any conclusion. So it is in the case of vivisection. The question is so wide that two opponents might talk for weeks and never once meet, except the issues to be discussed are previously determined and set out clearly.

There is another matter which excites my curiosity. We who are opposed to vivisection are, many of us, as well educated, generally and professionally, as those who differ from us, and we have as much common and other sense as they. Why are we mere "ignorant persons" because we differ? and why are our arguments upon this point mere "empty folly," as you say they are? This is a puzzle.—I am, sir, your obedient servant,

A. P. CHILDS.

Stockwell, May 26th, 1877.

\* \* We have yet to discover the "many of us" well-educated medical persons who range themselves with Mr. Childs. A few "well-educated" persons will always be found to adopt any extreme crotchet, and to propound absurdities which their education only enables them to render superficially plausible to the ignorant. It is, however, surprising that any person of any kind of medical education should be found willing to endorse the nonsense—disingenuous if not ignorant—which is weekly published in the *Home Chronicle*, in order to support the impossible thesis that experiments on animals are not essential to the progress of medicine, physiology, and pathology; and to prove, for example, that the theory of the circulation and the sounds of the heart, the great mass of our knowledge of the functions of the nervous system, the digestive and the respiratory organs, are not due to such experiments. We prefer to consider the few fanatics who support these theses to mislead the passions of the uninformed lay public as ignorant, rather than as being guilty of the monstrous wickedness which would be involved in conscious deceit in so very grave and momentous a question.

J. E. S. writes: Suppose a patient were suffering from disease which must inevitably prove fatal unless some remedy, as yet undiscovered, be speedily administered. And suppose it to be ascertained that, by subjecting his favourite dog to some painful vivisection, he will very probably be restored to health. Would it be right for him or his friends to allow this vivisection to be made? The answer, of course, is in the affirmative. How much more then is it right that authorised persons should be allowed to perform vivisection, in order that means may be discovered to give life and health not to one only, but to thousands of our fellow creatures.

## AN APPEAL.

SIR,—Will you kindly insert the following appeal in the *BRITISH MEDICAL JOURNAL* of next Saturday?

Miss Gent, the daughter of a medical man who practised for many years at Stony-Stratford, has been bedridden for five years, suffering from incurable disease. Previous to her illness, she was able to supplement a small yearly income by the sale of fancy work; she cannot do this now, and her weakness increases. She appeals to the profession for some assistance.

References are kindly permitted to Dr. Slack, Lyzwick Hall, Keswick; the Rev. H. Fisher, Incumbent of St. Luke's; and the Rev. J. E. Franklyn, Vicar of St. John's, Leamington. Subscriptions will be thankfully received and acknowledged by yours faithfully,

JAMES THOMPSON, M.B.

Avenue House, Leamington, May 28th, 1877.

## PROFESSIONAL ETIQUETTE.

SIR,—I beg to enclose copies of two letters sent by me to a neighbouring practitioner. He has taken no notice of either.—I remain, sir, yours faithfully,

Launceston, Cornwall, May, 1877.

WM. ANDREW.

"Sir,—A patient of mine, Mr. —, has, I understand, been under your care for the last six months. He says you told him on his first visit to you that you could cure him; and, on his second visit, that you could not cure him, but that you 'could make a man' of him, and that, had you seen him two years ago, he (—) would never have been in the condition in which he then was.

"He has been worse again lately, and has called me in.  
"Will you kindly inform me if the above statement of your opinion be correct; and, if so, what grounds you had for forming such an opinion?—I am, sir, your obedient servant.

"John King, Esq."

"Launceston, April 7th, 1877."

"Sir,—This day fortnight I wrote you respecting the case of Mr. —. I have received no reply. Perhaps my letter, through some mischance, has not reached you. I therefore enclose a copy, and request the favour of a reply at your earliest convenience.—I remain, sir, your obedient servant,

"John King, Esq."

"Wm. Andrew."

\* \* Before expressing an opinion, we shall be glad to hear Mr. King's explanation.

## INCUBATION OF GONORRHOEA.

SIR,—I shall be glad to learn the experience of some of our regular workers as to the longest period of incubation they have known between intercourse and the appearance of gonorrhœa; also the average period.—Your obedient servant,

May 21st, 1877.

A MEMBER.



**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the **BRITISH MEDICAL JOURNAL**, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

#### THE AMENDMENT OF THE MEDICAL ACTS.

**SIR**,—The draft Bill of the East London Medical Defence Association seeks to settle the vexed question of the legal recognition of foreign degrees by the apparently simple expedient of appraising them by the examination standard of the membership of the College of Physicians of London. There is a practical look about the proposal; and it is in no unfriendly spirit that, in response to your appeal for "the criticism of all sides," I venture to offer a few observations from the point of view of a foreign graduate.

There are two classes of foreign graduates who would be affected by the proposals of this Bill. The first consists of foreigners who, qualified to practise medicine in their respective countries, desire to carry on their profession, either temporarily or permanently, within the United Kingdom. The second class consists of British subjects who have added to their British qualifications medical degrees conferred after examination (and, in some cases, residence) at various Continental Universities.

The Bill, as at present drawn, so far as it affects the first class of cases, seems to me to favour French graduates above those of other nations. In France, the State accords plenary rights of practice only to those who have graduated M.D. at the single national University. In Germany, on the other hand, and I believe also in Belgium and Switzerland, the State itself examines and licenses for practice, independently of the Universities; and consequently in these countries the degree of M.D. is supplementary to, and not the basis of, legal qualification. Hence, it is quite possible that a German or Belgian doctor of medicine may appear inferior in qualification to his French *confrère*, if appraised only by the value of his University degree; though, in truth, he is not one whit inferior when his "Stateexamen" is also taken into account. But, in the draft Bill, no credit is proposed to be given for any examination other than that for bachelor or doctor of medicine.

A similar argument holds good with regard to the second class of cases. A duly qualified British practitioner applying for examination for the M.D. degree at a Continental University is credited with a certain amount of study and knowledge, as vouched for by his British diploma. In estimating the value of such a degree in comparison with the membership of the College of Physicians, it seems only just that a similar process should be resorted to. An allowance of this kind has, in fact, from time to time been made by the College itself in fixing the conditions upon which foreign graduates with British diplomas should be admitted to the examination for the membership.

In conclusion, I would venture to ask whether the *L.R.C.P. Lond.*, rather than the *M.R.C.P.*, would not afford a better standard for the international recognition of medical degrees. It must be remembered that the French M.D. or the German "practising physician" is not necessarily, like the *M.R.C.P. Lond.*, a "pure physician." On the contrary, he is, like the *L.R.C.P. Lond.*, usually a practitioner in medicine, surgery, and midwifery, though of the highest type. The French "*Officier de Santé*" (wrongly designated "Surgeon" by the *Times* Paris Correspondent) is an inferior practitioner, by no means equal to our *L.R.C.P.*; but is there not a danger of our French friends jumping at the conclusion that, if their general practising M.D.s are measured off by our *M.R.C.P.s* standard, the *L.R.C.P.s* (and all other fully qualified British practitioners for that matter) are no better than their *Officiers de Santé*?—Yours obediently,

A REGISTERED PRACTITIONER (NOT M.R.C.P.)  
AND FOREIGN GRADUATE.

May, 1877.

#### THE ADMINISTRATION OF PHOSPHORUS.

**SIR**,—In this week's number of the **BRITISH MEDICAL JOURNAL** (page 422), Mr. Bradley of Manchester states that "we have no good pharmaceutical preparation of this invaluable drug, but the homeopaths prepare a solution of a fairly reliable and uniform strength of one per cent." We think you will pronounce the sample of "tinctura phosphori" sent herewith a good pharmaceutical preparation; at least, it is regarded as such by many of the medical profession; and, if it were more generally known, it would probably obviate the necessity of prescribing the ethereal tincture, which is open to the objection that the ether volatilises so rapidly that some of the phosphorus is soon precipitated, and renders the tincture cloudy; whereas the alcoholic tincture is a very stable preparation, not affected by age or exposure to light. It contains one-twelfth grain of phosphorus in one drachm.

We also send for your inspection a sample of ethereal tincture of phosphorus (one per cent.), which corresponds with the preparation recommended by Mr. Bradley.—We are, sir, yours respectfully,  
Bouverie Street, April 1877.

GALE AND CO.

#### DURATION OF LIFE IN LEPROS.

**SIR**,—In the **JOURNAL** of April 7th, p. 424, is a paragraph on "leprosy," quoting the results of inquiries by Mr. Planck, in which he is said to have come to the conclusion that lepers live as long as other people. Not having seen his report, I can only answer his conclusions as quoted by you. I am afraid he would find few insurance offices ready to accept the lives of lepers on such hastily drawn conclusions. So far as you mention, he gives no comparative statistics of the mortality rates of the ordinary population and of lepers in the North-West Provinces, which is the only way to arrive at correct conclusions on such a matter.

I can only say that, from carefully wrought out statistics of the rates of mortality among lepers and those of the ordinary population of St. Kitts, I found, as one would *prima facie* expect, the mortality among the lepers much the highest, especially among the tubercular cases.

I can quite conceive that an error might easily be made if the mortality of lepers were compared with that of *all* the population, irrespective of age, as I found that the average value of life for the whole population in St. Kitts was, from 1862 to 1870, 33.5 years, while that for lepers was not much less, being, for the period 1859-70, 32 years, calculated on 64 deaths. In earlier times (1817-25), it was 29.7 years (when the lepers were carefully secluded by the slave owners); while the mortality of the population, as a whole, was practically the same as from 1862-70.

But, when we consider that very few cases of leprosy arose before the fifth year, and that by far the most of the cases arose between the fifth and thirtieth year of life (53 in 71 cases of which I have notes, while only 5 were before the fifth year, and some of these not quite certain), so that about puberty may be looked upon very fairly as the mean time for the disease arising, after which, as my statistics show, the average period of life among the tubercular cases is 12 years; among the anæsthetic, 17½ years; while the value of life in the general population at

that age is, as I have carefully calculated from the census returns, upwards of 40 years; the effect the disease has in shortening life is at once apparent.

I do not wish to occupy too much of your space, or I could give those statistics more fully, but am the less inclined to do so as I am at present publishing a series of papers on the subject in the *Edinburgh Medical Journal*, and will have occasion in due time to refer to them in it. I may say, however, that what I have stated is fully borne out by Carter in his *Report on Leprosy in Norway*, p. 25, who states that the mortality among lepers living in their own homes, as they do in India and St. Kitts, is no less than 6.6 per cent. *per annum*, and 12.3 among those in asylums, the worst cases; being incomparably higher than any mortality tables of populations over five years of age would show. Daniellssen and Boeck also show that in Norway the rate of mortality is very nearly what I have stated that it is in St. Kitts.

I merely mention those facts to show that my statistics do not stand as isolated facts, but may be compared with those of great authority elsewhere, and that they all contradict Mr. Planck's conclusion that the lives of lepers are as valuable as those of other individuals.

His conclusion that the disease is almost entirely hereditary is in great part contradicted by the great number of Europeans who have become affected after residence in leprosy countries; while I may point out that the fact of a child having the disease after its parent is no proof of its being hereditary, while it still remains an open question, or rather one that the weight of evidence fairly goes to prove in the affirmative, whether the child may not have been inoculated from the parent's, or sucked it in with the nursing. I am, yours faithfully,

W. MUNRO, M.D., late Medical Officer, St. Kitts, West Indies.  
311, Battersea Park Road, April 14th, 1877.

#### HOSPITALS FOR INFECTIOUS CASES.

**SIR**—I should be greatly obliged if any of your correspondents would inform me of the name of any place where the local sanitary authority has established a small hospital for non-pauper infectious cases.—I am, etc.,  
May 22nd, 1877. E. L. F.

#### TREATMENT OF MIGRAINE.

**SIR**,—Having used guarana in a great many cases, I have come to the following conclusions.

1. True migraine, characterised by acute frontal pain, commencing on one side, occasionally both, or going from one side to the other, usually lasting from twenty-four to forty-eight hours, with or without sickness, and relieved or cured by sleep, whether caused by errors in diet or not, will almost invariably yield to it.

2. In young persons, in whom the habit is only commencing, not only does it cure each individual attack, but, by persevering, the habit itself is broken.

3. One cause of failure is the smallness of dose, so that, in many cases in which it has been tried before and failed, an increase of the dose has been followed by cure. Twenty-five grains of the powder is my usual dose for an adult female, half a drachm for a man; less, of course, for younger cases—repeating in one or two hours, if necessary.

I have only tried amyl nitrite in one case, in which it rather increased the pain. As migraine cannot be put down to contraction of arterioles, amyl nitrite would hardly be expected to relieve.—I am, sir, your obedient servant,

Leatherhead, May 22nd, 1877. J. HURD-WOOD, M.D.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The York Herald; The Bridlington Quay Gazette; The Scarborough Daily Post; The Blyth Weekly News; The Glasgow Herald; The Malvern News; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; The Manchester Free Lance; The Belfast News Letter; The Manchester Courier; The Macclesfield Courier; The North Wales Chronicle; The Sunderland Daily Post; The Western Daily Mercury; etc.

\* \* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

#### COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. W. Rutherford, Edinburgh; Dr. J. Hughlings Jackson, London; Dr. George Johnson, London; Dr. Ogston, Aberdeen; Dr. Robinson, Dublin; Dr. Aitken, Rome; Dr. Bourneville, Paris; Dr. Bucknill, London; Mr. F. Mason, Bath; Mr. Branson, London; Dr. W. Fairlie Clarke, Southborough; Dr. Stirling, Edinburgh; Dr. Birkbeck Nevins, Liverpool; Dr. A. E. A. Lawrence, Clifton; Mr. Richard Davy, London; Dr. McCall Anderson, Glasgow; Dr. J. Milner Fothergill, London; Mr. R. S. Fowler, Bath; Dr. James Russell, Birmingham; Dr. J. W. Moore, Dublin; Dr. J. B. Pitt, Norwich; The Registrar-General of England; St. Simon the Snug; Dr. P. H. Maclaren, Edinburgh; Mr. Rushton Parker, Liverpool; Dr. Balthazar Foster, Birmingham; Mr. H. E. Waddy, Gloucester; Mr. T. M. Hovell, London; Dr. Childs, Stockwell; The Secretary of Apothecaries' Hall; "One who was let off"; Mr. Jonathan Hutchinson, London; Excelsior; J. E. S.; Mr. Alfred Corrie, Portsmouth; "A well known Alienist"; Dr. Arlidge, Stoke-upon-Trent; The Registrar-General of Ireland; Mrs. Malcolm, Lyndhurst; Mr. E. Noble Smith, Paddockhurst; Mr. W. Odell, Hertford; Dr. Chambers, London; Dr. N. K. Macdonald, Cupar Fife; Our Edinburgh Correspondent; Dr. Andrew Davis, Swansea; Dr. F. J. Brown, Rochester; Dr. Charles Gibson, Newcastle-upon-Tyne; Dr. E. S. Thompson, London; Dr. J. Sawyer, Birmingham; Mr. W. Crocker, London; Mr. E. Lloyd, London; Mr. Teevan, London; W.; The Secretary of the Obstetrical Society; Dr. Jacob, Leeds; Our Dublin Correspondent; Dr. Francis Warner, London; Dr. Fletcher Beach, Clapton; Mr. C. S. Loch, London; Dr. Ringrose Atkins, Cork; Mr. Lambert Ormsby, Dublin; Nemo; Dr. Thin, London; Mr. Meehan, Barking; Mr. W. R. Smith, Sheffield; Dr. Thompson, Leamington; M.D.Ed.; Mr. Hales, Warrington; Our Manchester Correspondent; Mr. Clark, Dunster; Mr. Burdett, Greenwich; Mr. Finch, London; Dr. Macke, Birmingham; Mr. Blythman, Swinton; Our Own Correspondent, Rome; Dr. Edis, London; Mr. Tate, Avranches; etc.



## CLINICAL LECTURE

ON

## SOME URINES AND URINARY CALCULI.

By WILLIAM M. ORD, M.B.LOND., F.R.C.P.,  
Senior Assistant-Physician, St. Thomas's Hospital.\*

3. *Calculi composed of Carbonate of Lime* are rarely formed in the urinary organs of man. In our own museum, we possess no authentic specimen; and, although the catalogue of the splendid collection at the Royal College of Surgeons contains a space wherein such a specimen should be recorded, the space is as yet a blank.

Considerable interest, therefore, attaches to the three small carbonate of lime calculi which I here produce. They were passed by a young man of 22 after symptoms of considerable prostatic irritation. They have the hempseed form characteristic of prostatic calculi, and this, taken together with the symptoms, makes it probable that they came from the prostate.

The calculi were originally six in number. Of these, one has been crushed to form the microscopic preparation on the table, one has been chemically examined by Dr. Bernays, and one by myself. The chemical examination shows them to consist of carbonate and phosphate of lime with an organic matrix. Their microscopy is extremely interesting. They are composed entirely of minute spherules in diameter twice or thrice the size of blood-corpuscles. The spherules are closely aggregated in most parts, and are slightly flattened at their points of mutual contact. They refract light very powerfully, and, when one is seen separate from the rest, it usually exhibits concentric internal lines—lines of lamination. The matrix is clear, transparent, and structureless. The forms are altogether like the spherical forms obtained in Mr. Rainey's original experiments, when mixtures of carbonate and phosphate of lime were slowly deposited in gum. The regularity of form and size indicates, according to Mr. Rainey's original observations, and others since made by myself, that the calculi were formed slowly in a muciform colloid, and they illustrate also the influence of the high temperature of the body. (See Fig. 2.)

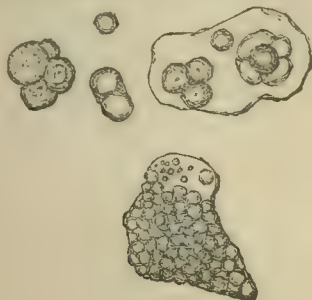


Fig. 2.

As useful subjects of comparison, I exhibit two calculi composed of carbonate of lime taken from the urinary passages of the horse, one irregular, nodulated, evidently moulded to the form of its place of formation, and extremely compact, from the pelvis of the kidney; the other, soft, friable, and roundish, from the bladder.

In the friable vesical calculus, the earthy matter is held together by only a small proportion of not very adhesive animal matter. Small pieces can be easily picked off with the finger-nail and crumbled to dust between the fingers. The dust, on drying and examination under the microscope, consists of minute crystals and spherules. The spherules are beautifully perfect bodies, of all sizes up to the  $\frac{1}{100}$ th of an inch, or even larger. They are marked with concentric shadings and with radiating fibrillation indicating a tendency to centrifugal crystallisation. I will not describe them in further detail, because they have every character belonging to the spheres of carbonate of lime formed artificially, and completely described by Mr. Rainey in his book on *Molecular Coalescence*. The spheres are mostly separate from each other; here and there a string of three or four is found, and some few little globular aggregations of very tiny spheres occur. With the spheres are found a long series of forms linking them on to the rhombohedral crystal. This form itself is not found perfect. There are found—1.

Dumb-bells; 2. Rounded bodies, partly crystalline, partly rounded, with central cavity; 3. Rounded rhombohedra without central cavity; 4. Six-sided crystals, some with a little rounding, some with sharp angles. (See Fig. 3.)



Fig. 3.

1. Of the dumb-bells, some are clearly such as are produced by the coalescence of spheres of equal size. Others have every indication of an origin in modified hexagonal prisms. Both kinds usually present a very small central cavity.

2. The rounded rhombohedron with central cavity is sometimes found single, sometimes in the form of a St. Andrew's cross. The central cavity is the starting-point of a number of markings, which would tend to make oval figures. These rhombohedra exactly resemble forms which I have drawn and described in the *St. Thomas's Hospital Reports* for 1871 and in the *Quarterly Journal of Microscopical Science*, 1872. They were composed of carbonate of lime and were deposited in gelatine.

3. The simple crystal is here more declared and in varying degrees of perfection. With the central cavity the oval markings are also absent. When the earthy matter is dissolved by an acid, the organic matrix still remains perfectly transparent and structureless, retaining the form of sphere or crystal.

This large, hard, irregular, and tuberculated calculus came from the pelvis of the kidney of a horse. Its section shows it to be capable of taking a polish, on account of the great compactness of its structure. It has several nuclei, around which the laminae wind irregularly, like the layers in walnut-wood, and it has all the appearance of having been formed by the binding together of several original calculi by subsequent enveloping deposit. One side of it is flattened, smooth, and pale, looking as though it had been in contact with another calculus. Probably, if time had been allowed, this would also have been cemented to the general mass. The surface of the section is whitey brown, in lighter and darker lines; the external surface a dark blackish brown. The earthy matter in this calculus is carbonate of lime. Associated with it is a large proportion of organic matter, which forms thick rich brown flakes after solution of the earthy matter in acid. Here is a section of the calculus at right angles to the surface prepared for the microscope. It consists in some parts of dense agglomerations of spherules of all sizes, with a few oblong forms. In other parts, thick laminae are seen running parallel to the surface. They are transparent and are evidently composed of completely fused crystallised spheres. They have smaller secondary laminae, reminding one of the circumferential laminae of bone. (See Fig. 4.)

The animal matrix looks exceedingly like soft vegetable structure that has undergone partial decay in water. Under the microscope, it is brown, and is completely occupied by round and roundish cavities of various sizes, corresponding evidently to the spherules. In some places, the structure is almost fibrous, and here probably it corresponds to laminae.

These three carbonate of lime calculi can be advantageously compared. You will observe that they present three degrees of hardness and compactness, the calculus from man holding in these respects a middle position, but inclining to friability. The readiness to disintegration in the first is not, indeed, to be measured by its present condition. When first examined *in situ*, it was soft and plastic, like a lump of clay. This condition is associated with the presence of but little colloid, and that of a thin, and not tenacious, quality. Now, I have no hesitation in laying down the rule that, in proportion as a colloid departs from the typical form of colloid albumen, it has less power in disturbing the molecular arrangements of crystals and in binding the molecules after the first disturbance into spheres and masses of spheres.

Carbonate of lime is more easily turned than most crystalloids from

\* Concluded from page 672 of last number.



the crystalline into the spherical forms by colloids. And the weak influence of the colloid in this case is shown, first, by the presence of many crystalline forms, and, secondly, by the marked individuality and perfection of the spheres. A stronger colloid would have subduced all the crystals and matted and cemented, and still further compacted by actual coalescence, the resulting spheres. This is exactly what we see in the hard renal calculus, where the colloid is present in large quantity and of considerable strength, in spite of the great condensation of the earthy material. The calculus from man has much colloid; but, while the crystals are entirely replaced by beautiful spheres, these latter are only slightly united together, and are nowhere fused into laminae. The presence of phosphate in this calculus probably influences the form and increases the cohesiveness of the spheres. In Mr. Rainey's experiments, the most beautiful and perfect spheres were formed when mixtures of carbonate and triple phosphate were used. It seems to me a clear corollary from these observations that the question whether calculi shall be formed in the urinary passages is very much determined by the amount and character of the colloids present in the



Fig. 4.



Fig. 5.

urine, or shed into it by the surfaces. Colloid was present, gluing these spheres and calculi together into a soft clay. A little less colloid, or a little softer one, being present, the clay would have been soft mud. And with less colloid, the mud would have been only a turbidity in the urine. If it were otherwise, calculi, as Dr. Thudichum has well pointed out, would be exceedingly common, or almost invariably formed in the herbivora. The urine of these animals is mostly alkaline, and full of large crystalline forms of carbonate and oxalate of lime.

So with human beings. Here the crystalline constituent is most commonly uric acid, less commonly oxalate of lime. Both are constantly found present in fresh urine; both are frequently passed for years together by a single patient without the production of calculi. It is only when some colloid nidus, like a clot or mucus, or colloid impregnation of the urine by albumen, or the like, is added, that the formation of calculi takes place.

Whether, indeed, carbonate of lime calculi are ever deposited from the urine or in the direct tract of the urinary passages, is very doubtful. Dr. Thudichum is of opinion that they are only deposited when the influence of the urine is cut off. The present specimens are just such as might have been deposited in prostatic diverticula, although the two examined by me gave no indication of being built upon any structure resembling the prostatic concretions described by Sir Henry Thompson. The calcareous prostatic calculi described by the same author are, again, very different from these, being very firm, hard, and polished, looking like pearl-barley. On the whole, these calculi rather correspond with some carbonate of lime calculi briefly described by Mr. Smith in the eleventh volume of the *Medico-Chirurgical Transactions*, p. 14, which were, like these small bodies, composed of carbonate of lime held together by animal mucus. To my mind, the calculi now in question are probably deposited in large ducts of the prostatic, and are to be compared to the earthy concretions formed in the ducts of racemose glands, though it is true that these are generally more completely composed of phosphates.

4. The next specimen follows very well on the foregoing to point its moral. It is a long narrow calculus, pointed at both ends, and resembling in shape a large orange-pip. It was passed by the urethra. The patient, a young man aged 24, who passed it had been healthy and free from bladder-troubles till about four years previously, when, by an injury to the neck, he was paralysed in the lower part of the trunk and lower limbs. For many months, the bladder was totally paralysed and the urine became ammoniacal and loaded with purulent mucus. And, when this had been going on for some time, he began to pass calculi. This is one of the largest; when cut through, it shows a white polishable surface in concentric layers, while its surface is crusted with a reddish material. The crust is chiefly uric acid.

The substance (nucleus included) gives the following reactions.

1. Heated on platinum, in the flame of a Bunsen's burner, it first turns black and then fuses. The fused matter is soluble in hydrochloric acid, and yields triple phosphate on the addition of ammonia, giving no precipitate afterwards with oxalate of ammonia. The nature of the precipitate is verified by the microscope, which shows the house-top crystals only.

2. Liquor potassæ causes the evolution of fumes of ammonia.

3. The nitric acid (murexide) test gives very feeble indication of uric acid.

4. A piece of the calculus dissolved in weak hydrochloric acid leaves a small pinkish residue, consisting of spherules, glomeruli, wheat-sheaves, and six-sided tables of uric acid, all of them such forms as would be assumed in presence of mucus or albumen. (See Fig. 5.)

The urine, when I saw him a day or two after the passage of the calculus, was, as he informed me, in its ordinary state. It was alkaline, very offensive, of specific gravity 1026, and contained albumen and much purulent mucus. In the mucus were crystals of triple phosphate in abundance, and numerous spherules of dark brown urate of ammonia. The present state of the urine demonstrated, in fact, the mode of production of the calculus. The crystals and the spherules were actually blending into masses in the mucus under one's eye. And without the influence of the mucus or albumen the crystals would no more have fused into calculi than do the carbonate and oxalate crystals constantly present in the urine of the healthy horse.

5. The last specimen about which I shall speak to-day is the bit of soft horny-looking matter, which is all that remains of a soft solid mass as large as a small bean, which a medical friend brought to me not long ago for examination. It looked then (and in drying has not altogether lost the resemblance) like caoutchouc softened by heat; so much so, in fact, that a suspicion had arisen of its being caoutchouc, and question had been made as to the possibility of a caoutchouc instrument having been broken in the bladder. Some of the stuff, on being touched with the flame of a match, had burned with a large smoky flame like camphor or caoutchouc.

When first examined by me, the substance was of a dark brown colour, tenacious, not elastic, and without smell. A portion exposed on platinum put to the flame of a spirit-lamp took fire and burned with a yellow smoky flame, giving off a smell like that of charred flesh or hair, not a resinous odour; the ash fused under the blow-pipe flame and gave afterwards indications of phosphoric acid. The nitric acid reaction for uric acid was used with negative results. Under the microscope, no structure was found, but part was clear and transparent, part granular and opaque. There were a few crystals of hæmatoidin. The hæmin test, with dry chloride of sodium and glacial acetic acid, brought out no more crystals; but it was observed that the granular portions became swollen, and that the granules on the surface expanded into spheres and tubes. The tubes thus shot out from the free surface were exactly like the tubes observed by Dr. Montgomery when myelin was placed in contact with water. The observations of Dr. Montgomery were made several years ago, when he was curator of the museum of this hospital, and it may be useful to make brief reference to them. To obtain his material, Dr. Montgomery made an extract of yolk of egg by long digestion in hot alcohol. The alcohol, on cooling, threw down a soft solid, which at that time generally received the name of myelin. Dr. Montgomery showed that, when a little piece of this was exposed to the action of water under the microscope, it could be seen to throw out from the surface a forest of tiny processes with rounded ends. The processes grew from the base, and by this means lengthened themselves almost indefinitely without variation of calibre; they were transparent, refractile, and had often a double outline, which made them look like tubes; they could hardly be distinguished from the processes which issue from the cut ends of fresh nerves on immersion in water.

I have lately obtained similar tubes in great beauty from specimens of a highly phosphorised matter extracted from brain-substance by Dr. Thudichum—his kephalin. His "buttery matter", a less purified extractive rich in cholesterol, yields even more beautiful fibres and processes. And no other substances that I know of give the reaction. Dr. Thudichum's myelin, a subcrystalline educt of the brain, does not, nor will fresh blood-clots; but there is certainly good reason for believing in the presence of highly phosphorised colloids in blood-corpuscles, both white and red.

On the whole, I am inclined to regard this substance as an old blood-clot long detained in contact with inflamed or ulcerated surface in some part of the urinary passages. Most of the colouring matter has been washed out or decomposed, leaving the brown tint and the few crystals of hæmatoidin. A clot so placed would be liable to infiltration by amœboid corpuscles; and, if so, these in their turn have probably undergone decomposition, leaving behind only their very



stable phosphorised material. For it may be noticed that, whereas lecithin is a very unstable matter, cephalin has been shown by Dr. Thudichum to be remarkably indisposed to decomposition.

The presence of such a phosphorised matter in large quantity would cause combustibility, as well as give rise to the singular microscopical reaction described.

## AN ADDRESS ON OPHTHALMOLOGY IN ITS RELATION TO GENERAL MEDICINE.

*The Annual Oration delivered before the Medical Society of London.*

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### IV.

LEAVING now the consideration of paralytic affection of the eyes from central disease, with other specially associated motor symptoms, we pass to sensory affection of the eyes with other specially associated sensory symptoms. We first note that there is a sensory symptom which is the strict analogue of the motor symptom—lateral deviation of the eyes—hemipia. This sometimes occurs with hemiplegia, and with that kind in which there is great defect of sensation. What is more to the point, it occurs in some cases where there is one-sided defect of sensation without discoverable paralysis. In all the cases of hemipia I have yet seen, the disposition has been that the patient had lost power to see to the side on which his body was anæsthetic or dysæsthetic, just as in the analogous motor cases the patient has always lost power to look to the side on which he was paralysed.

Here, then, we have an unilateral motor and a corresponding unilateral sensory symptom. The former, beyond all question, depends most frequently on destruction of the corpus striatum; in one case of the latter, there was disease of the optic thalamus. It is certainly doubtful whether hemipia with hemianæsthesia depends on disease of the thalamus only. Charcot says that one-sided amaurosis is produced by lesion of the posterior part of the internal capsule. He attributes any hemipia accompanying hemiplegic anæsthesia to lesion, direct or by compression of the optic tract. He thinks that lesion of the posterior part of the internal capsule produces defect of sight of the opposite eye only, there being no ophthalmoscopic appearances. To explain this, he supposes that the external fibres of the optic nerve which do not decussate in the chiasma decussate with their fellows in the corpora quadrigemina, whilst the fibres which decussate in the chiasma pass directly through the corpora geniculata to the cerebral hemisphere. For my part, I have not seen loss of sight of one eye from disease of any part of one cerebral hemisphere, except by the process of optic neuritis, and only two cases in that way. But, at any rate, there can be little doubt that hemipia and hemianæsthesia are owing to a destructive lesion in the region of the optic thalamus, and, speaking clinically, it is certain that there does occur from one sudden lesion a sensory paralysis the perfect analogue of the hemiplegia with lateral deviation of the eyes.

We saw that there was a mobile counterpart to hemiplegia in unilateral spasm, with spasmodic lateral turning of the eyes to the side convulsed; so there is a mobile counterpart of the one-sided sensory disorder with hemipia. In some cases of migraine, as Latham and Living have told us, there is a development of retinal sensations to one side, along with pricking, formication, etc., of the limbs of that side. This is the sensory analogue of spasmodic turning of the two eyes to the side convulsed in unilateral epileptiform seizure. In the one, there is discharge of convulsions in connection with the corpus striatum, as there is in the other, I think, of convulsions in connection with the thalamus opticus. Both are, I think, epilepsies in the sense that there are "discharging lesions" of some part of the cortex cerebri, although of different parts of the cortex. In cases of paroxysmal sensation development, as well as in cases of the motor development (epileptiform convulsion), we shall profit very largely by what Ferrier has done in his researches into the sensory areas of the brain. It seems to me that all clinical evidence points to the region of the optic thalamus as the seat of the discharging lesion in cases of migraine with visual phenomena. Latham thinks that the paroxysm of migraine is owing

to arterial contraction in the region of the posterior cerebral. Living thinks that there is in the paroxysm a "nerve-storm" traversing the optic thalamus and other centres. Ferrier's experiments, if not decisive, supply the only physiological evidence there is as to the cerebral locality where retinal impressions are specially represented. It is true that, in monkeys, he finds that extirpation of the angular gyrus is followed, not by hemipia, but by loss of sight of the opposite eye; his conclusions are endorsed by Charcot from clinical evidence. Hence I freely admit that there is a want of harmony betwixt present clinical investigations and physiological experiments. What, however, I would urge is careful attention to Ferrier's researches in this matter and methodical study of the very striking visual phenomena occurring in some cases of migraine along with other sensory symptoms of that disease. It would, however, be difficult to add to what Latham and Living have already done as to migraine. Excepting these physicians, little attention has been paid in this country to abnormal developments of visual sensations in their relation to developments of other sensations. But abnormal developments of sensations are as worthy of study as are developments of movements.

In the study of epilepsy, it is as important to note that coloured vision is a constant precursor of some seizures as that spasm of the hand is of others. It is very important that this kind of work should be done methodically, especially as there do occur cases which show degrees of intermediateness betwixt unilateral epileptiform seizures and the cases of migraine above spoken of—cases in which I suppose the discharging lesion is wide or betwixt the motor and sensory areas of the cerebrum. One general remark may be made; viz., that development of sight-sensations are more frequently precursors of epileptic attacks than any other special sense warnings, except touch. Smell is next in frequency, and an auditory sensation is rare. That sight should be the sense most often to suffer one would conclude *a priori*; it is the most representative sense; most ideation is carried on in visual ideas, whether that be the ideation of waking or that of dreaming, or the morbid ideation of delirium. Auditory hallucinations are rare, and, when they occur, betoken unusual gravity of mental affection. There is as yet no precise *post mortem* evidence as to the whereabouts of disease in any single case of epilepsy or epileptiform seizure beginning by development of sensation of smell, sight, hearing, or taste. Ferrier's researches as to the sensory areas of the brain are here very valuable. We should, if we happen to obtain *post mortem* examination in any case of epilepsy beginning by retinal or other sensations, search with great care the particular sensory areas, which Ferrier declares to be the seat of such sensation. This advice will only do harm to those who determine to find when they should be only carefully searching.

But, keeping to development of sight-sensations, there are some points of direct utilitarian interest. A patient may have attacks of coloured vision only long before he has severe epilepsy heralded by that sensation. Thus a married woman twenty-five years of age was one day sitting peeling potatoes, when "her sight became blue", and then she lost it; this she supposed lasted ten minutes; feeling her way, she went into another room and bathed her eyes. Subsequently, she had an exactly similar attack, followed by a severe fit with loss of consciousness and tongue-biting. It is a very common thing for a patient to have both partial attacks with coloured vision, and severe attacks heralded by that sensation. It has been noticed by Falret, and I think it is so, that red is the colour most often developed; it is what one would expect *a priori*, for red is the colour soonest lost in amaurosis; we should expect it to be so from the analogy of motor affection. Those parts which are most frequently paralysed are those most often seized by spasm.

Again, it is a very common thing for a paralysed or partially paralysed part to be seized with paroxysmal spasm, and similarly it is not uncommon for a patient who is blind or partly blind from cerebral disease to have attacks of coloured vision. There is still another analogy: it is a common thing to find temporary paralysis of a part after it has been recently convulsed. There is, I think, as Todd and Alexander Robertson have suggested, temporary exhaustion. It would be well to note, when we have the chance, whether, after development of colour-vision, there remains loss or defective power to perceive that colour. Dr. Alexander Robertson has noticed this sequence in one case. In the case of the woman who had development of the colour blue, there was a loss of sight for a time; the loss of sight, however, may have resulted either from local exhaustion of the parts discharged or from the discharge becoming very excessive, for during excessive discharge there is no sensation.

I now come to speak of the value of the ophthalmoscope in medical practice. In cases of blindness or great defect of sight, we nearly always discover something wrong in the eye. It may seem at the first glance that, when the defect of sight is produced by intracranial dis-



case, we should discover nothing wrong in the fundus, but with rare exceptions we do. In but one case of lateral hemiopia, even with corresponding hemiplegia, have I seen intraocular changes; in that case, optic neuritis followed. In a very few cases of entire loss of sight, presumably from cerebral disease, I have seen no abnormal changes, yet I repeat, in defects of sight from or with intracranial disease, there is nearly always some definite abnormality to be seen in the fundus oculi. On the other hand, it is an exceedingly common thing in physicians' practice to find very abnormal ophthalmoscopic appearance in patients whose sight is quite good. Hence the ophthalmoscope must have great interest to the truly practical mind. Without this instrument, the precise investigation of diseases of the nervous system is impossible. There are some good reasons why the ophthalmoscopic evidence brought forward by physicians has been lightly considered. It is an unfortunate thing that some investigators do not make allowances for differences in the appearance of the fundus in healthy people. It is a common thing for the inexperienced to see congestion and anæmia of the optic discs, when the experienced see nothing but a physiological redness or pallor, associated with a fair or dark complexion. The determination to find something wrong in the eyes, when something wrong is likely, leads to grave blunder. It is obvious that some observers are really largely inferring when they should be only looking. I believe that physicians are sometimes guilty of overrating slight appearances, finding something extraordinary when there is nothing particular; and this naturally provokes the scorn of good ophthalmologists, and brings a valuable means of research in medical cases into contempt.

On the other hand, those physicians who do not use the ophthalmoscope at all must frequently overlook an important pathological condition altogether. It is an exceedingly common thing in physicians' practice for a patient, the subject of fatal brain-disease, to have extreme optic neuritis, and yet see quite well. I have been urging this for fourteen years, in season and also out of season, and have long since pointed out that the statement does not rest solely on the authority of physicians. I have quoted Blessig, von Gräfe, Hutchinson, Brudenell Carter, and others in the matter. It is still received in some quarters with great incredulity, but it is true, nevertheless. Unless we use the ophthalmoscope, we should seriously misinterpret certain symptoms in cases of cerebral disease. We had recently under care in the London Hospital a little girl, who had an acute cerebral illness, the nature of which we could not make out. I thought, with some others, that there was tubercular meningitis. In this case, there was a large black patch at the yellow spot region of one eye. The child recovered. Any subsequently discovered defect of sight might be attributed to the cerebral illness by those who made no ophthalmoscopic examination. A careful *post mortem* examination in such a case would be, not a good thing, but a bad thing. I once saw a patient, who died blind and hemiplegic of the left side; there was disease of the right optic thalamus. Had I not used the ophthalmoscope, I might have erroneously supposed that disease of the optic thalamus had caused the loss of sight. But the ophthalmoscope had revealed the changes often seen in chronic Bright's disease; there was no real direct connection betwixt the blindness and the cerebral disease. When speaking of the error of merely minute investigation and merely definite statement, I by no means wish it to be inferred that we should not note, as carefully as we can, the slightest abnormal conditions of the fundus oculi that are met with. Both by precept and example, I have urged it for years. The fault is in drawing decided conclusions from slender evidence; the intellectual vice of speaking definitely when we cannot be exact, and of being minute when we cannot be precise. It is, I think, matter of great importance to note the condition of the optic discs in cases of epilepsy. I know of nothing characteristic in any state of the fundus in epilepsy, unless there be organic disease, and herein I agree with Allbutt. But I would still urge the investigations on younger men, who begin with fresher minds. In particular, I would urge the use of the ophthalmoscope during and after paroxysms of epilepsy and epileptiform seizures. Ten years ago, I recorded a case of an observation in unilateral convulsion; the patient was myopic, and I had a good view of the fundus all through the fit, and yet I saw no alteration whatever. I allude to this record because I wish to show that, in urging others to work in a very difficult field, I have not shirked trying to do some of the work myself.

In cases of some kinds of epilepsy, we might discover alterations of circulation in the fundus, which would help a little towards completing our knowledge of the epileptic process. There is another class of cases, at least allied to epilepsy, in which ophthalmoscopic examination should be made. As already mentioned, there are cases of sudden temporary defect of sight. These disorders are of two kinds: the physical processes corresponding to spasm and paralysis, from over-func-

tion and loss of function of motor centres. 1. There is development of retinal sensation (of clouds of colour), or the more definite spectral projection in some cases of migraine. Thanks to Latham and Living, this is now well known to the profession. Although I believe these appearances to be due to local discharges of cerebral convolutions, and to be analogous to convulsion of muscles, to strong lateral deviation of the eyes for example, it is possible that there may be a correlated alteration in the retinal circulation. There would be plenty of time to make careful and precise ophthalmoscopic observations in the stage of visual phenomena preceding headache in cases of migraine. 2. In the second set of cases, there are sudden and temporary failures of sight, lasting several minutes without precursory colours. I used to call both these classes of cases epilepsy of the retina; but for many years I have abandoned this fallacious expression altogether, and now call them cases of epileptic amaurosis. It is practically certain that they are due to central discharges; and I have little doubt that they are owing to discharges of those convolutions which Ferrier declares to be cerebral centres for vision. In the second class of cases, the patient becomes suddenly blind for a short time; the only thing is blindness. I have had no chance of investigating the fundus during an attack of this kind, excepting in one where there was double optic neuritis, and the patient's sight was so far affected that he could only just read No. 20 of Snellen. The results were nearly negative. Whilst I was examining him, total blindness came on. I discovered no change of importance.

By far the most important thing seen ophthalmoscopically in medical practice is optic neuritis; but I have written so often on this subject, that I must say no more about it than was said before when speaking generally of the value of the ophthalmoscope. It is well known that, although optic neuritis may disappear, leaving sight good, and only very trifling, if indeed any, abnormal ophthalmoscopic appearances, it sometimes leaves optic atrophy, with more or less defect of sight. I shall say nothing of this kind of atrophy.

There is another kind of optic atrophy, which is very different clinically as well as pathologically, viz., simple atrophy of the optic nerve—atrophy without precedent neuritis. This is seen in some cases of locomotor ataxy, and is in difficult cases a great help to that diagnosis. It is sometimes seen before ataxy begins, before there is any inco-ordination of the legs. But, even then, in many cases there is a symptom which as certainly belongs to the ataxic group as does the disorder of co-ordination. It will be found that the patients who have simple atrophy have pains in the legs—the well-known lightning pains. In these cases of simple atrophy, coming locomotor ataxy is possible; and, if there are the particular kind of pains spoken of, it is almost certain; we should always inquire for them in case of simple atrophy. I do not think I can put the clinical relationship of these cases to locomotor ataxy better than I put it in an old paper. "We have amaurosis (meaning that with simple optic atrophy) without pains in the legs; 2. Amaurosis with pains in the legs only; 3. Amaurosis with pains in the legs and difficulty of co-ordinating the movements of the legs; 4. Pains in the legs and difficulty of co-ordinating the legs without amaurosis; 5. Amaurosis without pains in the legs and with difficulty of co-ordination. I could now put five patients in a row showing the above sets of symptoms" (*Medical Times and Gazette*, September 1st, 1866).

Allbutt and Westphal have found simply atrophy of the optic nerve in many cases of general paralysis of the insane. I have made no observations on this matter.

There is a very important pathological process which we can watch by aid of the ophthalmoscope: the process of embolism. Virchow predicted that the effects of embolism would be seen in the eye, that is, ophthalmoscopically, four years before von Gräfe, in 1858, did see them. Brudenell Carter showed before the Medical Society, some years ago, a marked case; the effects of the embolic process could be seen. This case, like others, showed that blocking of arteries can lead to increased quantity of blood beyond the plug, and even to extravasation. In Carter's patient, effusions of bright red blood were to be seen over and beyond the disc. Now, the use of the ophthalmoscope in such a case as this is of vast interest as revealing the cause of the patient's blindness; but it is scientifically of extreme value as a contribution to the study of the process of embolism. The cases of blocking of a branch of the arteria centralis are most interesting. The whole process of embolism is within the eye, and may be looked at and its stages traced. It would, I think, be mere perversity to omit notice of processes we can see, and study exclusively that process, or rather the clinical aspect of it and its *post mortem* appearances, in organs concealed from observation during the patient's life. Moreover, ophthalmic surgeons have done their work in these cases with their usual precision. The first case of partial retinal embolism was recorded by Sämisch, the second by Hirschmann, and a third by Knapp. Knapp's case is of very great interest; numer-



ous hæmorrhages were to be seen in the retinal segment supplied by the blocked arterial branch. Now, as Knapp says, this might be called a case of hæmorrhagic infarction of the retina. The interest of such a case is that it helps us to complete our knowledge of the effects of embolism in general. It certainly is not widely known that the effects of plugging of arteries is commonly, not anæmia, as one might at first glance suppose, but hyperæmia and extravasation. The case might be called red softening of the retina; the process is just the same in cerebral red softening; there is arterial plugging leading to extravasation of blood and softening of the brain. It is so in the spleen and kidney, etc.; also in what are often called pulmonary apoplexies. In all these cases the blocking leads very quickly to hyperæmia and extravasation. That blocking of arteries can lead to total hyperæmia, to increase of nutrient fluid is, I think, worth some consideration in regard to the pathology of those diseases, such as epilepsy and chorea, in which the increased expenditure of energy implies of necessity increased nutrition by some process. Late in these cases the blood is absorbed and the disc atrophies. A similar change, making allowance for difference in the organs affected, follows in red softening of the brain; there is yellow softening and red splenic and renal blocks becoming washleather-like. Sometimes there is hemiplegia from embolism, and at the same time amaurosis from plugging of the arteria centralis retinae. I saw a case of this kind in Sir William Jenner's practice with Dr. Gowers. In this case, Sir William's diagnosis was confirmed by the necropsy: a valuable account of the case has been published by Dr. Gowers. This is the only case of recent retinal embolism with hemiplegia that I have seen. I have seen several cases of hemiplegia in patients who had atrophy of one optic disc. It is very important in such cases to note exactly the condition of the disc and its arteries, or we might be misled into the opinion that the atrophy was a consequence of the cerebral disease which caused the hemiplegia. This would be a very serious error; for, so far as I know, no kind of cerebral disease produces atrophy of but one optic nerve except by the process of neuritis, and that is, in physicians' practice, a thing of extreme rarity. As mentioned, Charcot believes that disease of a certain part of one cerebral hemisphere causes blindness of the opposite eye, but he says there are no ophthalmoscopic appearances.

[To be concluded.]

## A CONTRIBUTION TO THE NATURAL HISTORY OF CATARRHAL OPHTHALMIA.

By EDWARD NETTLESHIP, F.R.C.S.,  
Surgeon to the South London Ophthalmic Hospital.

THE every-day muco-purulent ophthalmia which most surgeons specially designate as "catarrhal" presents some features of interest peculiar to itself, and perhaps of importance in reference to local inflammations of other parts. The view has for some years past been taught, though not, I believe, put upon record, by Mr. Hutchinson, that this disease, in many of its features, resembles the exanthems—a theory based, I believe, on the observations that the disease is almost always symmetrical, that it attacks both eyes almost simultaneously, runs a definite course usually ending in spontaneous recovery, and that it scarcely ever occurs twice in the same person. Some of the facts given below will be found to favour this view, while others appear to point to a different conclusion; but careful records of a very large number of cases can alone decide the important points raised, and I shall for the most part avoid drawing any conclusions from the very limited data given in the present communication.

It may be well to call attention here to the rather vague meaning attached to the term "catarrhal" in connection with the eye. We may apply the term to the slight conjunctivitis which in some persons accompanies nasal catarrh; or to a mild form of disease, sometimes allied to episcleritis, in which the exposed parts of the eyeball become congested and slightly inflamed from exposure to cold or damp, and very liable to relapse; or to the chronic, chiefly palpebral, conjunctivitis sometimes associated with uncorrected ametropia; or to the chronic conjunctivitis so common in old people; or to the muco-purulent ophthalmia which often follows measles, scarlet and other fevers. Yet these forms of disease are very different from one another and from that for which, by common consent, the term is most emphatically used.

The facts given below are collected only from cases of the disease referred to in connection with Mr. Hutchinson's hypothesis, the diagnosis being based in each case on the attack being acute and accompanied by considerable muco-purulent discharge, and, in addition, presenting one or more of the following features:—(a) symmetry, both

eyes being attacked within a short time; (b) a history of contagion; (c) conjunctival ecchymoses.

If the disease be a constitutional one, of which the conjunctivitis is to be looked upon as the eruptive stage, a certain degree and duration of fever must be expected. I have had no opportunity of making continuous daily observations of the temperature, and the few records given below in this connection show no more than that there is a slight rise of temperature in a large proportion of the cases, and that this is greater in severe cases and at an early stage, than when the disease is mild or has lasted a relatively long time. It is, however, very remarkable that any exanthem should be characterised by an eruption limited to so small a part of the surface as that furnished by the conjunctiva, and that it should seldom, if ever, be accompanied by evident symptoms of ill-health. On the other hand, it is equally remarkable that the disease, if it be merely local, should be self-protective; for I do not know that this is true of any contagious local disease, unless favus be considered a case in point, where the scalp may become so scarred, that the hair-follicles are destroyed and no soil remains for the cryptogam to flourish in. It may be urged, however, that the absence or trifling severity of the constitutional symptoms can be scarcely less marked than in some cases of such undoubted specific fevers as chicken-pox and syphilis; whilst the limitation of the eruption to the conjunctiva might be accounted for by appealing to some anatomical and physiological peculiarities in this membrane. That the conjunctiva does possess some properties not found in other mucous membranes is rendered probable by the remarkable chronic changes which it undergoes after prolonged exposure to impure and damp air, changes giving rise to the chronic granular conjunctivitis or trachoma. And the occurrence on the ocular conjunctiva of phlyctenulæ or so-called "pustules" appears to point in the same direction; for they do not seem to be represented by any changes commonly met with on other visible mucous membranes or on the skin. Should further observation prove that a first attack of this "catarrhal" ophthalmia confers immunity from a second, and should a persistent elevation of temperature be found which could not be accounted for by the local inflammation, the exanthem hypothesis would acquire great probability.

In making a short analysis of about two hundred and seventy cases of this "catarrhal" or ecchymotic ophthalmia which have during the last few months been under my care, the following points will be dwelt upon.

1. *The Temperature.*—This was taken in 91 cases; in 85 of them only once; in the other 6, twice at an interval of several days. The cases were not selected in any way. The observations were all made between about 2.30 and 4 P.M. on the day of the patients' first visit; a six-inch Hawkesley's thermometer was used, and the temperature taken in the axilla. The value of the observations is certainly lessened by their having been made nearly at the time of the daily highest physiological maximum, by many of them having been taken in summer, and by the patients frequently being women or children. Thus, of the 91 patients, 28 were women or girls of 14 and upwards, and 38 children under 14; only 25 were men or boys over 14. Making all possible deductions, however, the figures show that a definite elevation of temperature was present in a considerable proportion of the cases. The increase was never great; in only 13 cases was the temperature over 100 deg. Fahr. In one, a female child aged a year and a half, it reached 103.1 deg. Fahr., but in none of the others did it exceed 101.7 deg. Fahr. The following table gives some further details.

	Total, 86	Males, aged 14 or more.	Females, aged 14 or more.	Children under 14.
Temp. above 100.4 deg. Fahr. (slightly febrile) . . . . .	5	1 (20 per ct.)	....	4 (80 per ct.)
Temp. between 99.5 deg. and 100.3 deg. (subfebrile) . . . .	36	10 (25 per ct.)	16 (50 per ct.)	10 (25 per ct.)
Temp. between 99.4 deg. and 99.1 deg. . . . .	26	8 (30 per ct.)	6 (24 per ct.)	12 (46 per ct.)
Temp. normal, 99 deg. or lower	19	5 (26 per ct.)	4 (21 per ct.)	10 (52 per ct.)

Of the 41 febrile and subfebrile temperatures, 11 (or 25 per cent.) were in men, 16 (or 40 per cent.) in women, and 14 (or 35 per cent.) in children; while, of the 45 remaining which were normal or very nearly so, 13 (or 29 per cent.) were men, 10 (or 22 per cent.) women, and 22 (49 per cent.) children. Thus the women furnished a much larger proportion of high temperatures and a somewhat smaller proportion of normal temperatures than the men. The children gave a proportion of high temperatures intermediate between the men and women, while they much exceeded these in the proportion of normal tempera-

\* This paper was written in February.



tures. The latter fact is, no doubt, due to the difficulty in taking the temperatures of young children in an out-patient room, and does not represent the truth.—In six patients, the temperature was taken a second time, several days having elapsed between the two observations; in four of them, the second temperature was normal, the first having been above normal, and in all these both eyes were already affected when the first observation was made. In the other two cases, the second eye was attacked between the date of the first and second thermometric observation, and in each of these the second temperature was the higher.—The majority of the high temperatures were in the more severe cases. In only one of those with febrile or subfebrile temperature was the case mild; viz., a woman aged 42; in nearly all the others, the disease is marked as "severe" or "moderate."\* On the other hand, in five-sixths of the cases marked "mild", the temperature was practically normal.

Only three patients came under care within twenty-four hours of the onset of the disease in the first eye, and the temperature was above normal in all of them. It was the same with four others who came with both eyes affected, but within twenty-four hours of the onset in the second eye. Again, the cases with high temperatures were, on the average, in a somewhat earlier stage of the disease (counting from the onset in the first eye) than those in which there was no elevation. Further, while none of the cases with the highest temperature were in a later stage than the fourth day (counting from the commencement in the eye last affected), in those with normal temperatures the disease was often at the fifth, sixth, or seventh day, or even later. Lastly, in none of those where the temperature was taken on or after the sixth day was there any material elevation. These are the only facts I have to offer which bear on the relation between the temperature and the stage of the disease.

2. *Evidence of Protection afforded by a First Attack.*—Some kinds of ophthalmia, e.g., phlyctenular cases, are especially liable to relapse; in others, e.g., granular ophthalmia, the patient never really recovers, and, though remaining sometimes for long periods free from active symptoms, he is in constant risk of recurrences. On the other hand, whilst the group of purulent cases furnishes but few instances of second attacks, this is probably due in no degree to the exhaustion of liability on the part of the conjunctiva to purulent inflammation, but simply to the rarity of a second exposure to inoculation with the necessary material.

In the ophthalmia now under consideration, the rarity of second attacks, if it be a fact, can scarcely be referred to the rarity of opportunities for a second inoculation; the disease is so common that numbers of those who have had it once will probably be exposed to the risk of it again. Some other explanation must, therefore, be sought.

Of the two hundred and seventy-one cases of which I have notes, and in nearly all of which the question as to a former attack was asked, twenty-seven gave the history of an attack of some kind of ophthalmia at a previous date. In most of these, no opinion could be formed as to its character; in some, it had certainly not been "catarrhal" ophthalmia; but, in about half a dozen, the account given was such as to leave little doubt that a former attack of the same disease had occurred, and in all of these the attack which I saw, presumably the second, was quite characteristic. The following are short notes of the cases referred to.

CASE 24.—M., 5. Characteristic ecchymotic ophthalmia. Sister and another boy have it. A year and a half ago, the patient, and the same boy who now has it, had bad eyes for a month.

CASE 39.—F., 6. Characteristic ecchymotic case. No contagion. Two years ago, had "blight" in both eyes, and at that time all the other children had it too.

CASE 60.—F., 36. Characteristic case, with history of contagion. Six years ago, had "blight" in both eyes for nearly a month.

CASE 184.—M., 9. Characteristic ecchymotic case. Contagion from a brother. Two years ago, had a similar and equally bad attack, when mother and baby also had it.

CASE 253.—M., 28. Characteristic ecchymotic case. All his three children have it. Three years ago, he had precisely the same thing in both eyes; eldest child (at that time the only one) also had it, and has it again now. Both were soon well in former attack.

The three next cases (Nos. 66, 144, and 225) illustrate not only a second attack (in Nos. 66 and 144), but the escape during the present attack of several who had the disease at an earlier date.

CASE 66.—M., 44. Characteristic case. Three of his eight children

have just had it. A year and a half ago, he had just the same thing; wife and one child had it then, but neither of them has had it this time.

CASE 144.—F., 10. Characteristic ecchymotic case. One child in the same family and several in another family in the same house have just had it. Two years ago, both eyes were bad in just the same way, and were well in a fortnight. Mother and four other children of the family had it then and have escaped now.

CASE 225.—M., 41. Characteristic ecchymotic case. Four of his eight children have just had it. None have had it before. Some years ago, his wife and eldest child had it, and have not now caught it again.

3. *Symmetry.*—In one hundred and fifty-four cases, it is noted that, on admission, the disease was symmetrical, and in one other that it became so after admission. In about seventy-five, there is no note on this point; but it is certain that, in a large number of these, the omission was due to the fact that the cases conformed to the rule, i.e., that they were symmetrical. In forty cases, it is noted that only one eye was affected on admission; but, in three-fourths of these, the disease had begun so recently that there was no probability of the second eye escaping. A small number (nine cases) remain in which from five to eight days had, on admission, already elapsed without the implication of the second eye; but, even in most of these, it is by no means certain (as will be seen from considerations given below) that the disease did not ultimately become symmetrical.

The interval between the beginning of the disease in the two eyes is usually very short. Of eighty-eight cases in which it is recorded, the interval was one day or less in thirty; from one to three or four days in forty; four days in six; five days in five; one week in four; more than one week in three.

It is important to note that, in the cases (twelve in number, and all of them very characteristic) where the interval was longest (five days or more), nearly all the patients were adults, two only being children aged 4 and 10 respectively. It is easy to account for the delay in the affection of the second eye in adults as compared with children, on the ordinary supposition that it is inoculated accidentally by the fingers, etc., from the first eye; this being less likely to happen quickly in proportion as the patient is older and more careful. On the exanthem hypothesis, it would, however, be difficult to explain. Returning to the cases (nine in number) in which, on admission, a long interval (five to eight days) had already passed without the second eye suffering, I find that none of them were children, and that only one was under 20, and it thus seems highly probable, as already mentioned, that in most of them the second eye did suffer afterwards. The disease began in the right eye in ninety-six cases, in the left in seventy-seven, and in both together in six.

4. *Contagiousness.*—The commonly received opinion as to the communicable nature of this ophthalmia is fully borne out by statistical inquiry. In more than one-half of the cases (151), there was a history that the patient had been exposed to the risk of contagion to or from another person suffering from a similar complaint. When it is borne in mind that the patients are usually seen only once, and that inquiries of this kind are often hurriedly made and sometimes omitted, it will be granted that, in all probability, a similar account would have been given by a much larger proportion had time allowed. The total number accounted for by each patient who gave a contagion history was such that, on the average, each of the 150 cases under care represented two others which were not seen; or of 450 cases, 150 came under notice. The disease appears to be far more communicable than purulent ophthalmia derived from gonorrhoea or leucorrhoea; for, although its duration is much shorter, contagion is far more common.

The patients are almost always either children, or married people with families. It is not common to find cases in adults who have had no communication with children. Thus, of the 150 cases with a contagion history, the first patient is stated to be a child in 97 (nine of these being babies in arms), the mother in 6, the father in only 3. The children are more likely to catch the disease than either of the parents; for, of 136 families in which contagion had occurred, the mother had caught the disease in only 37 and the father in 32.—These facts do not favour the belief that exposure to cold, wet, dust, or impure air are causes of this form of ophthalmia.

The disease appears generally to be communicated whilst in an active state, and it is common to find it running through a family of half a dozen persons in as many weeks. But, in a few cases, it is probable that the communication does not take place until quite a late stage, although, in making this inference, I do not forget that there are fallacies which, in hospital clinical work, it is impossible to avoid. It may also be that the malady has an incubation of several days, so that, although the inoculation may occur in an active stage, no symptoms

\* It may be noted that the terms "severe", "mild", etc., cannot always be applied with strictness, since the various symptoms of the disease (congestion, ecchymosis, swelling of lids, and discharge) are not always present in corresponding degrees.



show in the recipient until the communicator is nearly well. The following case is perhaps an instance of this.

A lad living in London had "blight" in his eyes; while still suffering somewhat, although said to be nearly well, he went to Gravesend to see his sister, a servant girl aged 16. She gave up her bedroom to him for the night, and he returned to London in a day or two. Eight or nine days after his visit, his sister's left eye inflamed, and the right followed on the day after; five or six days later, she came to me with well marked ecchymotic ophthalmia.

Other instances in which a long interval seems to have elapsed between successive cases are the following.

CASE 136.—M., 17. Characteristic ecchymotic ophthalmia; four days. Three weeks ago, his "mate" had it and is now well.

CASE 71.—F., 18. Characteristic ecchymotic case, with a week's interval between the two eyes (*sic*). Three months ago, her sister had a severe attack in both, lasting about three weeks. No other known contagion.

CASE 107.—M., 35. Characteristic severe ecchymotic case. During the last eight or ten months, all his six children have had it; wife has escaped.

CASE 178.—M., 35. Characteristic case; four days. Six weeks ago, his wife had it, and, within a fortnight of her case, three of his six children suffered. Then a month elapsed without a fresh case, when his own attack began quite suddenly.

CASE 34.—M., 25. Acute ophthalmia of one eye only; two days. Attended only once. Two of his children were suffering from "blight". Between four and five weeks after the onset of disease in the patient, his wife (Case 19) began to suffer, and came under care, with a sufficiently characteristic attack, after the disease had lasted six days.

5. *Natural Course of the Disease.*—In support of the assertion that the cases usually recover spontaneously in a short time, the following may be noted. 1. It is very common to hear of several cases having occurred in the family, and recovered without any treatment, excepting perhaps a little bathing with cold water, before the case under care is brought to the hospital. 2. A large majority of the cases attend the hospital for less than a week; which may be taken as positive proof that they nearly all get well a few days after admission. Thus, of the total number (273), 164 attended only once; 83 twice or three times, their whole attendance extending over from seven to ten days, or occasionally fourteen days; only the remaining 22 were under care three weeks or more. 3. The prolonged cases generally occur either in young children (under four or five), in whom the disease seems slightly prone to run into a chronic condition, or are accounted for by the occurrence of phlyctenulæ as a complication. 4. Severe cases (excepting in some young children) do not, as a rule, last much longer than mild cases.

The disease occurs at all ages. Several of the patients were fifty or more; one was an infant of three weeks, and several were infants of two or three months. About one hundred and forty of the cases were children under fourteen, the remainder being divided almost equally between males and females of fourteen and upwards.

## ROUSTCHOUK MILITARY HOSPITAL.

By H. CROOKSHANK, M.R.C.S., etc.,

Surgeon-Major Turkish Military Service; Operating Surgeon to the Hospital.

THIS small but strongly fortified town, which is likely to play an important part during the present Turco-Russian campaign, now boasts of six large temporary hospitals, with an aggregate number of upwards of eight hundred and fifty beds. Four of these hospitals belong to the military authorities, one to the naval, and one to the civil, the two latter having been in existence some years; the naval hospital containing twelve beds; the civil twenty-five, which number, on an emergency, can be increased to one hundred or one hundred and fifty. Two more large buildings have been placed at the disposal of the medical authorities, one of them belonging to the Jewish community, and formerly used as a school for the children of that denomination. These latter will be fitted up with beds and reserved for surgical cases. Two months ago, a portion of the caserne was sufficient to meet the need of the medical service; but, as the number of battalions stationed here increased and each one brought with it a contingent of sick and feeble, it was necessary to obtain more space, and to the caserne was added the École Israélite, then a large building not quite finished, and intended for a school for Ottoman girls; and finally the Haremlik of the Kouak; and over all these buildings gaily floats a large white flag with a red crescent in the centre, which the Turks have chosen as an emblem of

protection and to warn the Russian gunners from pointing their pieces on an assemblage of suffering humanity.

During the last three days, the weather has suddenly changed from beautiful summer to cold winds and rain, which has told very much on the army under canvas and greatly increased the number of admissions into hospital. For two days we have had a continuous down-pour of rain, accompanied by thunder and lightning, which rapidly converted the narrow streets of this town into rivers from eight to twelve inches deep, and has caused the Danube to rise considerably above its usual height even at flood-time. One good effect this deluge has had; namely, to cleanse the roads and to carry into the river all the refuse matter which the inhabitants, in defiance of all sanitary measures, insist upon depositing outside their street doors.

The hospital administration is very good, due in great measure to the admixture of foreign element in the staff, which consists of thirteen doctors, namely, one Armenian, one Greek, five Turks, four German, and two English. The patients are well looked after, there being a good supply of hospital attendants; and the diet is liberal and of very fair quality. The buildings, having been intended for other purposes, are well lighted, properly ventilated, and answer admirably for the purposes to which they are at present applied. They are mostly detached buildings, at some distance from each other; and several of them are surrounded by pleasant well-kept gardens, where the convalescent patients spend most of their time. During the month ending May 12th (April 30th, local time), a total of 1,972 cases were treated at the various hospitals. The largest number being in hospital on one day was 835. On April 13th (April 1st, local time), there were 463 patients in hospital; 1,509 were admitted during the month, making a total of 1,972 cases, of which number 1,106 were dismissed cured or relieved, and 104 died: a mortality of about 5.2 per cent., which is not excessive, considering the fact that most of these men have been eighteen months under arms and passed through a very severe winter in Servia, many of them not having yet recovered from the wounds they received in that campaign. The number of soldiers in this neighbourhood under arms has been estimated at about 25,000, and the average daily admittance into hospital for the month was 65.7, most of them serious cases. The maximum number of cases in hospital at one time was 835, an average of little over 3 per cent., which speaks well for the sanitary condition of this division, the usual percentage being about 1.5.

The following is a list of a few of the most important diseases admitted into hospital, with the result.

DISEASE.	In Hospital.	Dismissed, cured or relieved.	Died.
Anæmia and general debility .. .. .	30	17	1
Abscesses .. .. .	42	37	5
Inflammation of glands (various) .. .. .	29	24	5
Diseases of chest .. .. .	57	51	6
Phthisis .. .. .	57	1	25
Diseases of eye .. .. .	35	11	5
" skin .. .. .	67	4	1
" ear .. .. .	14	1	1
Rheumatism (acute and chronic) .. .. .	114	101	13
Erysipelas .. .. .	17	11	6
Simulant and hysteria .. .. .	24	22	2
Gonorrhœa .. .. .	17	15	2
Veneral disease .. .. .	54	35	1
Catarrh of intestine .. .. .	112	112	2
" stomach .. .. .	20	18	2
Dysentery .. .. .	109	101	8
Fever (various, but chiefly typhoid) .. .. .	109	101	8
Influenza cold .. .. .	11	10	1
Contusions .. .. .	17	10	7
Ulcers (various) .. .. .	13	11	2
Scurvy .. .. .	2	1	1
Various .. .. .	111	87	24

During the last three days, on account of the great change in the weather, the number of patients admitted into hospital has increased, no less than 354 serious cases having been taken in during the week; so that the numbers stand thus:

In Hospital May 1 (local time).	Admitted during week.	Total.	Dismissed.	Died.	Remaining in Hospital end of week.
762	784	1546	1011	20	515

The daily average of beds occupied during the week was 84.3, and the average daily mortality 3.14. The following were the causes of death: Dysentery, 8; typhoid fever, 5; scurvy, 2; heart-disease, 1; Bright's disease, 1; burns received, 1; pneumonia, 4; pleurisy with effusion, 1; phthisis, 4.



Up to the present moment, there have been very few surgical cases, only three having been admitted; viz.:

1. Accidentally shot himself in the thigh with a revolver. The bullet lodged in the muscles and was extracted. Doing well.
2. Sailor wounded in the right arm by cannon going off whilst he was loading it during the engagement at Oltenitz. Brought to hospital three days afterwards. Thumb and two fingers blown off; compound fracture of forearm and elbow-joint; gangrene extending some inches above elbow. With the assistance of Dr. Stevens, who compressed the vessels, I amputated at the shoulder-joint. Patient doing well.
3. Sailor brought from Intrekai after the explosion of the Turkish gunboat, severely burned over face, arms, chest, and legs. Died the day after he arrived in hospital.
4. I went to one of the camps to hold inquest of a soldier who had been shot by a sentinel on guard. The bullet entered the back to the right of the spine just below the inferior angle of the scapula, passed through the chest and left the body just below the left nipple, wounding the heart and fracturing three ribs. Death almost instantaneous. The deceased had quarrelled with the guard, and during the night tried to stab him with a knife, but failed, only slightly wounding him. Roustchouk, May 14th, 1877.

## MINEHEAD AS A WINTER-RESIDENCE FOR THOSE SUFFERING FROM CHEST-DISEASES.

By THOMAS CLARK, L.R.C.P. and S.Ed.

MINEHEAD is situated on the Bristol Channel. The Channel is a tidal current, supposed to be under the influence of the gulf-stream. The gulf-stream, in its course along the shores of the Atlantic Ocean, creates a milder climate, very distinguishable from that more inland. Its effects are seen in the freshness of the vegetation, the luxuriance of growth—camellias, myrtles, and other exotic plants growing and flowering out of doors; the almost total absence of snow and frost, the equable temperature of the winter months, and its high mean average.

While Minehead enjoys the climatic advantages referred to, it is also sheltered from the prevailing winds, north and north-west. Those portions of Minehead situated between the parks to the parish church, and the church to Blenheim Terrace, are especially sheltered, not only from the north and north-west winds, but also to a great extent from the east winds. The North Hill shelters the town like a great wall, and has a southern aspect; it is under the influence of the sun's rays from sunrise to sunset. The subsoil of Minehead is of a sandy nature, dries up very quickly after rain. Minehead is now well supplied with water, and a thorough system of drainage is about to be carried out. It is laid out for building purposes, the projected streets being spacious and wide.

My object in bringing Minehead under the notice of the profession is to point out that it possesses unusual advantages for those suffering from chest complaints; the great desideratum in such cases lies in a genial and equable climate.

The subjoined thermometric readings will enable the reader to form an estimate of the climate of Minehead.

	Maximum, or daily.	Minimum, or nightly.		Maximum, or daily.	Minimum, or nightly.
1873.—November..	53.0	41.3	1875.—February ..	41.7	34.7
December ..	48.0	40.1	March.....	45.8	38.0
1874.—January ..	47.8	39.5	November..	48.8	41.9
February ..	47.8	37.5	December..	41.4	37.8
March.....	49.8	40.4	1876.—January ..	43.8	36.1
November..	51.2	42.3	February ..	47.7	39.4
December ..	41.6	33.6	March.....	46.3	36.1
1875.—January ..	47.9	42.7			

Giving the average daily temperature for the three months of the three winters as 46.9, and the average nightly temperature for the three months of the three winters as 38.7. The last five months of the present winter have not been reckoned; they have been unusually mild, and not calculated, therefore, to give a true average.

The readings of the barometer for the same time were:

1873.—November ..	29.85	1875.—February ..	30.39
December ..	30.20	March.....	30.49
1874.—January ..	29.91	November..	30.14
February ..	29.97	December..	30.42
March.....	30.63	1876.—January ..	30.52
1874.—November..	30.38	February ..	30.21
December ..	30.15	March.....	30.07
1875.—January ..	30.45		

Giving an average for the five months in the three winters as 30.25 inches. The usual range of the barometer in Britain is from 30.9 to 29 inches. In equatorial regions it varies for only a few tenths, except in storms. The range of the barometer at Minehead is 30.25 inches,

showing an equal and high average pressure from month to month and year to year.

The rainfall of the years 1874, 1875, and 1876, was 39.28 inches; and, during the winter months as above, rain fell on 68, 65, and 56 days.

Mr. Symons believes that the small fall of rain along the coast is accounted for by the fact that the south-west rain-bearing winds pass over part of Dartmoor and the whole of Exmoor, and are by these high lands deprived of their vapour.

It is seldom that Minehead is affected by the mists, called "Devonshire weather", that pass up the Channel.

In Dr. Spencer Thomson's published book of the *Health Resorts of Britain*, the average temperature of the winter months is given as under:

Torquay .....	44.0	Minehead—Maximum ..	46.9
Undercliff.....	41.8	Minimum ..	38.7
Clifton .....	39.9	" Average ..	42.8
Hastings .....	39.0		

The mortality of Minehead for the last thirty years was 15 per 1,000; the average age was forty-seven years.

The country around Minehead is charming in the extreme, combining, as it does, beautiful inland scenery with extensive coast views.

In conclusion, I may state, that the many pulmonary complaints which I have been called upon to treat have invariably improved. The improvement is, in my opinion, in a great measure traceable to the salubrious climate of Minehead.

The profession, I am disposed to believe, will find in Minehead a new outlet for all kinds of chest-diseases, and I have great pleasure in directing their attention to it.

## CLINICAL MEMORANDA.

### SUPPLEMENT TO A CASE OF SYNCOPE FROM ETHER-INHALATION.

SINCE the publication of a case of syncope from ether-inhalation in the JOURNAL of May 19th, it has been necessary to again administer anæsthetic to the patient in consequence of a redislocation of the hip. We decided to use ether as before, and a similar specimen was employed. An ounce was poured into the inhaler, and given very gradually. In three minutes, the breathing, which had been deep and regular, suddenly became slower and extremely shallow; the orbicularis palpebrarum acted on the eyelids being touched; but the muscles generally were relaxed, and no pain seemed to be produced on moving the tender hip-joint. The face became rather pale, but the pulse remained good. The inhaler was removed; and, as presently the respiratory movements were scarcely perceptible, the epigastrium was flapped with the cold wet end of a towel. This seemed to revive the breathing somewhat; but during the next quarter of an hour it remained extremely shallow, and the patient was unconscious, although the painful limb was moved in taking off the splint, etc. At the end of this time, the patient quietly woke up, and a little more ether had to be given. Only two drachms were put on the inhaler at once, and the patient was much longer in getting under the influence of the anæsthetic. The breathing, except just when she was conscious, remained extremely shallow, and was frequently almost imperceptible. Altogether, three ounces of ether were used, and the patient was under its influence for nearly an hour. There was throughout, as on the previous occasion, a marked absence of any struggling stage, only a very little muscular movement taking place after the first time of revival.

Although the respiration failed in a remarkable manner, there was on this occasion no indication of any failure of the circulation beyond slight blanching of the face. This was probably because Mr. Denton was extremely careful to remove the inhaler whenever the condition of the respiration seemed to indicate its advisability.

R. J. PYE-SMITH, F.R.C.S., Surgeon to the Sheffield Public Hospital.

### SYNCOPE IN ETHER-INHALATION.

THE occurrence of syncope during inhalation of ether, as recently described by Mr. Pye-Smith in this JOURNAL, raises questions of considerable interest. Not long after the publication of Mr. Morton's case in the *Lancet*, to which Mr. Pye-Smith refers, I had the opportunity of witnessing a similar case in this infirmary. The patient had had a tumour removed from the breast. At the end of the operation, the face was somewhat pale, but the pulse good. In the course of a few minutes, the ether being discontinued, the breathing became gradu-



ally fainter, and finally ceased; the pulse, however, persisted. Artificial respiration for a few moments restored the natural breathing.

I think it is questionable how far this arrest of respiration, although accompanied by pallor of face, is due primarily to failure of cardiac action. In experiments upon animals killed by ether inhalation, the heart is found to beat for several minutes after the total arrest of breathing. I think it is possible that in the cases above referred to the failure of respiration may be due to action of the drug on the respiratory centres, the failure of heart following it closely, but being secondary to that of the respiration. Whether this be the case or not, there is practically a great difference between the gradual failure of cardiac action of this sort from ether and the sudden stoppage of pulse and respiration observed in cases of chloroform-syncope. The one gives ample warning, the other often not till it is too late.

Let me, in conclusion, say a word in behalf of ether-inhalers made on the principle of that described recently by Mr. Ormsby. There are several of this kind in use, including two invented by Mr. Clover and described in this JOURNAL. I have used Mr. Ormsby's inhaler now many times, and find it but little inferior to the admirable but somewhat expensive apparatus designed by Mr. Clover. In face of assertions as to the length of time, the amount of the anæsthetic required, and the struggles of the patient under ether, it cannot be too generally known that, if properly administered, ether should induce narcosis, save in exceptional cases, without struggling, in two or three minutes, with an expenditure of one to two ounces of the anæsthetic for an operation of moderate length.

ERNEST H. JACOB, M.B., Leeds Infirmary.

#### ETHER-INHALATION.

I HAVE been informed by Messrs. Coxeter and Sons of Grafton Street East, London, that many of the leading hospitals in London, Dublin, and the provincial towns in England, including those of Manchester, Birmingham, Leeds, and Liverpool, are using the ether-inhaler suggested by me.

For the benefit of those who have thus adopted it, and to prevent any disappointment or delay in producing anæsthesia, the following directions may be of use. 1. The patient should be told before administration that the ether-vapour may cause a suffocating feel at first, which should not be regarded, as the sensation will only be momentary. 2. An assistant should hold the hands of the patient, so as to prevent the inhaler from being suddenly snatched from the face. 3. No solicitation whatever on the part of the patient should be listened to as regards giving a breath of fresh air, which is invariably cried out for, but would only delay the anæsthesia. The sliding aperture in the mouth-piece may be left open for a moment, but should then be closed, so as to compel the patient to breathe and rebreath the same ether-charged air; and care should be taken to see that the face-piece is well pressed on the face, so as to cover the nose and mouth accurately. 4. None but the best anæsthetic ether should be used, specific gravity .720 to .730: only one ounce of ether should be poured at first into the sponge; if more be required, it can be introduced by removing the brass cap on the mouth-piece without removing the inhaler from the face; and when the cornea can be touched with impunity, and other signs of unconsciousness are present (which usually takes place in less than two minutes), the inhalation need not be pushed farther; the sliding aperture may then be opened and the operation proceeded with. The aperture may, however, be closed, if necessary, in a prolonged operation, when the anæsthetic effect seems to be passing off. Children can be etherised just as well as adults with this instrument.

I would feel greatly obliged, and esteem it as a very great favour, if those who have adopted this inhaler would kindly let me know their experience of it, and whether I could give them any further information as regards its use, which combines simplicity, portability, and economy of first cost. The air-pad round the face-piece should always be inflated before administration, and allowed to collapse afterwards. This pad can be supplied separately by Messrs. Coxeter and Son.

LAMBERT H. ORMSBY, F.R.C.S.I.,  
Surgeon to Meath Hospital, Dublin.

#### SURGICAL MEMORANDA.

##### REMOVAL OF TRACHEOTOMY-TUBES.

SINCE Dr. Maclaren has offered a criticism upon the manner in which I removed a tracheotomy-tube from the left bronchus, in the case brought before the Royal Medical and Chirurgical Society, I trust I may be allowed to write a few lines in reply.

He explains the difficulties encountered upon a presumption entirely his own. These arose, he says, "from an erroneous conception of the principle on which the extracting power should be applied in such cases". They arose, as I stated, from the inaptitude of the throat-forceps at my disposal for introduction into the trachea. To recommend that I should have introduced both blades of the forceps employed into the lumen of the tracheotomy-tube, is to advise that I should have introduced the greater into the less. From the rarity of these cases, I should scarcely have thought that a sufficient number would have come under the notice of any one individual to lead him to dogmatise upon a particular method of extraction; though, of course, I cannot be aware of Dr. Maclaren's personal experience. The facts, however, that Mr. Hulke found a hooked wire efficient, whilst Professor Spence withdrew the tube in his case by expanding within it the blades of a forceps, and I grasped the foreign body after introducing one blade within the tube, show that there are at least three methods which have on different occasions proved successful. The surgeon whom chance may call upon to operate in a similar case will find that, when the patient is continually expectorating blood and mucus, and in imminent risk of suffocation, it is by no means an easy thing to extract a silver tube from the bronchus even when armed with Dr. Maclaren's conception of a principle. It was to obviate for the future some of the difficulties which I experienced, that I caused the forceps to be made which was exhibited before the Society. It is so curved as to pass readily into either bronchus, and may be manipulated with ease beneath the projecting chin. The handles are made to overlap, in order that the blades may be widely separated after passing through a narrow opening. Experiments on the dead subject showed that it mattered little how the tube was caught; for the blades, being elastic, allowed the tube to rotate to some extent without escaping from between their teeth.

R. CLEMENT LUCAS, B.S., F.R.C.S., London.

#### OBSTETRIC MEMORANDA.

##### STRONG GLASS SPECULA.

I THINK Dr. Murphy of Sunderland has rendered a service by his article in the JOURNAL of May 26th, on the advantages of specula made of strong glass. I have myself been using for several years specula exactly of the nature described by Dr. Murphy, and have recommended them to several of my friends, one of whom—Dr. Caldwell of Shotts—has just written me stating that, after five years' trial, he prefers them to Simpson's and Ferguson's. I may mention that they were first introduced to me through my neighbour Dr. Gray, who, I understand, has employed them, almost to the entire exclusion of other specula, for a period of twenty years.

One point has been omitted by Dr. Murphy in his otherwise clear and complete description of them. Whilst it is advisable to obtain as full a view of the parts as possible, it is also necessary to make the introduction of the speculum, as far as can be, painless to the patient; and, to secure both of these results, a series of say from half a dozen to a dozen of the instruments, ranging from one inch to two inches external diameter, ought to be at hand. This the moderate price of these specula renders a comparatively inexpensive matter. They can be procured here from Messrs. A. and R. Cochran, St. Rollox Flint-Glass Works.

Whilst on the subject of specula, it may be permissible to say, as I believe it is not uncalled for in the case of young practitioners, that not only, as Dr. Murphy remarks, is the cylindrical speculum more of therapeutic than of diagnostic value, but that, as uterine pathology is more clearly understood, less attention will be paid to the mere ulceration of the lips of the os, for which principally this speculum is used, than to the condition of the uterus and the general health and habits of the patient, of which the ulceration is frequently only a symptom.

SAMUEL SLOAN, Assistant Physician-Accoucheur, Glasgow  
Maternity Hospital.

##### SPECULA MADE OF GLASS.

I AM glad to learn from Dr. James Murphy's communication to the JOURNAL this week, that we are likely soon to have specula "made up of De la Bastie's toughened glass". In November 1876, I consulted Messrs. Gardners of Charing Cross as to the possibility of having specula made by this process. They communicated with the manufacturers of De la Bastie's toughened glass, and were informed that they could not undertake to supply less than a gross of each size. As Messrs. Gardners did not wish to keep so large a stock of specula, and



as I had neither room nor use for such a supply, the matter was allowed to drop. With Dr. Murphy's permission, I would suggest the importance of having rectum-specula made of transparent material. This I regard as a greater necessity than even vaginal specula. The instruments available for the examination of the rectum are not nearly so perfect as might be desired. It was chiefly with a view to supply, in some degree, this defect, that led me to apply to Messrs. Gardners on the subject.

THOMAS CHAMBERS, M.R.C.P. Edin.,  
Senior Physician to the Chelsea Hospital for Women, etc.

## REPORTS

OF

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### HOSPITAL NOTES.

MIDDLESEX HOSPITAL (MR. LAWSON: DR. CAYLEY).

**Lumbar Colotomy.**—An elderly woman had been under the care of Dr. Cayley for obstruction of the bowels, probably due to scirrhus cancer. The hand had been passed into the rectum, and an obstruction high up thus discovered. Colotomy was performed by Mr. Lawson two months ago in the left lumbar region. The bowels have acted freely since without pain, and the wound remains healthy. The discharge is almost free from smell, and this result is attributed to the patient eating charcoal biscuits freely. The disease has advanced and brought her to the last stage of exhaustion; but the operation appears to have relieved the symptoms.—An elderly man, admitted for cancer of the rectum and anus, with a large ulcerating cancerous mass occupying the place of the perinæum, submitted to lumbar colotomy three months ago. At that time, he suffered much, was unable to get any sleep, and could not straighten his legs; and there was great difficulty in obtaining any action of the bowels, which distressed him much. The wound in the loin looks healthy, and gives no trouble beyond the necessary attention to cleanliness; and his general condition is much more comfortable.

**Acute Necrosis of the Patella.**—This rare condition occurred in a boy who appeared to be fairly healthy, without any definite injury or other apparent cause. It had caused extracapsular abscess; this had been opened, and a loose piece of necrosed bone removed. The leg is placed on a back-splint, the wound is healthy, and the patella freely movable. The joint is free. Mr. Lawson referred to a case in which a portion of the patella was chipped off, necrosed, and fell into the joint, there setting up acute inflammation, which resulted in death.

**Strangulated Hernia.**—A man aged 65 and a woman aged 63 were operated on for strangulated hernia on the same day. Both herniæ were inguinal; one scrotal, the other labial. They resembled each other in general condition, with vomiting, abdominal tenderness, and hiccough; but the man, being admitted shortly after strangulation, was operated on early and without previous manipulation. In the woman, strangulation had existed four days and a half, and reduction had been attempted by more than one surgeon previous to admission to hospital. The woman died; the man is convalescent. The teaching is: operate early, and do not depend much upon the employment of the taxis; this probably kills more patients than the operation.—A man aged 60 is now convalescent from a strangulated inguinal hernia after the second operation within six weeks. Each time, the operation was performed soon after the strangulation. Omentum was found in the sac on both occasions, and the symptoms were acute. The cause of the second strangulation was neglect on the part of the patient to wear his truss constantly. The small danger of early operations is here illustrated.

**Recovery after a Fall from a House-top.**—A young man was at work on the roof of a high house clearing the snow in winter; he slipped from the parapet and fell into the street. When brought to hospital, the left ear was bleeding freely, the right hand crushed; there was a compound comminuted fracture of the upper part of the right femur, and probably fracture of the pelvis. To lessen the amount of reparative power called for, the hand was at once amputated. The injured thigh was immobilised, as primary amputation at the hip-joint after such an injury is rarely otherwise than fatal. He remained insensible more than three weeks, and during a portion of that time was wildly delirious, rendering it most difficult to keep the femur in place by any apparatus. At present, six months after the accident, the stump of the forearm is healed; the femur is united in good position, but with

much thickening at the seat of injury, and there is some necrosed bone, which will have to be taken away.

**Excision of Upper Maxilla for Malignant Epulis.**—A man aged 36 had been sent up from the country with cancer of the alveolar processes. It formed a large mass, nearly filling the mouth. Partial removals had been previously effected, with but little benefit. The growth was first observed in October last year, and a fortnight ago Mr. Lawson removed it, using Fergusson's incision, running down the side of the nose and centre of the upper lip. This portion of the face was dissected up as a flap; and then one-half the hard and soft palate, half the fauces, and the greater portion of the superior maxilla, were removed—leaving, however, the orbital plate intact. The ascending ramus of the lower jaw, being diseased, was snipped off. The man now gets up and is able to take food well. The wound in the skin is healed.

**Intracapsular Fracture of the Neck of the Femur.**—This accident had happened to a boy three years and a half old, from an accident several weeks before admission to hospital. This condition is rarely met with at that early age. It had not been treated previously, and it was determined to try the effect of immobilisation for some weeks. He is now allowed to walk with a Thomas's splint, which, embracing the limb and the trunk, keeps the joint steady.

**Strumous Disease of Knee-joint,** with partial dislocation of the tibia, was put up in a "spring extension-splint" made by Mr. Hawksley. A graduated pressure is thus used to straighten the limb.

**Periostitis.**—Mr. Lawson here prefers doses of one grain of iodide of potassium in a tumbler of water, reserving large doses for cases of syphilitic disease of the nerves or brain.

**Idiopathic Pericarditis (Dr. Cayley).**—A man aged 21 dates his illness from last Christmas. A strongly built man, of previous good health, he had developed pericarditis without any apparent cause. There was considerable pericardial effusion, and this persisted many weeks. Subsequently, double pleurisy with effusion came on, apparently of tubercular origin, as the right lung presents some signs of commencing consolidation. There has been slight anasarca, but no sign of endocardial lesion and no albuminuria; slight cough, with expectoration; no rheumatism; temperature 102-103; liver slightly enlarged; no jaundice. He does not look ill, and there is but moderate emaciation.—A girl aged 9, in the surgical wards for onychia, there developed a pericardial friction and effusion. No cause for this was apparent; but probably there was some blood-poisoning from the finger, or at least some depression of the system determining the inflammation. The finger being very unhealthy and intractable, amputation is proposed.

**Ascites dependent on Cirrhosis of Liver.**—A man aged 52 had been tapped four times, refilling rapidly after each operation. He was at the same time treated with copaiba, digitalis, etc., without any benefit. Lately, tonics and port wine have been given with marked benefit, the ascites having been in abeyance now a month. A fortnight ago, he had effusion into the left pleura, and he has also had an intercurrent attack of peritonitis. The superficial abdominal veins have enlarged considerably.—A woman aged 18 was admitted with temperature 102-103 deg. Fahr. and frequent profuse nocturnal sweatings. A pleuritic friction-sound next developed over the left chest, and effusion followed. At present, both lungs present signs of incipient consolidation. The family are said to be consumptive, and probably the ascites and pleuritic effusion are both of tubercular origin. She is taking cod-liver oil and syrup of iodide of iron.

**Psoriasis of four months' standing in a man aged 45.**—It is seen chiefly on the trunk and extensor surfaces of the limbs, the face and hands being free. His son, aged 18, has likewise developed the disease during the last two months. He was ordered warm baths and liquor carbonis detergens, one in ten parts, as a lotion; ethereal solution of phosphorus (one-thirtieth of a grain) in mixture three times a day. He has already taken arsenic without benefit. The disease will probably be removed, but will tend to relapse.

**Facial Palsy.**—A man aged 35, almost totally deaf, presents incomplete facial palsy of the right side. The patient attributes this to working in the cold and wet during the winter. The right ear is totally deaf, is the seat of otorrhœa, and the nuchal glands on this side are enlarged. He opens his mouth with difficulty; and then a deep ulcer is seen behind the soft palate, with pus exuding from it. The deafness and facial palsy occurred about eight weeks ago. Treatment: ten grains of iodide of potassium three times a day. The facial palsy is less marked than on admission: a fact difficult to reconcile with the supposition that it is caused by the ear-disease, and, considered together with the ulceration of the throat, suggesting a probably syphilitic origin.



*Case of Strong Abdominal Pulsation.*—A man aged 28 complained of attacks of severe abdominal pain. In the epigastrium was felt a strongly pulsating aorta, with a distinct thrill. A systolic *bruit* was heard without any pressure of the stethoscope. In commenting on the case, Dr. Cayley remarked that the heart presented no abnormal signs; but the pulse was markedly dirotous—i. e., the arteries relaxed, so that they become suddenly distended at the ventricular systole. The age is against the idea of aneurism; but there is a history of the patient straining himself while lifting a weight.

*Rheumatic Fever.*—In both acute and subacute cases, Dr. Cayley frequently uses salicylate of soda in doses of twenty grains every two hours till slight deafness is produced. This appears to relieve pain and reduce pyrexia and the arthritis, but does not prevent the tendency to relapses after the drug is discontinued. It is, therefore, especially needful, in cases thus treated, to keep the patient at rest some days after the pain has subsided. Relapses frequently follow the neglect of this rule. The effect, if any, in preventing heart-complications, can hardly yet be estimated.

#### BIRMINGHAM GENERAL HOSPITAL.

UNCONSCIOUS AUTOMATIC ACTS ILLUSTRATED BY A CASE OF NIGHT ALARM IN A BOY.

(Under the care of Dr. RUSSELL.)

THE subjoined case may be added to some illustrations which have lately appeared in this JOURNAL, as it usefully exemplifies a class of seizures which, in the automatic character they present, approach very closely to the epileptic character, and in many instances are undoubtedly the direct result of an epileptic discharge; I refer to the night alarms of young children. I need not say how important it is that the true nature of these attacks should be recognised, as regards the question both of moral and of medical treatment. They have also much interest from a physiological point of view, as forming a link between somnambulism on the one hand, and the automatism of epilepsy on the other. In the case now detailed, we see the mental aspect of somnambulism exaggerated to disease, whilst the mechanical acts, which are performed in some other cases of epilepsy, equally exemplify the physical side of that condition. In my patient, the truly epileptic character of the attacks can only be recognised by the analogy of certain fits of day delirium following the *petit mal*; but, indeed, the gradation between the normal phenomena of dreaming and the morbid state of delirium is altogether insensible.

The patient, a boy aged 9, was brought to the Birmingham General Hospital by his mother for attacks of the following description. They have been present for three years. He falls asleep naturally on going to bed, and sleeps comfortably for about an hour, then he suddenly awakes, holds out his arms to his mother, and tries to get out of bed, at the same time screaming most violently, and crying out, "Oh, get me away!"—"Look, there's something coming!" moving his hand as if to push it away, and trying to get backwards. He fixes his eyes on a certain place, looking at it "dreadfully hard", always doing the same thing each time. His face is pallid, his eyes start out of his head, his heart beats dreadfully, and seems to rise to his throat, almost choking him; he becomes "burning hot all over", and is soothed by the application of cold rags. As the fit passes off, he breaks into a general perspiration. The attacks generally last a quarter of an hour. They have happened four times in the course of a single night, ordinarily only once or twice. He is perfectly ignorant next day of anything unusual having occurred, and gives no reference to any impression made on his mind. By day he is apt to be drowsy, and if he fall asleep is liable to have an attack. He is not apt to dream, but often moans in his sleep. He is a thin ill-nourished boy. The sounds of his heart are healthy. When I last saw him, the frequency of the attacks had been materially diminished by the influence of bromide of potassium.

#### CHILDREN'S HOSPITAL, PENDLEBURY, MANCHESTER.

DEFORMITY OF LEFT KNEE, THE RESULT OF DISEASE: EXCISION: RAPID RECOVERY.

By T. JONES, F.R.C.S., M.B.Lond.

ADA K., aged 14, a healthy-looking girl of German parentage, was admitted into the Children's Hospital in November 1876, with the following history.

Six years ago, she injured her left leg by a fall; this was not followed by any immediate ill effects, but, about three months afterwards, her mother noticed a decided enlargement of the joint. A medical gentle-

man who was consulted advised counterirritation by means of tincture of iodine. As this produced no beneficial change, and the parents were very anxious, the girl was sent to Germany and placed under the care of Professor Busch of Bonn. During her two-and-a-half years' stay abroad, various remedial agents were tried, but to no purpose; she, therefore, returned home, and the condition of her left leg soon afterwards was as follows. The knee was bent, distorted, and movable to a certain degree. The tibia was dislocated backwards, with outward rotation. The patella was dislocated and fixed to the anterior and outer surface of the external condyle of the femur. The whole limb was wasted and crippled.

With the view, if possible, of correcting the very bad position, and of procuring ankylosis, a screw splint was adjusted to the back of the knee. This splint remained on for several months; still there was no improvement. Excision by semilunar incision performed on December 12th. The patella was removed before opening the joint. The ends of the tibia and femur were sawn off, the edges of the wound brought together, a drainage-tube introduced at each angle of the wound, and the limb placed on a McIntyre's splint. The dressing employed was lint soaked in carbolised oil; besides this, great attention was paid to cleanliness, and any discharge washed away by carbolic acid lotion.

The incision-wound healed by the first intention, with the exception of the angles, where a small quantity of healthy discharge made its escape for about a month. There was an entire absence of constitutional disturbance after the operation.

On January 6th, 1877, the wound having entirely cicatrised, the limb was put up in a starched bandage, strengthened by a splint posteriorly, and on the inner side.

The patient left the hospital on January 9th.

On April 11th, the bandages were removed, and the bones found firmly united in a straight position. She is now able to walk well with one crutch.

## REPORTS AND ANALYSES

AND

### DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

#### DR. ALEXANDER'S POCKET CLINICAL URINE-CASE.

THIS little case is six inches long, two and a half wide, one and a quarter deep. It is made by Mr. Hawksley, Oxford Street. It carries a trial-jar enclosing an urinometer, which requires three drachms and a half of fluid to float it, and is thus advantageous when but a small quantity of urine can be obtained; a bottle for liquor potassæ or Fehling's test-solution; two test-tubes, which enclose a leather case, hold nitric acid in capillary tubes, the advantage of such being that they are clean, non-corroding, and occupy small space; a movable stand for holding trial-jar and test-tubes when in use; a spirit-lamp, the peculiarity of which is that with its leaden cap it fits *spirit-tight* upon the edge of the burner, the wick being pushed down and pulled out each time it is used with a pin which is supplied. The leakage of spirit is thus avoided as in ordinary lamps. Two boxes of ebonite for test-papers and matches complete the case, which is made of morocco. It is the most ingenious, thoroughly portable, and cleverly arranged urine-case which we have seen; and both in design and in execution is deserving of high commendation.

#### COPEMAN'S COFFEE.

MESSRS. COPEMAN of Norwich have introduced a preparation of coffee which is avowedly mixed with a certain proportion of chicory, unquestionably of good flavour and well roasted. The admixture of chicory with coffee is still a debatable question, some persons believing with Pereira that it is not desirable. An almost universal custom has, however, declared very strongly in its favour. At any rate, a large proportion of persons in this country prefer well-roasted coffee mixed with a certain proportion of roasted chicory. Messrs. Copeman aptly call their coffee Parisian coffee; for, when properly made, it resembles in quality and flavour the coffee one is accustomed to get in the best cafés in Paris, which is much appreciated by British visitors as well as by the people themselves.



## NEW MEDICINAL PREPARATIONS.

MESSES. GALE and Co. of Douverie Street have forwarded us certain of their specialities, among them an alcoholic tincture of phosphorus, which is a very admirable and reliable preparation of this drug. We would advise that, when made up for sale, some direction should accompany it pointing out the best vehicle for its administration, as the phosphorus rapidly separates from all ordinary fluids. When it is rubbed up with compound tragacanth powder, it may be given in the shape of mixture; though here we would advise cautious shaking of the bottle before a dose is taken.

The compound phosphorus pill is also an excellent preparation. Each pill contains one-fiftieth of a grain of phosphorus, two grains of reduced iron, half a grain of quinine, and one-fiftieth of a grain of strychnia. Similarly, we have found the pill containing four grains of compound squill pill, a fourth of a grain of ipecacuanha, and one-eighth of a grain of powdered opium, a very useful combination. Not the least consideration in these latter preparations consists in the fact that they are of uniform size, well coated, and got up at a reasonable price.

## REPORTS OF SOCIETIES.

## CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 11TH, 1877.

G. W. CALLENDER, F.R.C.S., F.R.S., President, in the Chair.

*A Case of Taliacotian Rhinoplasty.*—Mr. MAC CORMAC exhibited the patient, a healthy girl aged sixteen, who had lost the tip and both alæ of her nose when an infant, from the injection of a nævus situated on the nose with the pharmacopœial solution of pernitrate of iron, which had resulted in a slough. Photographs showing this condition of the face before and after Mr. Mac Cormac's operation were also exhibited. Mr. Mac Cormac determined to attempt relief by means of the operation of Taliacotzi. The apparatus for keeping the arm in position consisted of a pair of ordinary stout well-fitting stays, with two perinæal straps attached to prevent displacement upwards; a helmet, partly made of leather, connected to the stays by a leather band running up the centre of the neck and back; an arm piece, strengthened by a steel band, moulded in leather, and extending from the wrist to the shoulder, where it was buckled to the stays; and a gauntlet for fastening the wrist and hand to the helmet, while the elbow could be fixed in any required position by straps running from it to the stays, and to the sides of the head-piece. There was nowhere any undue strain, and the apparatus was applied for days before the operation to accustom the girl to its use, and remedy any defects in it. It proved to be so comfortable that she could sleep in it. A model of the part required to make good the deficiency was made in gutta percha, and from this the extent of the deficiency could be projected on a flat surface. On February 12th, 1877, a flap was marked out on the inner aspect of the left arm, two-thirds larger than the actual size of the estimated deficiency; it remained attached to the arm by a broad long pedicle, and consisted of all the tissues down to the muscular sheath. A triangular gap was next made on the right side of the nose, and into this the flap from the arm was fitted, where it became partly united by the first intention. Subsequent suppuration occurred around the flap, but it had all united within three weeks. Then the operation was completed by detaching the base of the flap from the arm, and preparing the left side of the nose to receive it, where it was adjusted by sutures. In a fortnight healing was completed. The dressings of the arm and nose consisted of cotton-wool soaked in olive-oil. The leather apparatus answered its purpose completely and without inconvenience. For the first two or three weeks after the operation, much contraction of the new nose occurred, but very little subsequently. The extensive wound in the arm had nearly healed on May 11th, 1877. The nostrils were kept dilated by India-rubber tubing. The improvement in the girl effected by the operation had been most satisfactory.—THE PRESIDENT, in introducing the case to the meeting, said he thought the operation was likely to be followed by better than ordinary results.—Mr. MAUNDER said everyone could appreciate the value of a good nose. He congratulated Mr. Mac Cormac on having given his patient a handsome appendage, and also on his having improved upon the method of Taliacotius, who, if Hudibras might be credited, required a second person to provide the necessary integument, and that too from a very inconvenient region of the body.—Mr. FURNEAUX JORDAN remarked on the good symmetry of the organ, the two sides being exactly alike. There was, moreover, no disfiguring scar on the face. Had Mr. Mac

Cormac tried any other method? Mr. Hardie, of Manchester, had in one case taken the flexor surface of the thumb and made an excellent nose from it. The apparatus ceased to be irksome after a time.—Mr. SPENCER WATSON alluded to the perfection of the apparatus used, inasmuch as this operation was probably given up on account of the irksomeness induced by the entailed position. Moreover, the nutrition of the parts to which the new skin was to be attached was perfect, and not half-destroyed, as in lupus. Was any impairment of smell left behind?—Mr. GANT asked if the part was protected by cotton-wool or any such substance after the operation.—Mr. MAC CORMAC said that the connexions between the new nose and the arm were divided three weeks after the transplantation, but in all probability this might have been safely done at the end of two weeks. The new part bled freely. There was no sloughing whatever. The only dressing was oiled lint. The apparatus admitted of ready dressing.

*A Case of Excision of the Os Calcis and the Astragalus, in which the Second Row of Tarsal Bones was subsequently drawn underneath the Malleoli.*—Mr. FURNEAUX JORDAN brought forward the case. It was that of a girl aged 14, who was supposed to be the subject of caries of the os calcis. For this condition, gouging had been resorted to without success, although followed by careful and prolonged rest. As the direction of the carious area seemed to extend upwards, and new sinuses pointed to the implication of the astragalus, Mr. Jordan determined to excise both the os calcis and the astragalus. The bones were reached by means of a flap made at their outer aspect, the convexity of which looked downwards and slightly backwards. In the after-treatment, the foot was most easily kept on a line with the axis of the leg by holding it up by means of the toes. Healing went on favourably, so that in eight weeks the wound and the sinuses had healed, and the foot could be moved and handled without pain. But now a curious circumstance attracted notice. It was found that not only had the foot become shorter, but that, the first row of tarsal bones having been removed, the second row had in some degree taken its place. The scaphoid and cuboid bones were partly under the malleoli; the tibia and fibula were thus kept at some distance from the floor when the foot was put down. This unexpected result was, no doubt, brought about by the action of the muscles which lay at the front and sides of the ankle-joint. The weight of the body had now been placed on the foot with some retentive apparatus for several months without any sign of deformity or weakness. In conclusion, this question was asked: Assuming that it was desirable to bring the scaphoid and the cuboid under the malleoli after excision of the os calcis and the astragalus, could any special operation, or dressing, or position facilitate such a result?

Mr. MAUNDER said that the Society was much indebted to Mr. Jordan for having taken the trouble to come a long distance, in order to communicate a fresh instance of the value of operative surgery. He fully agreed with the author concerning the inveterate character of caries of the irregular bones of the foot. He advocated accordingly, in hospital practice, the removal of the bone in preference to repeated gouging. By this means, much time and pain were saved to the patient. With regard to the case under consideration, the operation was most successful; but Mr. Maunder feared that, possibly, the abnormal pressure to which the bones left would be necessarily subjected, in a person whose occupation required that she should be on her feet many hours daily, would lead to further caries and further operation. In the normal foot, each bone was called upon to support only a certain proportion of the weight of the body; but after such an operation as that above described, the extra degree of weight might prove highly injurious to the health of the remaining bones. Mr. Maunder also advocated (having such a case in the London Hospital at the present time) excision of the os calcis by an external flap, so as to avoid having a cicatrix on the sole of the foot.—Mr. GANT made a few remarks on operations for excision of the os calcis, or, with it, the astragalus. He dwelt on the advantages of making a sole-flap, rather than a heel-flap, of integument. In disease of the heel, there were usually fistulous openings, leading into the bones, and the integument was there unsound; so that, if the flap were raised from the sole and reflected backwards, sloughing was almost certain to ensue, owing to the deficient supply of blood from behind in the seat of the fistulous openings. But, if the flap were reflected forwards, its attachment, in the sole of the foot, was sound and well supplied with blood. When dealing with the os calcis alone, it was always necessary to remove the bone. Gouging out the cancellated interior left a shell of bone, which seemed to promise a successful result, with preservation of the heel; but this procedure was nearly always followed by necrosis of the shell, thus necessitating a subsequent operation of complete excision. After this operation, the arch of the sole being destroyed, the foot became flattened, and was an excellent base of support. Mr. Gant related the case of a middle-aged gentleman who, after the operation, could walk some miles without the aid



of a stick, a result which continued for years. It might be questionable, therefore, whether, when the astragalus was also removed, an attempt should be made to bring the remaining forepart of the foot backwards under the malleoli. Mr. Gant warmly congratulated the author of the paper on the successful result of his operation, as a most valuable contribution to excisional surgery.—Mr. SPENCER WATSON said that, in cases of limited caries of the bones of the ankle, a good result was to be obtained by gouging out the diseased bone, and injecting the cavity thus made with strong sulphurous acid.—Dr. DOWSE made some remarks; and Mr. JORDAN then replied. He said that gouging was of use in some cases. His patient could not have gone to Canada if she had lost her foot. As to the return of caries, Mr. Syme had twelve times had to remove the foot for relapse of caries after partial excision of the tarsal bones.

*A Fatal Case of Syphilis, contracted from the Congenital Form of the Disease.*—Dr. DOWSE read notes of this case. It occurred in a young girl, aged 9, who was admitted into the Central London Sick Asylum, at Highgate, on January 12th, 1875. There was no history of congenital syphilis, excepting that the mother had eight miscarriages, and no objective signs beyond an irregular and notched condition of the incisor teeth of the upper jaw. There was no interstitial keratitis, no pigmentary change of the choroid, nor optic neuritis. According to the mother's statement, her daughter was born without a blemish, and grew up to be a strong healthy girl until the month of July 1873. At this time, she was living neighbour to a family who were known to be syphilised, and she took an especial fondness for one of these children (an infant), who, in addition to other sores about the body, was suffering from mucous tubercles around the anus. She was constantly nursing this child, and, neglecting a scratch upon the flexor surface of the right forearm (upon which she carried the child), she soon found it to become very painful, and shortly an open wound, with indurated edges, was formed. The lymphatics became affected and the axillary glands enlarged. The precise period of incubation was unknown. From a fine healthy girl she became rapidly emaciated, complained of aching pains all over the body, followed by the train of signs and symptoms which were fully delineated in Dr. Dowse's remarks and in the photographs which were exhibited. He stated that there was considerable destruction of the ale of the nose; and that the ulceration extended to the pharynx, larynx, and, as was found at the *post mortem* examination, to the trachea and larger bronchi. So severe was the ulceration of the throat and pharynx, that swallowing was at times almost impossible. The eruption upon the skin first made its appearance as a lenticular syphilide, which rapidly ulcerated, giving rise to a foetid discharge and crusts resembling a modified rupia. The chest, abdomen, flexor surfaces of the arms and thighs, were comparatively little, if at all, affected; but the head, the nose, the angles of the mouth, the extensor surfaces of the extremities, and the back were covered. The rapidity of change from the destructive to the reparative process was a marked feature in the case. Dr. Dowse said that he could scarcely pass to its pathology without making some few remarks upon the treatment, and here he considered that he failed most unfortunately, for the reason that nature was doing battle most manfully. Upon several occasions, he thought her cured; but the disease again recurred with greater severity. He tried every remedy; but mercurial inunctions proved more beneficial than increasing doses of iodide of potassium. Dr. Dowse finally remarked that most writers upon syphilis speak of the rarity of rupia in syphilitic children. Zeissl says that, with his large opportunities, he had rarely seen such cases; and Cullerin remarks that he has never seen it. The clear history in this case appeared to give it greater interest; for the child contracted the disease in the secondary stage, and then gave evidence of a secondary eruption, which rapidly passed into the tertiary form. The patient was of fair complexion, with light very fine hair, and long eyelashes, just a girl in whom lupus might in all probability be anticipated; and it certainly became a question as to the exact difference between the ulceration about the nose and lupus, and might lead to a point for discussion as to how far lupus might originate and be due to a modification of the prime syphilitic agent; and again, should it be correct that the patient was the subject of hereditary syphilis, it went to prove, what had hitherto been to a great extent denied, that syphilis could be acquired in a girl the subject of hereditary taint. A description of the microscopical appearance of the nodules in the lung, which had been made by Dr. Coupland, was also read by Dr. Dowse.—The CHAIRMAN remarked that the case was especially interesting from the contraction of the disease by a child from another child congenitally diseased.—Dr. CAYLEY thought it was by no means certain that the patient had congenital syphilis; she appeared to have had no sign of the disease until after its contraction from the congenitally-diseased infant. Something had been mentioned respecting her teeth; but he thought that, if all other symptoms of congenital

syphilis were absent, not much weight should be attached to that sign alone.—Dr. DOWSE remarked that the teeth were the only signs of congenital syphilis present in the case. The girl had been quite healthy until she acquired the disease from the baby. There had been no syphilis at all in the parents, as far as he could discover upon careful investigation.—Mr. MORRANT BAKER inquired what interval elapsed between the acquisition of the disease and the onset of the tertiary symptoms. Was not the disease of the nose, etc., perhaps due to lupus?—Dr. DOWSE did not know the exact length of time that had intervened. The mother's account of it was indefinite. The ulceration of the nose, without the other conjoint symptoms, might have been taken for lupus. The child had a strumous aspect. The history of the case, its causes, the rupia, etc., undoubtedly all seemed to show that the disease was syphilis.

*A Case of Abscess of the Liver and Empyema, in which Paracentesis was Performed.*—Dr. IRVINE read particulars of this case. The patient, aged 40, was admitted into Charing Cross Hospital, under Dr. Silver, on February 16th, 1877. He had been a soldier; was in India five years, where he drank freely, and was invalided at twenty-eight because of chronic dysentery. After his discharge, he had tolerable health and no return of his dysenteric symptoms; but, just before Christmas, 1876, he caught cold, began to cough and spit, and suffer from pains in the right chest. The cough became worse and worse, and was accompanied by dyspnoea. He lost flesh rapidly and sweated greatly at nights, but had no rigors, no diarrhoea, and no pain in the right hypochondrium. Shortly after admission, he could breathe calmly in the recumbent position, but complained of a distressing cough. He was much emaciated; his nails were incurved. The superficial veins of the thorax were distended; the right side was bulged and showed scarcely any movement. There were dullness, diminished vocal fremitus, and weak, though bronchophonic, resonance over the whole right chest, back and front. The heart and liver were displaced; the liver could be percussed from an inch to two inches below the margin of the ribs, but its edge could not be felt. There was no bile in the urine. On the morning of admission, the temperature was 100.2 deg. Fahr. There was no improvement from his stay in the hospital, and the dyspnoea became more distressing. The temperature varied considerably, on one occasion falling five degrees in little more than a day without obvious general improvement. On March 2nd, a trocar was passed through the ninth space, behind the posterior axillary line, where the empyema seemed to be pointing, but only two ounces of pus mixed with blood were brought away. The temperature sank afterwards to 97.6 deg. Fahr.; but, on the second day, the patient's condition was most critical, and a free opening was made in the eighth space, in the mid-axillary line, and by means of a probe connected with that made in the ninth space. A tube was passed, and about a pint of sero-purulent matter escaped. This gave temporary relief; but it was dangerous to proceed with operative measures. The man died next day. It was found *post mortem* that the lower puncture had passed below the diaphragm into an abscess of the liver, from which the first pus had come; the opening in the eighth space had passed above the diaphragm into the pleural cavity, but the diaphragm was bound by old firm adhesions to the chest-wall, and because of these adhesions the operation had been inefficient. A catheter went through the eighth space, diaphragm, abscess of the liver, and out through the ninth space. The pleura was full of sero-purulent matter; the lung completely collapsed and adherent to the diaphragm. The liver was displaced and altered in shape; its right lobe was rounded, the gall-bladder wholly anterior, and there was no edge. This lobe was lying anteriorly as high as the sixth rib and as low as three inches below the margins of the ribs. The left lobe was completely under the sternum and under the adjacent left cartilages. It seemed probable that the man had been the subject of hepatic abscess, which had for years been latent; that perhaps, as a consequence by direct transmission through the diaphragm, pleurisy had from time to time occurred, and finally ended in a very acute attack and empyema. The chronic nature of the disease was proved by the position of the liver and the adhesions which existed between it, the diaphragm, and lung. The diminutions from time to time in the amount of pleuritic fluid would vary the intrathoracic pressure and modify, therefore, the position of the liver, which besides was completely changed in shape by its own internal disease. Clinically, it seemed impossible to arrive at a diagnosis of the exact conditions in cases like this. All the usual distinctions between empyema and hepatic abscess were wanting, and it was impossible to determine how far the liver ascended in the thorax. The effects of respiration were valueless, because there was no respiratory lung on the right side; the points where vocal fremitus and resonance ended were useless, and the difference in resistance at the margin of the ribs was like that in



with in simple pleurisy with displacement of liver, because of the peculiar twisting and shape of the latter, which also prevented any lower edge from being felt. As regarded the operation of paracentesis, the case was of most interest. It was impossible to have avoided the belief that the pointing in the ninth space was empyemic, because the signs of empyema were so certain, while of hepatic abscess there were none. Physicians were asked, before surgeons operated, to say where the liver began; and, though wounds of different organs were not of serious importance in the operation, it was well to make it as perfect as possible. The case was an illustration of the difficulties which arose in the diagnosis of the exact relations of lung and liver in hepatic abscess and empyema.

Dr. SILVER said that, had he known the case was coming on for discussion, he might have been able to furnish some more exact details than were contained in the paper. There were, however, certain facts in connexion with the case as a diagnostic puzzle which were worthy of notice. The man had been a soldier in India, where he had drunk a great deal. He had been discharged on account of disease of the liver following dysentery, and since his return to England he had often drunk night after night as much as a bottle of brandy. It was fair to conclude from such a history that the liver was likely to be in a very unsound condition. He was employed as a "commissionaire," and was much exposed to cold and wet about Christmas, since which time he had suffered from a cold and cough. A day or two before admission, he was suddenly seized in Hyde Park with a violent pain in the right side, with exacerbation on coughing, and with difficulty reached home. When admitted, his right pleura was full of fluid, but from the history it was not quite clear whether the pleurisy was recent or of some standing. He did not improve after admission, and his temperature showed regular and considerable nocturnal exacerbations, and as the fluid did not yield to treatment it was determined to ascertain its nature, with a view to relieve either by aspiration or drainage. The liver could not be felt, and when the man inclined to his left side, so as to expose his right for percussion, but little liver-dulness was appreciable. The fluid seemed pointing in the ninth interspace nearly in a line with the angle of the scapula. Here the needle of the aspirator was introduced, and pushed in for some distance. About two ounces of thick grumous fluid came away. The character of the fluid showed that successful aspiration was hopeless. Accordingly, an opening was made with the knife, but on that occasion no additional fluid came away. The extremity of a drainage-tube was introduced to keep the wound open, in the hope that during the night the fluid might escape by its side, but this did not take place. On Sunday, finding the man much worse, the original wound was deepened, much of the same kind of pus coming away, and a counter-opening was made higher up in the chest; between these two a thick elastic catheter was passed and fastened in, with the hope that thus at last the accumulated fluid would find free vent. Unfortunately it did not. He did not again see the patient alive, nor was he able to be present at the *post mortem* examination, when it appeared that the pus actually came from an old abscess in the liver. The lungs were too completely collapsed to entitle one to think of more than partial and temporary inspiration.—Dr. COUPLAND inquired whether the heart returned to its position after the operation.—Dr. IRVINE replied that the man's condition after the operation prevented physical examination, but that the small amount of fluid evacuated could not have led to much change in the heart's position, and that on percussion after death the heart was found displaced far to the left.—Dr. D. POWELL said that in these cases one should not be satisfied with one or two, but should even make three or four incisions, if necessary, until, in fact, the fluid was evacuated. In a case of empyema, attendant upon a recent miscarriage, in which he was associated with Mr. Arnott, there was difficulty in evacuating the pus from an interspace two or three higher up than that opened in Dr. Irvine's case. A pint of pus was evacuated through a small exploratory incision with a trocar, the incision closed and fluid collected, the chest was again opened and again healed. They subsequently determined to evacuate the fluid through a larger opening. An incision an inch long was made, still there was only one small gush of fluid; the opening was then stuffed with a small piece of lint, and in the course of the night a large evacuation of pus occurred. This demonstrated how one must often persevere in these operations. Dr. Irvine's case was one of great difficulty.—Dr. IRVINE said that the operations in his case were only exploratory; had the patient lived, such means as Dr. Powell proposed would have been undertaken for his relief.

*Artery Constrictor.*—Mr. HENRY MORRIS exhibited some specimens of the external iliac and common carotid arteries, removed from dead subjects, which had been subjected to constriction by Dr. Fleets Spiers's "artery-constrictor". He also demonstrated the mode of application of the instrument. The constrictor acted much as the liga-

ture and torsion by dividing the internal and middle coats; it did not, however, destroy the external coat, while the inner coats could be peeled away and involuted to a degree varying with the extent to which the screw of the instrument was worked. The specimens showed the success of the constriction. The instrument had to be applied for a few seconds only, and, after its removal, it was found that the involution of the coats was of itself sufficient to resist the flow of fluid injected into the artery. The results of experiments on the dead subject, and the trials which had been made of the constrictor on the living by American surgeons, were very satisfactory; so that it deserved, Mr. Morris thought, a fair trial from all surgeons interested in measures having for their object the checking of hæmorrhage or the occlusion of arteries in their continuity, without leaving any foreign body whatever in the wound. In aneurisms of the arch of the aorta, of the innominate, carotid, subclavian, and axillary arteries, torsion was impossible; Esmarch's bandage out of the question; compression was neither convenient nor safe, even when it could be borne; carbolic catgut ligatures had been proved to be unreliable; and the galvanopuncture was fraught with dangers of its own. In such cases as the above, the use of the "artery-constrictor" seemed to possess advantages over all other methods, and promised a fair amount of success. Mr. Morris pointed out that it was most essential that the hook of the instrument should be accurately made, or it would lacerate the external coat. Such he found to be the case with a constrictor made in this country from the drawings in Dr. Spiers' original paper. This had led him to obtain a pattern, through Mr. Hawkesley, from America, made by the instrument-makers employed by Dr. Spiers.

## SOUTH OF IRELAND BRANCH.

JANUARY 13TH, 1877.

*Syme's Amputation.*—Dr. H. M. JONES (president) exhibited a foot removed by Syme's amputation for caries of old standing, together with a microscopical section of the diseased bone, showing the large and empty lacunæ into which the osseous structures had been hollowed.

*Tænia.*—Dr. R. ATKINS exhibited two specimens of tænia passed by the same patient, which differed so considerably in appearance as to render it probable that they were segments of different species; in one, the segments were elongated and presented the ordinary characters of tænia solium, while in the other the latter were short and broad, presenting some of the characters of tænia mediocanellata. The head or heads had not been obtained. Oil of male fern in drachm-doses had been administered.

*Pathology of the Pneumogastric Nerve.*—Dr. R. ATKINS read a paper on the pathology of the pneumogastric nerve, showing that, from the results of anatomical investigation and experimental research, many disorders of the thoracic and abdominal viscera must be ascribed to an irritation or paralysis of the branches of distribution of this nerve to the organs affected. Several cases were related as illustrations. In one, an elderly woman for many years insane, who died suddenly, *post mortem* examination revealed the apex of the right lung adherent to the pleura, and reduced to a greyish pulp somewhat similar in appearance to that described as resulting from experimental section of the pneumogastric nerve: the left lung was quite healthy: there was no cough or expectoration during life: the heart was in an advanced state of fatty metamorphosis: the pia mater, covering the right lateral half of the medulla oblongata, was thickened and closely adherent to the nerve substance, from which it could not be stripped without injury to the latter: the right pneumogastric nerve was fibroid and enclosed in this thickened tissue. A transverse section through the medulla showed numerous spots of milary sclerosis: the nerve-cells of the olivary bodies were somewhat atrophied. In another case, there were "alternating" symptoms; at one time the functions of the larynx, at another those of the stomach, being disordered, death eventually taking place from capillary bronchitis with suffocative effusion.

FEBRUARY 10TH, 1877.

*Diseases of the Heart and Vessels with Granular Kidney.*—Dr. R. ATKINS exhibited the heart and kidneys taken from the body of a female patient who died in Dr. Cremen's wards in the Union Hospital, twenty-four hours after admission in a semicomatose condition. The kidneys were diminished in size and granular: the heart was much enlarged and hypertrophied: no valvular disease beyond some dilatation of the tricuspid orifice existed: the aorta was dilated and slightly atheromatous, the coronary arteries markedly so: the heart-muscle towards the apex showed under the microscope the characters of fatty metamorphosis: the brain was oedematous and diminished in con-



sistence: the renal arterioles were hypertrophied, and showed, in addition, an increase in their outer and inner coats: in parts, the renal tubules were separated and enclosed by fibroid tissue, taking carmine readily, and were either entirely empty or contained broken epithelium: many of the Malpighian bodies were enclosed in capsules thickened by circularly arranged connective tissue; the vessels of the pia mater showed no hypertrophic or fibroid changes in their coats, and prepared sections of the brain-tissue revealed the vessels also unaffected, the latter being somewhat contracted within the perivascular spaces. Dr. Atkins remarked that this case illustrated the cardio-vascular sequences in granular kidney, the order probably being, as pointed out by Dr. Milner Fothergill: first, renal fibrosis, arterial tension, hypertrophic thickening of arterioles, and hypertrophy of heart; secondly, continued arterial tension, growth of connective tissue around the vessels, dilatation of larger arteries, endarteritis, atheroma, especially of coronary arteries, and finally fatty degeneration of the heart and its consequences.

*Injury of the Eye; Removal.*—Dr. H. M. JONES (president) exhibited a dissected eyeball, which he had removed from a young gentleman for an injury resulting from the explosion of gunpowder in a glass bottle. The fellow eye exhibiting symptoms of sympathetic irritation, and commencing suppuration being suspected in the injured globe, the latter was at once enucleated, the patient making a rapid recovery. Examination of the ball showed commencing disorganisation of the vitreous body. No foreign body was found in the eye.

Dr. JONES also communicated the histories of two interesting cases which had occurred in his service at the fever hospital. The first was one of typhoid fever with severe and continuous hæmorrhage ending in recovery, the second being a fatal case of scarlatina with bad throat and laryngeal complications, in which a secondary eruption occurred.

MARCH 10TH, 1877.

Dr. CREMEN exhibited two specimens of uterine fibroid polypi with microscopical sections demonstrating their structure. A long discussion ensued on the best method of removing intrauterine polypi.

Dr. H. M. JONES read a paper on division of the cervix uteri, detailing a case in which he performed the operation with successful results. A discussion followed.

#### PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, MARCH 10TH, 1877.

ANTHONY CORLEY, M.D., in the Chair.

*Mediastinal Lympho-Sarcoma.*—Dr. FINNY exhibited the thoracic parietes and viscera of a woman aged 30, a housemaid, who was admitted to hospital with a tumour near the left second rib. There was an impulse synchronous with the beat of the heart. The tumour was non-distensible. A systolic murmur, not limited to the tumour, but heard over the area of præcordial dullness, also existed. After death, a vast lympho-sarcoma, taking its origin in the anterior mediastinum, was found to have invaded the fibres of the pectoralis major and pectoralis minor muscles, as well as those of the sterno-mastoid. The growth also passed into the pericardium, and pressed upon the pulmonary vessels. The heart and its valves were healthy. The superior vena cava above the vena azygos was involved in the neoplastic mass, through which the aorta tunneled. The systolic murmur had been produced by a ring of neoplasm in the ascending aorta. The right phrenic and pneumogastric nerves were involved; also, on the left side, the pneumogastric and recurrent laryngeal. The anterior wall of the œsophagus blended with the tumour without any diminution of its lumen. The left pleura and lung were also invaded by the growth. Dr. Reuben J. Harvey had examined the specimen, and reported that it was a lympho-sarcoma. The lymphatic glands were not contaminated, and the left sterno-clavicular articulation had escaped, although surrounded by the neoplasm.

*Fracture of the Rings of the Trachea.*—The CHAIRMAN showed an unique specimen of this injury. The subject of it had been a woman aged 36, who was "squeezed in the throat" some weeks ago in a domestic squabble. She was admitted to the Richmond Hospital on February 2nd, 1877, suffering from great dyspnoea and stridulous breathing, with congestion of the face and blueness of the lips. There was a remarkable inflammatory blush, with œdema, and a line of superficial ulceration in the upper and front part of her throat. Laryngoscopic examination revealed nothing which would account for her sufferings. After some days' sojourn in the hospital, tracheotomy was performed as a forlorn hope, but she succumbed almost immediately. The second, third, and possibly the fourth cartilages of the trachea were broken, and projected unevenly into the tube. An abscess involved the cricoid cartilage, which was necrosed. An *ante mortem* clot lay in the pulmonary artery and its right and left branches.

#### BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

#### BRITISH MEDICAL JOURNAL.

SATURDAY, JUNE 9TH, 1877.

#### COMMISSIONS OF LUNACY.

THE writer of the placid and courteous communication on this subject, which we publish in another column, is, we think, in error in considering that we have, in a former comment, exceeded the legitimate limits of remark upon proceedings in a court of law. We must protest against the attempt to convert a difference of scientific opinion into a personal question. We have made no imputation of improper motive against him. The intention of doing so was never in our thoughts, and certainly should not be inferred from our words. As for "slander by an interested person", the accusation is itself slander. We have, for reasons of public and scientific interest, called attention to what we consider very mistaken opinions, which are likely, if accepted, to increase the frequency of contested inquisitions in lunacy. The term "appeared for the defence" is an expression which is justified by custom and convenience; but, seeing that inquisitions in lunacy do not imply either offence or defence, it would perhaps have been a more exact phraseology to have said that Mr. Digby Seymour and his medical adviser appeared on behalf of the alleged lunatic, whose insanity was so manifest, from convincing testimony and from her own letters, that the jury unanimously found her of unsound mind without seeing her or hearing evidence to the contrary.

The scope and limits of the inquisition *de Lunatico* are laid down in the third section of the Lunacy Regulation Act of 1862 in the following terms. "The Inquiry to be made under every Order for Inquiry or Commission in Lunacy or issue *shall be confined to the question whether or not the person who is the subject of the Inquiry is at the time of such Inquiry of unsound mind and incapable of managing himself and his affairs.*" Shelford says that "the Commission and the verdict must be consistent upon the face of the record, which cannot be unless the verdict is either in the words of the Commission or in equipollent words". And there never yet was a Commission in which the future treatment of the lunatic was made part of the issue, nor was a verdict ever received in which such matter was introduced. At the Commission on J. S., the jury did go out of their way to "express their hope that the lady would be treated in the manner most conducive to her recovery", a hope which the presiding judge courteously, but somewhat needlessly, assured them that he should endeavour to carry into effect; but this empty and supererogatory expression of hopefulness was not recorded in the verdict, which it would have rendered informal and liable to be quashed. It should not be forgotten that Masters in Lunacy do not preside at inquisitions in their capacity of Masters, but "in pursuance of the General Commission under the Great Seal of Great Britain to them for that purpose directed". They sit, in fact, as judges, and have to try the issue as it is strictly defined by the statute above quoted; and the Master sitting as Commissioner at the inquisition can no more entertain the question of the future care and treatment of the lunatic than the jury can do so. After the inquisition has been filed in the Petty Bag Office, the future care and treatment of the lunatic is the subject of a further inquiry, in which the Master sits as Master, acting under the General Orders issued in November 1853. At this inquiry, the Master takes evidence and forms his own opinion as to the proper care and treatment, and as to the allowance and the committees, etc.,



which he embodies in a report, which is then submitted for approval to the Lord Chancellor or to the Lords Justices, and the treatment of the lunatic is determined thereby, subject to alteration upon the reports of the Visitors of Lunatics. This is the carefully arranged method upon which the care and treatment of Chancery lunatics are actually determined, differing considerably in value from the casual opinion of twenty-three jurymen, who know nothing about the treatment of lunacy, and who may, as in this instance, never have seen the lunatic.

We remarked in our annotation that "the conjunction of insane delusions with civil capacity is a possibility which the law does not at present recognise". This remark, as the context shows, had reference to Commissions in Lunacy, and it is strictly correct in such reference. The reply of our "well-known alienist", that "a person with insane delusions may make a sane and valid will", is entirely beside the question. Formerly, insane delusions did incapacitate from making a valid will; but, under the recent ruling of the Lord Chief Justice (*re Banks v. Goodfellow*), the courts will not now upset a just and reasonable will on account of delusions which appear to have had no connection with the said will. And wills have been maintained which have been made by Chancery lunatics; but, if this well-known alienist can point to a single instance in which a person who has been found by an inquisition to be suffering from insane delusions has yet been held to be capable of managing his affairs, we will gladly admit that his affidavit was neither mistaken nor mischievous. The distinction drawn by the law between testamentary capacity and the management of affairs by lunatics is clearly enough founded in common sense. A man may have delusions which will not affect a single act, however important that act may be. Moreover, the making a will is an act which can be subjected to judicial investigation after it is done, and maintained or set aside according to its circumstances and qualities; but the conduct of a man in life in the management of affairs cannot fail to be influenced by insane delusions, and must comprise many acts which, once done, can never be undone; and therefore the law says that, while the latter shall be controled, the former shall not be absolutely denied. For the same reason, the marriage of a person having delusions, if he be not a Chancery lunatic, is not void by law, but voidable or not according to circumstances, for marriage with an insane person may be prompted by the best or the basest motives. The marriage, however, of a Chancery lunatic is void under a special statute to that effect.

In conclusion, we can neither retract nor modify the warning we have given, that if juries at inquisitions are allowed to entertain the question of the future treatment of Chancery lunatics, and if alienists are encouraged to maintain in their affidavits to the Lord Chancellor the doctrine that persons having insane delusions are still capable of managing their affairs, contested Commissions in Lunacy will become more frequent. At present, the Court discourages contested petitions and commissions when the lunacy is manifest; but once admit these novel views and new issues, and the petitions will be few indeed upon which the lawyers will not hang a contest.

#### HOMŒOPATHY.

A *CONDENSED* has been published between Dr. Wyld, a homœopathic practitioner, and Dr. B. W. Richardson, which would hardly have been calculated to have any more effect than that of exciting a smile, but for a certain prominence which has been given to it in the daily press. Dr. Wyld very frankly confesses what we all of us have known for a long time, and what has been frequently made manifest, that the so-called homœopathic practitioners have, in fact, long since renounced everything which could by courtesy be called homœopathic practice; and that the homœopathic delusion has degenerated into a pretence. Homœopaths so-called, as he says, are in the habit of using aperients, anodynes, opiates, anesthetics, tonics, and all the other tangible weapons of rational medicine, and in the rational manner. Homœopathy, so far as it had at all a title to a name or place in theory or fact, had three fundamental points laid down by

Hahnemann. The first was the defiance of the ordinary laws expressed in the maxims *sublatâ causâ tollitur effectus*, and *contrariis curantur*, for which was substituted the mystical nonsense expressed in the words *similia similibus curantur*. The second point was the abolition of medical pathology and of all other knowledge of the nature of disease by the substitution of the doctrine of Hahnemann, that there is only one general pathological phenomenon at the bottom of all disease—the diseased condition called by the learned *psora*, and by the vulgar itch. The third was an almost necessary sequence of the first; for, inasmuch as any tangible experience of the action of medicines at once contradicts the absurdly assumed principle that like causes produce opposite results, it was necessary to have recourse to the intangible; and accordingly Hahnemann laid down as his third fundamental doctrine, that the potency of a medicine is increased by its dilution; and that, in proportion as all tangible therapeutic power is removed by infinitesimal division, so is the mystic or homœopathic power increased. We do not need Dr. Wyld to tell us that these delusions have not stood the test of time and practice; and that, with few exceptions, homœopaths have long ceased to have more than a mere nominal connection with the flag under which they rally. That Dr. Richardson should think it worth while to give any prominence to the inconsequent proposition of Dr. Wyld, that persons who have virtually abandoned the wild delusion to which they still seek to give some semblance of plausibility should be admitted to special privileges of any sort by virtue of, or in respect to, this delusion, is an instance of remarkable want of judgment which does not admit any very satisfactory explanation.

There is nothing that we know of to prevent any person who has ceased to believe in any delusion from freely recanting it; and when the rest of the world are satisfied of the honesty and consistency of the course which he takes, there is not in our profession more than in any other any obstacle to his taking his place once more in the ranks among his brethren. More than this cannot be asked, and less need not be expected. On the other hand, however, it is already obvious that Dr. Wyld has no authority to offer any general explanation, or make any authorised request, on behalf of those who have called themselves homœopaths, any more than Dr. Richardson has any such authority to accept, in the name of others than himself, the proposition made. The whole correspondence appears to us to be singularly empty and somewhat vainglorious. In the position in which Dr. Wyld stands, he would apparently have done better to acknowledge privately and individually the errors which he has to recant; and when he had done so, there would be an end to the matter. It was quite clear that he has no public mission in the matter: and it is equally clear that no proposition of any sort can arise out of this very vague, empty, and feeble correspondence.

It is announced that Viscountess Strangford is about to proceed to the seat of the war, to superintend a British hospital and ambulance for the relief of the wounded and sick. Arrangements are being made by Dr. Crookshank for commencing the work, and Mr. Harry Slade will hasten the formation of a field hospital, with ambulance attached, to Shumla, as quickly as possible. In another column will be found a report from Dr. Crookshank of the work in the Roustchouk hospital up to this date.

DR. A. HUGHES BENNETT is a candidate for the post of Assistant-Physician at the Westminster Hospital, which is now vacant owing to the promotions due to the resignation of Dr. Basham. Dr. Hughes Bennett worthily supports the honoured name which he bears. His education has been most complete, and he has already attained marked distinction in his career, having been elected Senior President of the Royal Medical Society of Edinburgh, and having carried out a series of extremely interesting physiological inquiries of the actions of coca, theine, etc.; as well as having made some valuable contributions to clinical medicine.



We are requested by the National Health Society to state that a lecture will be delivered on Wednesday next, June 13th, at 4.30 P.M., in the rooms of the Society of Arts, John Street, Adelphi, by Mr. Ernest Hart, on "Coffee-Taverns for the People".

THE ninth annual dinner in aid of the funds of the French Hospital and Dispensary is announced to be held at Willis's Rooms on Saturday, June 9th; the French Ambassador, his Excellency the Marquis d'Harcourt, will be in the chair.

PETITIONS against the Bill of the East London Defence Association to amend the Medical Act, 1858, introduced by Dr. Lush, M.P., are pouring in from druggists in all parts of the country, who fear it will check their lucrative counter-prescribing.

A BILL to amend the Medical Act (1858) has been printed, bearing the names of Mr. Errington, Mr. Dillwyn, and Mr. John Maitland. It proposes that a double qualification shall be required from persons registered—a degree or licence to practise medicine, as well as a degree or licence to practise surgery. It also proposes to require a test examination in addition to registration for medical employment in the public service.

TWO serious cases of hydrophobia are reported from Aldbourne, near Hungerford. A shepherd employed on a farm was bitten by his dog, and after a short time symptoms of hydrophobia set in and the man died in great agony. Another labourer in the same employ was also bitten by the same animal and is now lying in a precarious condition at Savernake Cottage Hospital, near Marlborough.

THE London correspondent of the *Western Morning News* says:—It would be well if our medical journals were to inquire into the management of our small-pox hospitals. I am assured that it is very different from what it should be. One recent inmate in a suburban institution of this kind has been complaining bitterly of the treatment he received there. One would not have expected to find in a hospital, and among persons suffering from a terrible disease, practical jokes and horse-play, such as go on in a large boarding-school. Yet the patient in question declares that he was turned out of his bed on to the floor, and that remonstrance only made matters worse; that there was no proper supervision of the patients, no adequate nursing; and that the language used was simply abominable.—Such statements should not be made except on the clearest evidence.

A RELIGIOUS newspaper, which has been sent to us by a correspondent, is full of quack advertisements, such as high-class London newspapers are in the habit of rejecting. It has frequently been brought under our notice that even the most respectable religious newspapers in London are in the habit of making a revenue, by largely filling their columns with advertisements of all kinds of quack nostrums. This certainly does not tend to raise the good opinion which we all desire to entertain of the sincere character and the professions of this valuable department of the press. Their teachings are so highly valued, and their circulation is, in many instances, so large, that it is surprising that, either for the highest or the lowest reasons, they can be induced to open their columns to a class of advertisements which the most respectable organs of the London press reject.

#### RUSSIAN AID TO THE WOUNDED.

ALL the members of the Imperial family are using what they can to forward this work. The Grand Duchess Alexandra Petrovna, wife of the Commander-in-Chief of the Army, has converted several of the halls of her palace into a huge workshop, at which all sorts of materials are received, to be made up into articles for the use of the sick and wounded. An immense number of persons of all classes come to the palace every day and take their places at the tables where the materials are distributed. Lately, when the Empress paid a visit to the palace, she found five hundred persons at work. The Cesarevna has also opened some

of the rooms of her palace at Tsarskoe Selo for the reception of gifts of all kinds, and persons appointed for the purpose give out materials to be made up to all who apply for them.

#### THE RADCLIFFE INFIRMARY.

ON Saturday, Prince Leopold opened, at Oxford, a new Children's Ward at the Radcliffe Infirmary, which has been erected by the munificence of Mrs. Coombe, widow of Mr. Thomas Coombe of the University Press. Arrangements had been almost completed for the Prince to preside at a meeting in the out-patients' hall of the institution, but unforeseen circumstances rendered it advisable at the last moment that the proceedings should be held at the University Museum instead. The Prince was voted to the chair by the Dean of Christ Church (Dr. Liddell), and there were also present the Vice-Chancellor, Lord Jersey, the High Sheriff of the County, the Bishop of St. David's, several Heads of Houses, Professors, and many ladies and gentlemen from the county and city. After an opening address from Prince Leopold, a highly satisfactory report of the infirmary was read by the Rev. J. H. Ashurst; after which, the Rev. S. Doïd read a letter from Mrs. Coombe, formally requesting the Governors' acceptance of the gift, and this, with the keys of the Ward, were presented to His Royal Highness. Professor Rolleston moved, and the Rev. J. Slatter seconded, a resolution to the effect that the Governors received with gratitude, and desired to express their warmest acknowledgments to Mrs. Coombe for, the munificent proof of the interest she felt towards the poor and sick children among whom she dwelt. The Dean of Christ Church then proposed a vote of thanks to the Treasurer (the Rev. J. Slatter), and in doing so requested the Prince to be the medium of presenting to him a purse of one hundred guineas and a silver salver, in recognition of his long, faithful, and gratuitous services. The High Sheriff seconded the proposition, and His Royal Highness then made the presentation; and, in afterwards acknowledging a vote of thanks, proposed by Mr. E. W. Harcourt, and seconded by the Vice-Chancellor, and accorded by acclamation, the Prince requested that the new wards might be called the "Victoria" and "Alexandra" Wards, after the Queen and the Princess of Wales. The proceedings then terminated. Before the ceremony, Prince Leopold honoured the Vice-Chancellor with his presence at luncheon in New College Hall.

#### EPSOM COLLEGE CLUB.

A LARGE and successful meeting of old Epsomians was held at St. James's Hall on Saturday last, when Mr. F. J. Marshall was called to take the chair. It was unanimously resolved to establish a club on the basis of the University of London and such-like dining clubs, whereby old Epsomians will have an opportunity of meeting three times a year, in the months of July, October, and December. About forty gentlemen at once enrolled themselves as original members, and many others, it was stated, intended to join before the first meeting in July. Mr. Henry Morris was elected Treasurer; Dr. Frederic Taylor, Secretary; and Messrs. W. W. Wagstaffe, Oldaker, C. Fox, and Sloman, members of Committee. Mr. F. J. Marshall will be the President of the first meeting.

#### HOSPITAL FOR CONSUMPTION, BRIMPTON.

FROM the annual report of the committee of management, it appears that 1,143 persons have received the advantage of hospital treatment as in-patients during 1876: of these, 862 have been discharged, many greatly benefited; 122 had died; and there remained in the hospital on December 31st, 1876, 159. The fact of the west wing having been closed for nearly six months, owing to extensive alterations and improvements, which were still uncompleted at the end of the year, accounts for the annual admissions, as well as for the number of beds occupied on December 31st, being much fewer than usual. In the out-patient department, 12,603 new cases had received medical treatment and medicines. The receipts have been £20,771 : 6 : 9, the expenditure £18,249 : 7 : 4. Four additional houses in the Epsom Road have been purchased during the year. In view of the proposed exten-



sion of the hospital, Mr. Thomas H. Wyatt has been instructed to prepare plans for a new building opposite. This, when completed, will probably almost double the accommodation for in-patients. The outlay will involve a greatly-increased annual expenditure, while the cost of the site and the building will absorb most of the present accumulated capital now possessed by the hospital.

#### THE BRITISH MEDICAL TEMPERANCE ASSOCIATION.

We are requested to publish the following statement. On Wednesday, May 30th, the first annual meeting of the above association was held at 11, Chandos Street, Cavendish Square. Dr. Edmunds presided, and the report of the year's proceedings was read by the honorary secretary, Dr. Ridge of Enfield, and adopted. Some other business having been transacted, Dr. Edmunds, who had been previously re-elected president for the year 1877-8, delivered an interesting and practical address on the subject of alcohol, in which he dealt with the question of its oxidation in the system and food-value; its action as a narcotic rather than as a real stimulant, especially in relation to certain forms of disease. His conclusion was, that nothing could settle the question of its value in sickness but accurate clinical observation. An useful conversation followed, in which Drs. Norman Kerr, Russell, and R. Lee took part, and the meeting concluded with the usual votes of thanks. This being the first time the Association has made any public announcement of its existence, we may say that its object is stated, in its constitution, to be to "promote and conduct investigations as to the effect of the employment and non-employment of alcohol in health and disease", and that its members are all registrable medical men who have declared themselves to be practising total abstinence from alcoholic beverages.

#### CLAPTON ASYLUM FOR IMBECILE CHILDREN.

On Tuesday, May 29th, the President of the Local Government Board, accompanied by Dr. Brewer, Chairman of the Metropolitan Asylums Board, and Sir Edmund Currie, Chairman of the Clapton Committee, visited the above asylum. The President went over the schools, workshops, dormitories, etc., and on leaving expressed himself as being well pleased with the arrangements for the education and training of the children. We had lately the pleasure of visiting this asylum and thoroughly examining its management. Nothing which intelligence, science, and kindness can suggest is wanting to the welfare of the children; their progress is very satisfactory, and reflects great credit on the managers and on the medical superintendent, Dr. Fletcher Beach, and on the matron. The dietary is varied, the cooking excellent; and the whole impression produced by this visit was most favourable. Dr. Bourneville of Paris, who accompanied us in the visit, expressed his admiration of the spirit in which the officers did their duty; and it is probable that some of the details of management will be imitated in France.

#### CONFERENCE OF SANITARY SCIENCE AT IPSWICH.

A MEETING of the Association of Municipal and Sanitary Engineers and Surveyors was held at the Town Hall of Ipswich on June 1st. Mr. G. S. Elliston, the medical officer of health for the borough, read a paper on State Medicine and Sanitary Engineering, particularly dwelling on the site and construction of dwellings. Within the last three years, one hundred and thirty unhealthy dwellings have been demolished in this town; but there has been much difficulty in providing accommodation for the poorest classes thus displaced, and the neighbourhood of materials for preparing concrete has suggested this as a suitable and cheap building material. Suitable dwellings for artisans are plentifully provided by commercial enterprise. At the same time, much "insanitary building" is being even now run up, and in consequence it is proposed that no dwelling be allowed to be occupied till certified as healthy by the sanitary authority. Though Ipswich presents a low mortality rate, it is unfavourable in the item of consumption, 12 per cent. of its deaths coming under this heading. On this

account, the importance of a system of deep drainage was strongly insisted on. Ipswich is well situated for drainage, and its population is over forty-six thousand. It is not, however, half sewered, and many of the old sewers are defective and badly constructed, not being deep enough to allow drainage of the basements of houses. It has now been decided to adopt a system of drainage by gravitation, discharging through intercepting tanks into the Orwell a mile and a half below the town. In a subsequent discussion, the use of water-closets, as *versus* earth-closets, was generally advocated; and it was strongly urged that competent surveyors should be appointed to rural as well as urban sanitary districts. It was then agreed, on the motion of the President (Mr. J. Lemon), that the eastern counties be amalgamated with the home counties for the purposes of the Association.

#### CLINICAL TEACHING.

THE following rather interesting letter of the late Professor Syme will be read with some amount of interest now, inasmuch as it bears on certain views as to clinical teaching, which, both by their nature and mode of expression, have recently excited some considerable discussion. Mr. Syme's letter was addressed to, and published in, a medical journal, and is dated Edinburgh, October 10th, 1864.

"Sir,—Your correspondent Dr. Anstie hits the right nail on the head when he says that clinical teachers should be paid for their trouble. So long as both the instruction and attendance are regarded as matters of course, and certified by the surgeons collectively in favour of every student who pays his fee for admission to the hospital, it would be vain to expect anything better than the present system of sham.

"In Edinburgh, clinical instruction is more highly remunerated than any other department of medical tuition, since, the fees being the same for all, while the clinical lectures are delivered only twice, instead of five times a week, a student pays two shillings for each of them, and not more than tenpence for any one of the others.

"If reform is really desired, it should be founded on the concentration of responsibility and the adequate remuneration of service rendered.—I am, sir, your obedient servant,

JAMES SYME.

"Edinburgh, October 10th, 1864."

#### THE FAMINE-MORTALITY IN BOMBAY.

A HIGHLY accomplished and perfectly trustworthy correspondent writes to us under date May 14th.—As the terrible epidemic of relapsing fever in Bombay will, no doubt, have some interest for you, I give you a few notes which will bring the intelligence up to date, and convey more information than you can get from any other source. The medical report of Drs. Carter and Cook, the committee appointed by Government to investigate fever, has been in the hands of Government exactly a fortnight to-day; but the public as yet know nothing about it. It is pretty certain that Government are not prepared with their decision. The report was sent in due course to the head of the medical department in this Presidency, Dr. W. G. Hunter, and in due course—say a day or two—he should have advised Government about it; but, just at this juncture, the Supreme Government sent Dr. Cunningham to Madras and Dr. Lewis to Bombay to ascertain the nature of the prevailing diseases. Dr. Lewis visited the native hospitals here and examined the blood of the fever-cases microscopically, and I was informed that he told some of our medical men he had discovered spirilla in abundance in some of the cases. Lewis was accompanied by Hunter in his visits to the hospitals. This has been commented upon by medical men here, who ask why Hunter did not visit the special hospital provided for the fever-cases that were under the investigation of Carter and Cook, where, they urge, the fever would have been known at once, and Hunter could have made his report *at once*. As it is, Lewis has gone back to Calcutta to think over and arrange his observations, and probably Cunningham has proceeded to the same centre to join his colleague, and, in process of time, there will be a report. Now, whatever that report may be, it seems utterly wrong to report on a contagious epidemic *after* it has died a natural death. This is what really will happen: the fever will abate for want of victims. Can this be science? At the present moment, the fever



is as rife as ever in Bombay, and the mortality is at a maximum. The deaths are upwards of 850 a week, or a ratio of 68 per 1,000 of population. The mortality is confined to a single section of the people, whose numbers do not exceed 100,000, if so much. The true mortality amongst the exposed class may be conceived. And nothing is being done—no isolation, no medical treatment, no nourishment, no help. The disease and the mortality are ignored. Last week, I asked, and obtained from, the municipal commissioner all the available information about the fever. This I summarised and laid before the town council, and the result was this: the council talked about executing a system of drainage. I protested that defective drainage was not the cause of the fever, and could not cure the city of it, and my hands were tied in giving full expression to my views, because Government are keeping back the report of Drs. Carter and Cook. I dared not even call the fever by its proper name; for my colleagues would say: "Oh, that has not yet been determined." A letter has been sent to Government, which contains some facts about the fever which cannot be found elsewhere. Government are considering that letter along with the report of Carter and Cook. If the labouring population of any city in Great Britain were being killed off in the way that this population is being destroyed, the newspapers all over the land would howl with fury. But human life is valued at a less figure here. The Viceroy, who could sit down and pen a tremendous long minute on an European beating a native, does not find his bowels yearning towards a nation of natives, whose numbers must be counted by millions. Truly, we "stick at a gnat and swallow a camel". The press here is silent simply because it has nothing before it to comment upon, and it will not go and observe for itself. Fashionable people do not want news of this kind. The most remarkable feature in the whole thing is, that the Government in this country persuade themselves that they can prevent the course of Nature by adopting some fanciful famine policy. When that policy is formulated, it amounts to this. We agree to feed the people; therefore, the ills and evils of famine have no right to appear. One cannot help feeling that our rulers are big children playing the game of sham government.

#### WORK UNDER THE RED CROSS.

THE following extremely interesting summary of the highly valuable work done by English surgeons at the English Hospital, Belgrade, during the recent Servian war, has been recently prepared for the information of the Acting Consul-General at Belgrade, by Mr. F. L. Attwood, the senior surgeon in charge of the hospital, who devoted nine months of skillful and unselfish labour to this most excellent work, and achieved results which would do honour to any surgeon and to any hospital. A good deal was said of the work done by foreign ambulances during the Franco-German war, and, on that occasion, the picturesque aspects of the work were brought very prominently under public notice. During the recent Servian insurrection, the work done was certainly not one whit less valuable or less severe. It was, however, done under less favourable circumstances and supported by less external enthusiasm. The record is one which is highly honourable to English charity and English skill.

"In view of the approaching termination of our proceedings, I beg to lay before you the following statement of the results of our work. The hospital was opened on September 12th, 1876, by the National Aid Society, and was conducted under its auspices until December 1st; during that period 237 patients were treated. Of this number, 134 were sent home cured, or transferred to other hospitals nearer their homes; 11 died, and 92 remained in the hospital on December 1st. Of the 11 deaths, 3 were due to the refusal of the patients to submit to operation; 3 occurred after operations too long deferred, owing to the unwillingness on the part of the patients to give their assent, and undertaken as a last resource; and the remaining 5 resulted from secondary complications (disease of internal organs). On Dec. 1st, the responsibility of the maintenance of the hospital was assumed by me in accordance with an agreement entered into between the Servian Government and myself. At that date, 92 patients were under treatment, and 66 have since been admitted; of these, 119 have been cured, or transferred to other hospitals; 7 have died; and 32

remain in the hospital. Of the 7 deaths, 2 were due to refusal of the patients to undergo operation, 1 occurred from lung-disease (no wound), and the remaining 4 resulted from secondary complications; thus, the total number of patients treated in the hospital amounts to 303, and the total number of deaths to 18 (5.95). A great proportion of the cases treated were severe. Seven 'capital' operations (amputations) have been performed, of which 4—undertaken only as a last resource—proved fatal, and the remaining 3 successful. The less important operations performed have in all cases yielded satisfactory results. The above statistics will compare favourably with any to be found in the records of military surgery."

#### DR. HABERSHON.

WE learn with much pleasure that Dr. Habershon, who has been for some weeks seriously ill, may now be considered thoroughly convalescent. The severe symptoms from which he suffered, and which appear to have been due to the effects of overfatigue and chill, have entirely passed away, and he has left town for change of air. There is every reason to believe he will very soon come back with recovered health and renewed strength to the full performance of his public and private professional work.

#### CORONER'S INVESTIGATION.

A WOMAN named Caroline Welsh was sent into the infirmary of the Westminster Workhouse in a state of insensibility and about six months gone in pregnancy. She did not recover intelligence, and died eighteen hours after admission. An inquest was held on Monday last, when Dr. Rogers, the medical officer, stated that he had made a *post mortem* examination, and found that the stomach and intestines presented such evident signs of inflammatory action, probably due to an irritant poison, that he forwarded the contents of the stomach and that viscus and the small intestines to Mr. Charles Piesse, the Public Analyst to the Strand District Board of Works. Mr. Piesse attended an adjourned inquiry, and at its conclusion asked the coroner to whom he was to look for payment. The coroner replied that he had no power to order anything, but that Mr. Piesse could make an application to the Home Secretary. This, we believe, he is about to do. Surely, in a case of this grave character, there should be some understanding as to the authority, and what should be the payment for making analytical investigations.

#### UNREGISTERED MEDICAL PRACTITIONERS.

A "BILL to amend the Medical Act of 1858", bearing the names of Dr. Lush, Sir Trevor Lawrence, Lord Edmond Fitzmaurice, Mr. Grantham, and Mr. Ritchie, has been printed. It proposes to repeal section 40 of the Act, and to enact that any unregistered person who shall fill up or make statutory medical certificates, or falsely pretend to be a registered person, shall be fined £20 for each offence. No person is to be registered who does not possess a qualification both in medicine and in surgery. Penalties recovered under the Act are to be paid to the treasurer of the General Medical Council.

#### TRANSFUSION OF BLOOD.

MR. ALFRED HIGGINSON, consulting surgeon to the Liverpool Southern Hospital, writes to the *Standard* to say that he was not the operator in a case referred to in a recent coroner's inquest at Liverpool, in regard to the death of a man named Walter Robert Williams, who had submitted to the operation of venesection in order to allow some of his blood being infused into the veins of a person who was sinking from weakness. Mr. Higginson was present in the coroner's court as a listener merely, and had no connection with the case under inquiry, but at the request of the coroner explained his mode of operating.

#### ST. MARY'S HOSPITAL.

THE dinner in aid of St. Mary's Hospital, Paddington, took place on Wednesday at the Great Western Royal Hotel, Paddington. The chair was taken by Mr. J. D. Allcroft, supported by the Duke of Grafton, Mr. Maurice Brooks, M.P., and many other friends and supporters of the hospital. In proposing the toast of the evening, "Pros-



perity to St. Mary's Hospital," the Chairman stated that the hospital had been doing a great work and had been doing that work well, and considering the time it had been in existence it had made a most wonderful progress, but looking at the wealth of the district he thought the hospital deserving of a great deal more support than it had up to this time received. The amount of subscriptions and donations announced amounted to upwards of £700.

#### WELL-MERITED HONOURS.

WE see with great pleasure, in the Queen's birthday list of decorations, the names of Inspector-General Smart, promoted from the rank of C.B. to that of K.C.B., and of Inspector-General Dr. William Domville, nominated C.B. Sir W. R. E. Smart has long been known in the profession as one of the most able, energetic, and public-spirited medical officers of the Navy. In a long course of service he has always distinguished himself, not only by his scientific abilities and contributions to the records of the service, but by his energetic and devoted performance of duty, and by his universal kindness to his patients, to his colleagues, and to his subordinates. It is, moreover, well known that Sir W. Smart has always had the interests of the service deeply at heart, and has on many occasions had the opportunity of suggesting to the authorities measures of reform, of which some only have been accomplished, but all of which have had for their object the improvement of the Medical Department of the Navy. Dr. W. Domville, who is, we believe, the youngest officer of his rank in the Navy, has been one of those officers who have known how to conquer success by conduct and character. He has still before him a career possibly even more brilliant than that which has already led him with so much credit into the highest ranks of the service; and the honour which has now befallen him is one which he has evidently had a true claim to expect. We regret very much to see, however, so few decorations bestowed on this occasion. It would certainly not be difficult to name a considerable number of medical officers of the Navy who might fairly expect to be remembered on such an occasion as this. The total number of promotions and admissions in this list is sixty-two, and of these only two have fallen to the Medical Department.

#### THE PUBLIC HEALTH.

DURING last week 5,719 births and 3,673 deaths were registered in London and twenty-two other large towns of the United Kingdom. The mortality from all causes was at the average rate of 24 deaths annually in every 1,000 persons living. The annual death-rate was 19 per 1,000 in Edinburgh, 27 in Glasgow, and 31 in Dublin. The annual rates of mortality per 1,000 last week in the twenty English towns, ranged in order from the lowest, were as follow: Wolverhampton 16, Portsmouth 17, Nottingham 18, Leicester 18, Hull 21, London 21, Plymouth 21, Brighton 22, Bristol 22, Leeds 22, Bradford 24, Birmingham 24, Newcastle-upon-Tyne 24, Norwich 25, Manchester 27, Liverpool 27, Sheffield 28, Sunderland 29, Salford 33, and Oldham 41. The annual death-rate from the seven principal zymotic diseases averaged 3.3 per 1,000 in the twenty towns, and ranged from 0.0 in Wolverhampton to 5.8 and 7.4 in Oldham and Salford. The deaths referred to small-pox in the twenty towns, which had been 92, 85, and 79 in the three preceding weeks, was again 79 last week, of which 61 occurred in London, 6 in Liverpool, 8 in Manchester and Salford (exclusive of one fatal case in the Monsall Hospital), and 4 in Oldham. In London 2,225 births and 1,443 deaths were registered. Allowing for increase of population, the births were 106 below, whereas the deaths exceeded by 64, the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the three previous weeks had been equal to 23.8, 23.1, and 20.6 per 1,000, was last week 21.3. The 1,443 deaths included 61 from small-pox, 69 from measles, 28 from scarlet fever, 8 from diphtheria, 41 from whooping-cough, 16 from different forms of fever, and 13 from diarrhoea. The fatal cases of small-pox, which in the three preceding weeks had been 78, 70, and 69, further declined last week to 61, of which 27 were

certified as unvaccinated, and 12 as vaccinated; in the remaining 22 cases the medical certificates did not contain any information relating to vaccination. Twenty of the 61 deaths from smallpox were of children under five years of age, of whom 15 were certified to be unvaccinated. The Metropolitan Asylum District Hospitals contained 891 smallpox patients on Saturday last; in the five preceding weeks the numbers had steadily increased from 824 to 964. The number of new cases admitted during the week was 178, against 254 and 219 in the two previous weeks. The deaths referred to diseases of the respiratory organs, which had been 355, 338, and 303 in the three preceding weeks, further declined to 259 last week, which exceeded the corrected weekly average by 40. At the Royal Observatory, Greenwich, the duration of registered sunshine in the week was 44.0 hours, out of the 113.2 hours that the sun was above the horizon.

#### NERVE-SYSTEMS.

THE Friday evening discourse at the Royal Institution, on May 25th, was delivered by Mr. G. J. Romanes, M.A., his subject being "The Evolution of Nerves and Nerve Systems". Last year, he discoursed on the medusidæ, especially with reference to the facts his researches had revealed respecting their nerves.

The scope of the discourse (which is well abstracted in the *Times*) was to show the bearings of his researches on our knowledge of the genesis of nerves, having especial reference to Mr. Herbert Spencer's theory as to the mode in which nerve-tissue first becomes differentiated from protoplasm—viz., by waves of contraction (and with them waves of stimulation) proceeding more frequently from the more exposed parts of the specific-shaped masses than they do from the less exposed parts—thereby causing a polar arrangement of the protoplasmic molecules lying in the lines of most frequent passage, and so converting these lines into tracts offering less and less resistance to the waves of stimulation as distinguished from the waves of contraction. By constant use, therefore, these tracts begin to perform the essentially nervous function of conveying impressions or stimuli to a distance irrespective of the passage of a contractile wave. Referring to a diagram of *Aurelia aurita*, Mr. Romanes explained that all the ganglia in the margin of the swimming bell are collected into eight marginal bodies situated equidistantly. If these be cut out, all further spontaneous action is found to be impossible; but the animal continues responsive to stimulation, just in the same way as protoplasm or muscle does; and the important question with regard to the contractile waves is this: are they merely of the nature of muscle waves, such as is seen in primitive protoplasm, or do they require the presence of rudimentary nerve-fibres to convey them, the stimulus wave of the rudimentary nerve-fibre thus, as it advances progressively, causing the contractile wave in the rudimentary muscle fibre? These contractile waves passed on from a point of stimulation, even when the swimming bell was cut with scissors into a zigzag or into a long spiral ribbon, as in paring an apple without breaking the rind. The first idea naturally was that such cutting up must destroy any network of nerve-fibre that might exist. Since last year, Mr. Romanes has noticed that reflex action occurs between the marginal ganglia of the medusa and all the contractile tissues of the animal. If the swimming bell of *Aurelia* be cut and so unrolled that, roughly speaking, it forms a parallelogram, and all the ganglia be removed except one at one end of the parallelogram, then if a gentle stimulation be given at the other end, too gentle in itself to start a contractile wave from the point stimulated, there will, nevertheless, in a little while be a contractile wave started from the other end—from the ganglion, thus showing that a stimulus wave must have passed through the contractile sheet to the ganglion, and so caused it to discharge. In some cases, the passage of this stimulus wave admits of being traced. The numberless delicate tentacles which fringe the margin of this medusa are more excitable than is the contractile tissue of the bell; so that a stimulus which is not strong enough to start a contractile wave in the bell may start a contractile wave in the tentacles, one tentacle after another contracting in rapid succession till the wave of stimulation has passed all the way round the disc. These facts prove in a beautiful manner that the tissue is already so far differentiated from primitive protoplasm that the distinguishing function of nerve has become fully established. And now this very important question arises: Does this conductile function prove itself as able to survive the process of severing as the contractile function has already been found to be? Mr. Romanes has found that it is as tolerant. It is quite as difficult to block the passage of stimulus waves by means of interposing cuts as it is to block the passage of contractile waves by the



same means. This is, perhaps, the most important observation, both to the physiologist and the evolutionist, that has ever been made in the whole range of invertebrate physiology. To the physiologist, it demonstrates that the distinguishing function of nerve, where it first appears upon the scene of life, is a function which admits of being performed vicariously to almost any extent by all parts of the same tissue mass. To the evolutionist, it demonstrates the existence of such a state of things as his theory of nerve genesis would lead him to expect. In the case of a medusa cut in a spiral strip, it was noticed that where the waves became suddenly blocked by section, in about 90 or 95 per cent. of cases such blocking was permanent; but in the remaining 5 or 10 per cent. of cases, after a time that varied from a few minutes to a day or more, the obstruction is overcome, and the contractile wave passes forward with perfect freedom. This is not due to what physiologists call shock. The explanation of a temporary blocking is of great interest, and the following hypothesis is probably the true one. Suppose there is a well differentiated line severed by the cutting, and near it an uninjured line less differentiated, and which while almost, is not quite able to convey the stimulus. The waves of contraction and of stimulation are no longer able to pass along the usual line, now severed, and as they perpetually "break" upon the area of blocking, each of the forces concerned seeks for itself the lines of least resistance. The principal line will be the partly differentiated line, which is already nearly able to carry on the wave of stimulation. Every wave imposes a much higher degree of functional use on this line than it was ever before required to exercise, and as the greater use causes greater permeability, the line, from being almost, is soon quite able to carry a wave of stimulation, and so to set up a wave of contraction beyond the line of previous blocking. As might be expected, the first waves were feeble, but they were observed to get stronger and stronger, till at last, as the nerve passage became more permeable by use, they poured on without any perceptible diminution of force. Mr. Romanes also described another species of medusa, which he has called *Tiäropsis indicans*, which has a more highly differentiated nervous 'system', and whose polypite turns to the direction of a stimulant. It is, however, the first appearance of nerve lines, as in *Aurelia*, in the least differentiated form that is of the greatest interest. Speaking, in conclusion, of the way in which these observations supported Mr. Herbert Spencer's theory of *nervo-genesis*, Mr. Romanes said that, not only in biology, but also in psychology, its bearings are indefinitely great, as proved by the fact that it may be said to constitute the basis of Mr. Spencer's entire system of objective psychology. It is a proverbial saying that 'practice makes perfect', and in Mr. Spencer's theory we have a physical explanation of the fact. For no one can doubt that, in the cells and fibres of the brain, we have the physical aspect of all those relations which on their psychical aspect we know as thoughts and feelings; so that, if the theory explains the formation of nerve-fibres in the contractile tissues of medusæ, it must be held no less certainly to explain the formation of intellectual habits in man.

### SCOTLAND.

It is worthy of notice that only two deaths from zymotic diseases were registered in Edinburgh last week; one of these was from diphtheria, the other from whooping-cough.

At a recent meeting of the Lord Provost's Committee of the Edinburgh Town Council, to consider a letter from Sir Alexander Grant with reference to the amount still required for the University Building Fund, the Committee unanimously agreed to recommend the Council to subscribe another £1,000 to the Fund.

The following paragraph appears in the *Scotsman* for May 31st. The fatal stabbing case.—We understand that the *post mortem* examination of the body of Thomas Brown, who was stabbed by his nephew on Saturday night, showed that, although the wound on the left side of the neck was of an extremely dangerous character, the immediate cause of death was the use of chloroform while an artery severed by the stab was being closed.

The Curators of the University of Edinburgh will meet on Tuesday, June 19th, for the purpose of electing a successor to Sir Robert Christison, Bart., in the Chair of Materia Medica. The Curators are seven in number, four nominated by the Town Council, and three by the University Court. The present Curators are Sir W. Stirling Maxwell,

M.P., Sir Alexander Grant, Lord Rutherford Clark, Lord Giffard, Sir J. Falshaw (Lord Provost), Dr. William Chambers, and Mr. John Boyd. The Chair of Clinical Surgery, which Mr. Lister has not yet formally vacated, is in the gift of the Crown.

### EXPLOSION OF GAS IN A WELL IN EDINBURGH.

On Thursday morning, last week, while some men were about to inspect one of the wells at a brewery in Fountainbridge, from which the establishment is supplied with water, a lighted lamp was lowered with a string for the purpose of ascertaining the state of the air. The lamp had descended only a short distance, when an explosion of foul air took place. The roof of the building which covers the pumping machinery was partly blown off, and three of the men received severe burns on the face and hands. They were at once removed to Chalmers' Hospital, where it was found necessary to take them in.

### SUICIDE OF AN INFIRMARY PATIENT.

On the afternoon of the 26th ult., a man named Irvine was admitted to the Paisley Infirmary suffering from pneumonia. Shortly after midnight on Monday, Irvine, in the temporary absence of the nurse, whom he had asked to fetch a drink of water, jumped out of bed, opened a window, and sprang out, falling a distance of about thirty feet into the causewayed area below. He sustained a fracture of the skull, and died from the effects of this injury the following day.

### IRELAND.

Two deaths took place at a distillery in Dublin last week, when two men, on attempting to clean out a vat, without taking the necessary precautions, were poisoned by the carbonic acid gas.

The Royal Dublin Society and the authorities of Trinity College held a meeting last week, in order to make arrangements for the reception of the British Association for Science in Dublin next year, when it was determined that the Corporation of Dublin should also be asked to co-operate in the matter.

At a recent meeting of the Belfast Town Council, it was resolved that public baths should be provided in that town. The Water Commissioners have generously offered the necessary water free of charge, and it is expected that they will be self-supporting, besides promoting the health and cleanliness of the inhabitants.

### THE ULSTER EYE, EAR, AND THROAT HOSPITAL.

The annual meeting of the subscribers and friends of this institution was held last week in Belfast, the chair being occupied by Professor Hodges. During last year, there were 3,055 cases under treatment, of whom 106 were intern patients; the visits of the patients to the hospital numbering 14,262. The intern department is reserved for cases requiring operation, either with the view of restoring sight that has been lost, or saving that which remains. Last year, cataract was extracted in thirty-seven cases, in thirty of whom capital vision was restored; in four, slight improvement; and, in three, no benefit resulted. For strabismus, twelve operations were performed, making a total of eighty-five in the six years since the institution was founded, and with perfect correction in eighty-three cases. This operation being so certain in its results, free from risk, and a great improvement in the appearance being effected, it is a subject of wonder so many should be found with a deformity so damaging to prospects of various kinds. The bazaar held last year in aid of the hospital was of considerable service, the sum of £560 having been added to the funds of the institution.

### ROYAL COLLEGE OF SURGEONS OF IRELAND.

The annual election by ballot, of the Officers and Council of this Corporation for the ensuing year, took place on Monday last. Robert McDonnell, M.D., F.R.S., Surgeon to Stevens's Hospital, was elected President; Philip C. Smyly, Vice-President; Wm. Colles,



Secretary; and the following gentlemen members of Council, viz.: William Colles, Richard H. Butcher, Rawdon Macnamara, George H. Porter, Benjamin G. McDowell, Edward Ledwich, Albert J. Walsh, Edward D. Mapother, Archibald H. Jacob, Edward Hamilton, George H. Kidd, Alfred H. M'Clintock, John Denham, John K. Barton, Samuel Chaplin, T. Joliffe Tufnell, Wm. J. Wheeler, John Cronyn, and Henry Wilson. It will thus be observed that, with the exception of the retiring President—Dr. Kidd having been elected to the vacant seat caused by Mr. Smyly's appointment as Vice-President—the out-going Council was re-elected. Dr. McDonnell's election to the Presidency is a source of as great gratification to the profession in Ireland, as it will be, we trust, of advantage to the College over whom he now so worthily presides. Dr. McDonnell is one of the Vice-Presidents of the Dublin Branch of the British Medical Association; Dr. Gordon, the President of the King and Queen's College of Physicians, being the other.

#### THE TIPPERARY UNION.

THE medical officers of the different dispensary districts of the Tipperary Union have petitioned the Board of Guardians for an increase in their salaries. They based their claim on the increased expenses of all the necessaries of life, without a corresponding increase in their salaries or fees; and they also called attention to the fact, that the salaries paid to the medical officers of dispensaries in the surrounding unions were of a higher scale of remuneration than theirs. After a prolonged discussion, the consideration of the subject was adjourned for a month.

#### ROYAL COLLEGE OF SURGEONS OF IRELAND.

THE annual report for the year ending April 5th, 1877, has now been issued, and from it we glean some matters which may be interesting to our readers. During the past year, 13 candidates were admitted to the Fellowship of the College, 97 received the Diploma in Surgery, and 11 licentiates obtained the Diploma in Midwifery; the entire number on the lists of the College amounting to 407 Fellows and 2,815 Licentiates. As regards the museum, 120 new specimens have been added to the collection; and a collection of old surgical instruments lately obtained, with those presented by the late Mr. L'Estrange, it is hoped, will form, together with a few old instruments already in the museum, a nucleus of a good historical *armamentarium chirurgicum*. At a meeting of Council held on January 25th last, it was resolved that the co-operation of the College of Physicians should be procured, with a view of establishing a combined examination at a reduced fee for the granting of a double qualification in medicine and surgery. The College of Physicians having accepted the proposal, a committee from each College was appointed, who met several times, and drew up a scheme for a combined examination, which is now occupying the consideration of the Council. A candidate for the preliminary examinations having been rejected on four consecutive occasions by the College, and subsequently having, through means of a private entrance examination, and upon payment of a fee of £15, matriculated as a junior freshman of Trinity College, Dublin, and thereby, in accordance with the existing regulations of the General Medical Council, so far as a preliminary education and examination are concerned, qualified to enter the medical profession, the attention of the Board of Trinity College was drawn to the matter; and, the reply not being considered satisfactory, it was resolved that for the future no certificate of preliminary education emanating from Trinity College, unless it go to prove that its presenter is of junior sophister standing in the College, should be accepted by the Inspection Committee as an equivalent to the preliminary arts examination of the College of Surgeons. In June of last year, a copy of a memorial from the General Medical Council to the Government respecting the Vivisection Bill was received, when resolutions were adopted by the Council to the effect that, while deprecating needless pain in the performance of experiments on living animals, they regarded experimentation as indispensable for the ad-

vancement of physiological knowledge; that not a single case of abuse in any of the medical schools of Great Britain or Ireland had been brought to light; and they recommended to the consideration of the Government the modifications of the Bill suggested by the Medical Council and the Parliamentary Bills Committee of the British Medical Association. In last November, it was felt incumbent by the College to call the earnest attention of her Majesty's Government to the low estimation into which the medical department of the army had fallen in the opinions of the Irish students, and to express the conviction that, under the present system and existing regulations, able and efficient men are deterred from entering the Army Medical Department. The address from the Council to his Grace the Duke of Marlborough, with his Excellency's reply, terminates the report.

#### IMPORTANT SANITARY DECISION.

A VERY important judgment in many respects was given by the Recorder of Dublin last week in the appeal of Messrs. Finlay, manure-contractors, from a decision of the magistrates ordering them to remove a nuisance. The alleged nuisance consisted of a vast heap of manure amassed in an open yard, which was retailed to suburban and rural farmers. This accumulation, it was stated in evidence, was dangerous to the public health. It was piled up, as the Recorder remarked, in the centre of a district in the city which was one of the most fever-haunted spots of Western Europe, and whose contributions make the death-rate in Dublin the largest in the three kingdoms. When it was pleaded that the defendants and their families suffered no evil consequences, it proved no more than the customary healthiness of the medical attendants and nurses in the Cork Street Fever Hospital, not far distant. The conviction was confirmed, and the Recorder took the opportunity afforded by the startling condition of things in this city which the case had indicated, of reading a most excellent sanitary lecture to the corporation and Local Government Board. He acknowledged that there were considerable difficulties in the administration of the sanitary laws by bodies who were most anxious to discharge effectually the trusts committed to them, in consequence of the large powers with which they had been progressively armed being scattered and, to a great extent, hidden in a maze of sections of statutes, where even trained lawyers had a difficulty in tracing them. He hoped sincerely that the most praiseworthy design of the present Chief Secretary to consolidate and simplify this code into a single intelligible statute might prevail in this current session of Parliament. His Lordship indicated the principal existing powers which prove that Parliament at least is not to blame if the sanitary arrangements of cities are not adequate and complete. So long ago as 1388, there was a statute of Richard II forbidding filth-deposits in the streets under the enormous penalty of £5, a sum equal to ten times that value in our present currency. About 1555, Shakespeare's father was convicted for causing an accumulation of refuse in Stratford-on-Avon; but he was afterwards elected a town-commissioner, and no more, he presumed, was heard of the offence. And yet, five hundred years after the statute of Richard, in this reign of sanitary law, there were still houses in Dublin whose domestic arrangements are no more forward than they were in Edinburgh in the time of Elizabeth. This was, however, not the fault of Parliament. Alluding to some of the methods employed for the removal of sewage, his lordship pointed out what appeared to him to be the exceptional adaptability of Dublin to the water system. He suggested that it would be very advisable that our corporation, with the sanction of the Local Government Board, should direct an inquiry, and report as to the best method to be adopted here. The Act of 1874 would enable them to appoint a thoroughly competent officer to do this, and to pay him adequately. Unless it were done in this—a thorough and most efficient—way, it were better it were not done at all. But it was time they should set about in earnest to remove the stigma which makes Dublin occupy the position it does in the death-lists, notwithstanding its highly favoured natural conditions. His lordship further alluded to the various enactments down to the year 1849,



when, by the Dublin Improvement Act, the whole duty of cleansing the city and keeping it clean was transferred to the corporation, whose responsibilities and powers, he pointed out, had been enhanced from time to time, until now the want of jurisdiction can be no longer pleaded.

#### HEALTH OF DUBLIN.

ACCORDING to the Registrar-General's returns, the total deaths registered in the Dublin Registration District during the week ending May 26th, 1877, represent an annual mortality of 24.3 in every 1,000 of the population, by the census of 1871; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 23.8 per 1,000. Measles is very prevalent in Dublin now, especially at the north side of the city. Nine out of the twenty deaths from zymotic diseases during the week were due to this affection.

#### CLINICAL INSTRUCTION IN GALWAY.

WE are informed that the subject of the existing arrangements in regard to the clinical instruction given to the medical students of the Queen's College, Galway, was, by desire of His Grace the Lord-Lieutenant, brought under the notice of the Board of Guardians of the Union Workhouse last week by Dr. Brodie, Local Government Inspector, acting under the instructions of the Local Government Board. The clinical instruction is at present given in the Workhouse Hospital. This institution contains 130 beds, and has two medical officers—Dr. Cleland, the well-known Professor of Anatomy and Physiology in the College, and Dr. Colahan. The latter gentleman is not officially connected with the College, and, therefore, gives no clinical instruction to its students, who are consequently limited to one-half of the not over large field of practical instruction they might otherwise enjoy. Dr. Brodie suggested, as a remedy, that all the interesting cases for teaching should be placed under the care of Dr. Cleland. This proposition was manifestly unfair to Dr. Colahan (who, it was stated, was quite willing to give clinical instruction), and would, if carried out, tend to prove a fertile source of unpleasantness between the medical officers. After some discussion, the following resolution was unanimously adopted: "That, while the Board of Guardians would afford every facility for clinical instruction in the Workhouse Hospital, they could do nothing to the disadvantage or prejudice of either of their medical officers." The matter, consequently, remains at present *in statu quo*.

#### IRISH MEDICAL ASSOCIATION.

THE annual general meeting of this Association was held in the Royal College of Surgeons on Monday last. Several of the members breakfasted together in the morning at the Shelbourne Hotel, under the Presidency of Dr. A. H. Jacob, Chairman of the Council. The President of the Association, Dr. Martin of Portlaw, took the chair at the general meeting, which was largely attended by both provincial and metropolitan members. The report of the Council was read by the Honorary Secretary, Dr. Chapman, and was a very full and able statement of the important work done by this active body in the interests of the Irish medical practitioners. The chief subjects alluded to in the report were the action taken by the Council with regard to coroners' medical witnesses, medical witnesses at sessions, vaccination, registration of births and deaths, the Public Health (Ireland) Bill, superannuation of Poor-law medical officers, etc. We are glad to find that the condition of this useful and influential Association is now most prosperous, the number of members has largely increased, and there is a good credit balance. This result is largely, if not mainly, due to the exertions of the Secretary, Dr. Chapman; and it is very gratifying to find that, in recognition of his valuable services, the Association were enabled, on the motion of the President, to unanimously pass a resolution requesting his acceptance of a cheque for one hundred guineas. Among several other resolutions adopted by the meeting, it was resolved to form the Association into a registered and incorporated company, similar to the present constitution of

the British Medical Association. The following is a list of the officers who were elected by ballot for the ensuing year; and, as indicative of the harmony which we hope will always exist between the two Associations, we may point out that the President is a member of the Council of the Dublin Branch of the British Medical Association, the President of which is one of the provincial Vice-Presidents of the Irish Association, and that the Honorary Secretary of the Dublin Branch and four other of its members are on the Council of the Irish Medical Association. *President*: Dr. Darby, Bray. *Vice-Presidents*—*Leinster*: Dr. A. Hudson, Dublin; *Ulster*: Dr. Samuel Browne, Belfast; *Munster*: Dr. Brodie, Limerick; *Connaught*: Dr. Nolan, Gort. *Council*: Dr. Baggot, Enniskillen; Dr. Charles Benson, Dublin; Dr. H. G. Croly, Dublin; Dr. Drapes, Enniscorthy; Dr. G. F. Duffey, Dublin; Dr. Faussett, Clontarf; Dr. Gray Armagh; Dr. Grimshaw, Dublin; Dr. Hayes, Naas; Dr. A. H. Jacob, Dublin; Dr. D. Jacob, Maryboro'; Dr. J. Bellew Kelly, Drogheda; Dr. J. E. Kenny, Dublin; Dr. Longworth, Moate; Dr. Lyster, Kilkenny; Dr. Macnamara, Dublin; Dr. James Martin, Portlaw; Dr. Mayne, Ballybrack; Dr. Molony, Tulla; Dr. J. W. Moore, Dublin; Dr. Perceval, Stradbally; Dr. Pollock, Blackrock; Dr. George Porter, Dublin; Dr. T. Purcell, Dublin; Dr. Sharkey, Ballinasloe; Dr. H. J. Smith, Donaghmore; Dr. Speedy, Dublin; Dr. Spencer, Ahascragh; Dr. Tagert, Monkstown; Dr. Usher, Dundrum; Dr. A. J. Walsh, Dublin; Dr. Whistler, Bray. *Auditors*: Dr. Morrough, Dublin; Dr. Nugent Duncan, Ballybrack. The annual dinner of the Association took place in the evening in the hall of the College of Physicians, and went off extremely well.

#### MEDICAL BENEVOLENT FUND.

THE thirty-fifth annual meeting of the Royal Medical Benevolent Fund Society of Ireland, was held on Monday last, at the King and Queen's College of Physicians. The Chair was taken by Dr. Kidd, ex-President of the Royal College of Surgeons. Dr. M'Clintock, one of the Honorary Secretaries, read the report, from which we learn that the total amount of grants awarded during the year amounted to £1,273, the relative distribution being to medical men, £357; to widows, £763; and orphans, £153. Among the contributions of this year, the Committee referred with much pleasure to those received from medical students in Galway and Dublin, amounting to £20:12:6. "It is", to borrow the language of Dr. Stokes, "a wholesome example, and full of bright promise for the future of these young men." Moreover, it substantially refutes the wholesale charges of levity and selfishness often cast upon the character of medical students. The total amount disposable for awards this present year is swelled by the munificent special gift of one hundred guineas from Dr. Kidd, the retiring President of the Royal College of Surgeons; and, in accordance with his wishes, this sum is not added to the capital of the Society (as has been usual in the case of donations), but goes towards the grants of this distribution, "in order", as the donor expresses it, "to mark his year of office, as President of the Royal College of Surgeons, by making some little addition to the comforts of our poorer brethren and their relations". This graceful and generous act suggested the idea (notice of motion of a resolution embodying which was subsequently given) that only such proportion of the donations as seemed wise and expedient should be added to the funded property—which now is upwards of £17,000—and the remainder be applied to the grants of the current year. One hundred and five applications for assistance from the fund were sent in during the year; a greater number than that of any former year since the establishment of the Society. Seventy-seven petitions were from widows, seventeen from orphans, and eleven from medical men. Including the grants of this, the thirtieth annual distribution of this valuable Society, a sum of over £20,500 has through its instrumentality been expended in the alleviation of want, sickness, sorrow, and suffering, among necessitous professional men and their families. The Society has a Branch Association in each of the Irish Counties, and in each of the three Indian Presidencies; but, notwith-



standing the amount of good it effects, we regret to learn that the number of its subscribers throughout the country generally is not anything like what it might be, or even what it should be.

### THE MEDICAL ACT, 1858, AMENDMENT BILL.

A DEPUTATION from the East London Medical Defence Association waited upon the Home Secretary on Monday last to ask for the support of the Government to the Bill introduced into the House of Commons by Dr. Lush.

Mr. H. NELSON HARDY, in introducing the deputation, read a letter from Dr. Lush expressive of regret at his absence from unavoidable causes, and explanatory of the reasons which had led him to make alterations in the measure. It was upon public grounds only that the deputation asked the Government to give their support to the Bill, and reminded the Home Secretary that, in a previous Bill for the amendment of the Medical Act, the principles in the Bill of Dr. Lush were admitted, and were approved by the legislature, the profession, and the public. These principles had reference to the prosecution of the unqualified persons who practised medicine and the admission of foreign diplomas to the *Register*; but, being mixed up with other matters which were opposed, the chance of legislation upon these evils was lost by the whole Bill being opposed and thrown out. The present Bill did not touch any of these controverted subjects, and only dealt with those matters which had, as far as the principles involved went, received the assent of a former government, of one division of the legislature, and of the medical profession. The present measure gave the public protection against the unqualified pretenders who now practised medicine and surgery; and this protection was needful, as the public, in most cases, were unable to distinguish between the qualified and unqualified practitioners. Formerly, the duty of thus protecting the public fell upon the licensing bodies and was discharged by them; but many other duties had been cast upon those bodies, and this duty had since been overlooked by them, and what was everybody's business had thus become nobody's; for, if the duty of prosecuting the pretenders to medicine who traded upon the fears, the ignorance, and the credulity of the public had not been undertaken by the East London Medical Defence Association, it would not have been undertaken at all. This association, in their self-imposed task, had found the greatest obstructions from the different readings of the law by different magistrates. The Association had prosecuted in twenty-four cases, and, in all but one, which was still undecided, convictions had been obtained and fines of from £5 to £20 had been inflicted; and it was in consequence of finding the difficulties thrown in the way of such prosecutions by the imperfect wording of the Medical Act that the Association now applied to Parliament for its amendment. The case of a man calling himself Dr. Harrison, F.S.A., "Fellow of the Colleges of Physicians and Surgeons, New York, U.S.A.," was next referred to as an illustration. He issued filthy pamphlets, which were corrupting to youth, and the magistrate, who held that he could not convict "Dr. Harrison" under the Medical Act, but convicted him under Lord Campbell's Act for the indecency of his pamphlets, one thousand six hundred of which were ordered to be destroyed.

Mr. Cross expressed his astonishment that such a case could not be prosecuted to conviction.

Mr. HARDY said there was a difficulty in obtaining a conviction in the case, because after "Fellow of the Colleges of Physicians and Surgeons" which "Dr. Harrison" attached to his name, he placed the letters "N.Y., U.S.A.," which is not a registrable title. Mr. Hardy also spoke upon the various clauses in the Bill, and their purposes.

Mr. PRIDHAM, the solicitor of the Association, pointed out that, as the law stood, there were really no means by which a man could be caught in the meshes of the law for improperly practising medicine and surgery. A man like "Dr. Harrison," making his £100 a week, cheerfully paid £20 and costs obtained against him after many weeks of trouble.

Dr. J. ROGERS desired to impress upon the Government that, though they were medical men who were pressing the subject, they were only doing so for the public object of protecting the community from the dangers of these non-medical practitioners, and this was a duty which ought to be discharged by the police. He showed to the Home Secretary certificates of death signed by persons who had not the least right to sign as medical men, and urged the danger which here existed for the public. The Government ought to protect the public from these acts, and the men of whom they spoke not only in-

jured those who dealt with them, but they corrupted the minds of the young and innocent by sending indecent pamphlets and "medical works" broadcast. The General Medical Council got thousands of pounds yearly from the profession, but that council was only the quittance of the nineteen corporations represented by the members who did not represent the interests of the medical profession. That council knew that a very large number of persons not qualified were practising, and they did not interfere; and, if the Local Government Board, for instance, would only ask for returns of the assistants to the Poor-law medical officers, they would find that all the orders of that department were disobeyed.

Dr. CARPENTER exhibited to the Home Secretary certificates of death signed by a druggist's assistant. These were all of the same character as to the cause of death—"effusion on the brain"—and he urged that there was the alternative that the persons had been treated wrongly, or that the cause of death was not correct. The speaker also dealt with the points in the Bill.

The HOME SECRETARY said that, if he had known fully the purpose of the deputation, he should have asked them to go to the Duke of Richmond, who was at the head of the Privy Council Department, and therefore at the head of the department which had the jurisdiction over the Act referred to; and, if it had not been for the subject of the prosecutions, which properly came before the Home Office, he should have stopped them. Having heard everything they had had to say, he would forward their views to the Duke of Richmond, and then, if his lordship wanted to see one or two of the Association, doubtless, they would attend. He should himself make inquiries on some of the points mentioned—those in reference to the magistrates—and would forward the results of his inquiries to the Duke of Richmond.

Mr. H. N. HARDY thanked the Home Secretary for his courtesy, and the deputation withdrew.

### MEDICO-LEGAL CASES.

MEDICAL REPORTS ON RAILWAY CASES: FRIEND v. THE LONDON, CHATHAM, AND DOVER RAILWAY COMPANY.

THIS case came before the Lord Chief Justice and Lords Justices Bramwell and Brett in the Court of Appeal at Westminster on June 6th. It was an action for damages in respect of personal injuries sustained by the plaintiff in an accident on the defendants' railway. On the application of the defendants, an order was made by Baron Huddleston for the examination of the plaintiff by several medical men on behalf of the defendants. The plaintiff submitted to the examination, and afterwards applied for an order to inspect the reports made by the medical men to the defendants. The order was made by Mr. Justice Lush in Chambers. On appeal to the Divisional Court, the order for inspection was set aside, on the ground that the report was privileged. —Mr. COLE, Q.C., for the plaintiff, urged that the examination having been made by order of the judge, must be taken to have been under the provisions of 30 and 31 Vic., cap. 119, sec. 26, in which case the plaintiff was entitled to know the result of the examination. On the contrary, if the examination were by consent of the parties, there must be an implied undertaking on the part of the defendants to let the plaintiff know the result. —The LORD CHIEF JUSTICE: But the plaintiff has the report of his own medical man. It seems to me the object of the examination is to put both parties on the same footing. There must be reciprocity. Surely, if the plaintiff's medical man were asked to put on paper what he thinks of the case for the guidance of the plaintiff's solicitor, the defendants would not be entitled to inspect that document? —Mr. W. G. HARRISON, Q.C., for the defendants, said the order for the examination of the plaintiff was practically by consent; if not, it was *ultra vires* on the part of the judge who made it. It was not under the Act referred to; for, if it were, the person to make the report could not be a witness in the cause. But that was not stated in the order, and, in fact, the medical officers who examined the plaintiff are the defendants' principal witnesses. —The Court unanimously affirmed the decision of the Common Pleas Division, on the ground that the defendants' affidavit, uncontradicted, brought the case within the rule by which documents written at the instance and for the use of the solicitor of either party for the purposes of the action or defence are privileged from inspection by the other side.

A FRIEND of the late Charles Kingsley has given £100 towards the endowment of a cot, to be called "The Charles Kingsley Memorial Cot," in the Cheyne Hospital for Incurable Children. The annual cost of each cot being £30, the additional sum required to make the endowment perpetual is £500.



## THE MANCHESTER MEETING, AUGUST 1877.

THE Council of the Botanical Gardens at Manchester have arranged to hold an exhibition of medical and dietetic plants during the visit of the British Medical Association in August. Prizes will be given for the best collection; and there is no doubt that the exhibition will be one of great interest and value.

The show-day has been unavoidably fixed for Tuesday, the 7th of August, the first day of the Association meeting, but, as far as possible, the collection will be retained at the Gardens during the remainder of the week.

## RECOMMENDATIONS OF THE GENERAL MEDICAL COUNCIL ON EDUCATION AND EXAMINATION.

THE following is a copy of the Recommendations of the General Medical Council on General and Professional Education and Examination, agreed to during the recent session.

## CHAPTER I.—PRELIMINARY EXAMINATION.

1. THAT no person be allowed to be registered as a medical student unless he shall have previously passed a preliminary examination in the subjects of general education as hereinafter provided.—2. That it be delegated to the Executive Committee to prepare annually and lay before the Council for recognition a list of examining bodies, whose examinations fulfil the conditions of the Medical Council as regards general education.—3. That, for the present, testimonials of proficiency granted by educational bodies, according to the subjoined list, be accepted; the Council reserving the right to add to or take from the list.—A Degree in Arts of any University of the United Kingdom, or of the Colonies, or of such other Universities as may be specially recognised from time to time by the Medical Council, is considered a sufficient testimonial of proficiency.

*List of Examining Bodies whose Examinations fulfil the Conditions of the Medical Council as regards Preliminary Education.\**

I. *Universities of the United Kingdom.*—*Oxford*: Responsions; Moderations.—*Cambridge*: Previous Examination.—*Durham*: Examination for Students in the second and first years; Registration Examination for Medical Students.—*Oxford, Cambridge, and Durham*: Examination for Degree in Arts; Local Examinations (Senior), Certificate to include Latin and Mathematics; Local Examinations (Junior), Certificate to include Latin and Mathematics, and also one of the following optional subjects, viz., Greek, French, German, Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics.—*Oxford and Cambridge Schools' Examination Board*: Certificate to include Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations; Geometry, First two books of Euclid; Latin, including Translation and Grammar. And one of the following optional subjects—Greek, French, German.—*London*: Examination for a Degree in Arts or Science; Matriculation Examination.—*Aberdeen, Edinburgh, Glasgow, and St. Andrew's*: Examination for a Degree in Arts; Preliminary Examination for Graduation in Medicine or Surgery.—*Edinburgh*: Examination of (Senior) Candidates for Honorary Certificates under the Local Examinations of the University of Edinburgh.—*Dublin*: Examination for a Degree in Arts; Public Entrance Examination.—*Queen's University (Ireland)*: Examination for a Degree in Arts; Entrance Examination; Examination for the Diploma of Licentiate in Arts; Previous Examination for B.A. Degree.

II. *Other Bodies named in Schedule (A) to the Medical Act.*—*Royal College of Surgeons of England*: Examination conducted under the superintendence of the College of Surgeons, by the Board of Examiners of the Royal College of Preceptors.—*Society of Apothecaries in London*: Examination in Arts.—*Royal College of Physicians, Edinburgh*; and *Royal College of Surgeons, Edinburgh*: Preliminary Examination in General Education, conducted by a Board appointed by these two Colleges combined.—*Faculty of Physicians and Surgeons of Glasgow*; and *Apothecaries' Hall of Ireland*: Preliminary Examination in General Education.—*Royal College of Surgeons in Ireland*: Preliminary Examination, Certificate to include Mathematics.

III. *Examining Bodies, in the United Kingdom, not included in Schedule (A) to the Medical Act.*—*Royal College of Preceptors*: Examination for a First Class Certificate.—*The Examiners for Commissions*

\* This portion of the recommendations is somewhat condensed, to avoid repetition and save space.

and Appointments in Her Majesty's Service, Military, Naval, and Civil: Certificate to include all the subjects required by the General Medical Council.

IV. *Indian, Colonial, and Foreign Universities and Colleges.*—*Universities of Calcutta, Madras, and Bombay*: Entrance Examination, Certificate to include Latin.—*Universities of McGill College, Montreal; Toronto; Trinity College, Toronto; Queen's College, Kingston; Victoria College, Upper Canada; Fredericton; Sydney; and the Cape of Good Hope*: Matriculation Examination.—*King's College, Nova Scotia*: Matriculation Examination; Responsions.—*Medical College, Halifax, Nova Scotia*: Matriculation Examination.—*University of Melbourne*: Matriculation Examination, Certificate to include all the subjects required by the General Medical Council.—*Codrington College, Barbadoes*: English Certificate for Students of two years' standing, specifying the subjects of Examination; Latin Certificate, or "Testamur"—*Tasmanian Council of Education*: Examination for the Degree of Associate of Arts, Certificate to include Latin and Mathematics.—*Christ's College, Canterbury, New Zealand*: Voluntary Examinations, Certificate to include all the subjects required by the General Medical Council.—*South Australia, South Australian Institute, Adelaide*: Preliminary General Examination; First Class Certificate.

4. That it be recommended to the licensing boards not to accept the certificate of proficiency in general (preliminary) education from any of the bodies, the names of which are contained in the list annually circulated, unless such certificate testify that the student to whom it has been granted has been examined in the following subjects: 1. English Language—including Grammar and Composition.\* 2. Arithmetic—including Vulgar and Decimal Fractions; Algebra—including Simple Equations. 3. Geometry—first two books of Euclid, or the subjects thereof. 4. Latin—including Translation and Grammar. 5. And in one of the following optional subjects—Greek; French; German; Elementary Mechanics of Solids and Fluids, meaning thereby Mechanics, Hydrostatics, Pneumatics, and Hydraulics.—5. That it is desirable that the examination in general education be left to the Universities, and such other bodies engaged in general education and examination as may from time to time be approved by this Council; and that it be delegated to the Executive Committee to communicate with the licensing bodies on the subject.—6. That it be recommended to the various licensing bodies to instruct their examiners in professional subjects to report to them any cases in which decided ignorance in the subjects of general education has been displayed by the candidates, with the name of the board or boards before which the preliminary examinations have been passed; and that the licensing bodies be requested to transmit such reports to the Registrar of the General Medical Council.

## CHAPTER II.—REGISTRATION OF MEDICAL STUDENTS.

7. Every medical student shall be registered in the manner herein-after prescribed by the General Medical Council.—8. No medical student shall be registered until he has passed a preliminary examination, as required by the General Medical Council, and has produced evidence that he has commenced medical study.—9. The commencement of the course of professional study recognised by any of the qualifying bodies, shall not be reckoned as dating earlier than fifteen days before the date of registration.—10. The registration of medical students shall be placed under the charge of the Branch Registrars.—11. Each of the Branch Registrars shall keep a register of medical students according to the subjoined form.

*Form for the Registrations of Medical Students.*

Date of Registration.	Name.	Preliminary Examination and Date.	Place and date of commencement of medical study, as certified by a master, teacher, or other person in a medical school or hospital.

12. Every person desirous of being registered as a medical student shall apply to the Branch Registrar of the division of the United

\* The General Medical Council will not consider an examination in English sufficient that does not fully test the ability of the candidate to: 1. To write a few sentences in correct English on a given theme, attention being paid to spelling, punctuation, as well as to composition; 2. To write a portion of an English author to dictation; 3. To explain the grammatical construction of one or two sentences; 4. To point out the grammatical errors in a sentence grammatically composed, and to explain their nature; and 5. To give the derivation and definition of a few English words in common use. Provided always, that an examination may be accepted as satisfactory that secures, on the part of the candidate passing it, a sufficient grammatical knowledge of English.



Kingdom in which he is residing, according to the annexed forms which may be had on application to the several qualifying bodies, medical schools, and hospitals; and shall produce or forward to the Branch Registrar a certificate of his having passed a preliminary examination, as required by the General Medical Council, and evidence that he has commenced medical study.

*Form of Application for Registration as a Medical Student.*

I hereby apply to be registered as a student in medicine, in conformity with the regulations of the General Council of Medical Education and Registration of the United Kingdom, for which purpose I submit the following particulars.

NAME OF APPLICANT (To be written in words at length)		Preliminary Examination.	Date of Preliminary Examination.	Place and date of commencement of medical study, as certified by a master, teacher, or official in a medical school or hospital.
Surname.	Christian Name.			

Applicant's signature.....  
Address.....  
Date of application .....

*Certificate of commencement of Medical Study.*

I hereby certify that Mr. .... has commenced the study of medicine in\*.....  
Signature of master, teacher, or official in a }  
medical school or hospital. }  
Place and date.....

The Registrar of the Branch Council for .....

N.B.—The word "master" or "teacher" will be held to include any registered practitioner whose pupil the applicant may be at the time. The certificate of examination must testify that the student has been examined in the subjects mentioned in Recommendation 4.

The above form of application, duly and legibly filled up, must be forwarded to the Registrar, post-free, and be accompanied by a certificate of the applicant's having passed a preliminary examination as required by the General Medical Council.

13. The Branch Registrar shall enter the applicant's name and other particulars in the students' *Register*, and shall give him a certificate of such registration.—14. Each of the Branch Registrars shall supply to the several qualifying bodies, medical schools, and hospitals, in that part of the United Kingdom of which he is registrar, a sufficient number of blank forms of application for the registration of medical students.—15. The several Branch Councils shall have power to admit special exceptions to the foregoing regulations as to registration for reasons which shall appear to them satisfactory.—16. A copy of the *Register* of medical students, prepared by each of the Branch Registrars, shall be transmitted, on or before the 31st of December in each year, to the Registrar of the General Council, who shall, as soon as possible thereafter, prepare and print, under the direction of the Executive Committee, an alphabetical list of all students registered in the preceding year, and supply copies of such authorised list to each of the bodies enumerated in Schedule (A) to the Medical Acts, and through the Branch Registrars to the several medical schools and hospitals.—17. The several qualifying bodies are recommended not to admit to the final examination for a qualification under the Medical Acts, any candidate (not exempted from registration) whose name has not been entered in the medical student's register at least forty-five months previously. In the case of candidates from other than schools of the United Kingdom, the Branch Councils shall have power to admit exceptions to this recommendation.—18. The Branch Councils are desired to take means to make these regulations known at the various medical schools.

CHAPTER III.—AGE FOR LICENCE TO PRACTISE, ETC.

19. That the age of twenty-one be the earliest age at which a candidate shall obtain a licence to practise, and that the age shall, in all instances, be duly certified.—20. That no licence be obtained at an earlier period than after the expiration of forty-five months subsequent to the registration of the candidate as a medical student.

CHAPTER IV.—PROFESSIONAL EDUCATION.

21. That the course of professional study required for a licence shall occupy at least four years, of which at least three winter and two summer sessions shall be passed at any school recognised by any of the licensing bodies mentioned in Schedule (A) of the Medical Act.—22. That the following are the subjects, without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered: 1. Chemistry, including a knowledge of the principles of Chemistry, and of those details of the science which bear on the study of Medicine, and Chemical Physics, meaning thereby Heat,

Light, and Electricity; 2. Anatomy; 3. Physiology; 4. Materia Medica and Pharmacy; 5. Pathology, including Morbid Anatomy; 6. Medicine, including Medical Anatomy, Clinical Medicine, and Therapeutics; 7. Surgery, including Surgical Anatomy and Clinical Surgery; 8. Midwifery; 9. Forensic Medicine.—23. That the Council will view with approbation any encouragement held out by the licensing bodies to students to prosecute the study of the natural sciences before they engage in studies of a strictly professional character.—24. That a certificate be required, by each licensing body, from every candidate for its degree, diploma, or licence to practise medicine or surgery, that he has studied vaccination under a competent and recognised teacher; that he has himself performed the operation successfully under the teacher's inspection; that he is familiar with the different stages of the vaccine vesicle, and with the methods of preserving lymph, and that he is thoroughly informed in every necessary part of the subject.—25. That such a certificate should be received by any licensing body only from an institution where the appointed teacher of vaccination is recognised by the Local Government Board.

CHAPTER V.—PROFESSIONAL EXAMINATION.

26. That it is desirable that the different licensing bodies, whether singly or in combination, should frame their examinations so as to secure that the knowledge of every practitioner whose name appears on the *Register* shall have been tested in all the subjects of professional education which the Council has determined to be essential, viz.: (as in Chapter IV, Recommendation 22).—27. That there be in future three professional examinations.—28. That the professional examinations be arranged in two divisions; the first division to embrace the more elementary subjects. The first division may be completed at or before the close of the second year of professional study, but the second division not till the expiration of two years after the passing of the first division, nor before the completion of the fourth year of study. That the examinations, and the subjects included in each, be such, and in such order, as may insure, so far as possible, a due continuity and sequence of study.—29. That the first division of the examinations shall include the following subjects: 1. Chemistry and Chemical Physics; 2. Anatomy; 3. Physiology; 4. Materia Medica and Pharmacy. That the second division shall include the following subjects: 1. Pathology, including Morbid Anatomy; 2. Medicine, including Medical Anatomy, Clinical Medicine, and Therapeutics; 3. Surgery, including Surgical Anatomy and Clinical Surgery; 4. Midwifery; 5. Forensic Medicine.—30. That it is desirable that an examination in the earlier subjects of professional study should take place before the end of the first year of professional study.—31. That the professional examinations be conducted both in writing and orally; and that they be practical in all branches in which they admit of being so.—32. That not less than two examiners shall take part in every oral and clinical examination.—33. That the questions to be answered in writing should be submitted to the whole body of examiners for consideration and revision, if desirable, before being proposed to the candidates.—34. That the written answers should be submitted to more than one of the examiners.—35. That excellence in one or more subjects should not be allowed to compensate for failure in others.—36. That the professional examinations be held by the several licensing bodies, except in special cases, at stated periods, to be publicly notified.—37. That returns from the licensing bodies in Schedule (A) be made annually, on the 1st of January, and in the subjoined form, to the General Medical Council, stating the number of the candidates who have passed their first as well as their second and third examinations, and the number of those who have been rejected at the first and second and third examinations respectively; and that the registrar forward a sufficient number of forms, with a notice for their being returned in due time.

*Table of Return of Professional Examinations and their Results.*

Licensing Bodies.	Degrees and Diplomas.	No of Examinations to be passed.	1st Ex.		2nd Ex.		Final
			No. rejected.	No. passed.	No. rejected.	No. passed.	

38. That it is not desirable that any University of the United Kingdom should confer any degree in medicine or surgery, whether that of bachelor, doctor, or master, upon candidates who have not graduated in Arts, or passed all the examinations required for the Bachelorship

\* Insert name of school, or hospital, or place of apprenticeship, as the case may be.



in Arts, or passed, after due course of education, examinations, such as are, *bonâ fide*, academically equivalent to those required for a degree in Arts.—39. That in the opinion of the Council it would be desirable, as a general rule, that none of the higher degrees or qualifications in medicine or surgery should be conferred on persons who have not shown evidence of higher professional attainments.—40. That it is desirable that in the examinations on several of the subjects of the curriculum, such, for example, as chemistry, including chemical physics, physiology, and materia medica, the licensing bodies should limit and define by schedule the extent of examination.—41. That it be recommended that in no case should the examination of a candidate by any of the licensing bodies in any subject be conducted wholly by the lecturer or teacher in that subject in the school in which the candidate has been educated.—42. That it is desirable that observation with the microscope should form part of the examinations of candidates for a licence.—43. That it be recommended that candidates for the final professional examination be required to give evidence that they have had opportunities of practical study, with care of patients, as pupil, assistant, clinical clerk, or dresser, in hospital, dispensary, or elsewhere.—44. That it is desirable that, in examinations in anatomy, candidates should understand that they may be called upon to perform actual dissections, and that candidates in examinations in surgery should understand that they may be called upon to perform one or more operations on the dead subject.

### ABUSE OF HOSPITALS.

THE following is the report of a sub-committee of the Liverpool Medical Institution, appointed to consider the question of gratuitous medical advice, as afforded by the public institutions of the town.

I. The committee are of opinion that the relief at present afforded to the in-patients of the various hospitals and infirmaries of the town is warranted by the severity and urgency of the cases admitted, and does not call for further comment. Their remarks apply to gratuitous advice and attendance afforded to out-patients, either at hospitals and dispensaries, or at their own homes.

II. They consider that, in this latter respect, public charity is greatly abused by persons receiving it who are quite in a position to contribute something towards obtaining medical attendance; that the multiplying of charitable institutions, by producing separate interests and requiring separate buildings and staffs, involves a waste of public money which might be better applied to maintaining the great leading charities in a highly effective condition; that, with the present diffuse mode of administering medical charity, no systematic inquiry into the circumstances of persons applying for it is made; that its indiscriminate distribution tends to destroy the self-reliance of the working classes, and to encourage improvidence and pauperism; that, in consequence of the number of unsuitable cases applying for treatment, the medical officers are unable to devote sufficient time to really serious cases, while it greatly hinders the scientific study and treatment of disease.

III. *Statistics of Liverpool Charities, and proportion of persons relieved to population.*—The accompanying figures give an estimate of the number of out-patients attended to at the various public institutions of the town of Liverpool during the year 1876:

Royal Infirmary	...	...	4,534
Dispensaries	...	...	67,346
Eye and Ear Infirmary	...	...	9,479
Northern Hospital	...	...	3,456
Royal Southern Hospital	...	...	6,840
Infirmary for Children, Myrtle Street	...	...	8,711
Dental Hospital	...	...	5,367
St. George's Hospital for Diseases of the Skin, Granville Street	...	...	1,000
Infirmary for Cancer and Skin-Disease, Islington	...	...	6,003
Stanley Hospital	...	...	8,801
St. Paul's Eye and Ear Infirmary	...	...	2,106
Ladies' Charity, etc., Myrtle Street	...	...	1,516
Hospital for Consumption	...	...	2,309
Medical Mission, (a) Burlington Street	...	...	12,725
" (b) Beaufort Street	...	...	7,094
Homœopathic Dispensary	...	...	20,324
Bootle Borough Hospital	...	...	4,983

172,524

The number of paupers relieved by the "parish authorities" during

the same period, either by admission into hospital or otherwise, is estimated thus:

Admitted into workhouse	...	...	10,737
Relieved outside	...	...	5,145

The population of the town is estimated at 521,544.

IV. The committee feel that, as the present unsatisfactory condition of matters has been one of gradual and slow development, it will be impossible at once to effect any serious or sweeping changes in the present constitution of the charities administering out-door relief; but they would desire to bring prominently before the medical profession and the public two means by which they think some improvement might be effected, and which are already in successful operation in other towns.

(a) They strongly recommend that more general support be given to the Charity Organisation Society, one of whose main objects is to inquire into the necessities of persons requiring medical or other relief, and they think that the existing medical charities ought to bring themselves into more direct connection with it; they do so, in view of the fact that the present system of admission by governors' or subscribers' recommendation is undoubtedly much abused, as it by no means ensures that the applicant's means, or the urgency of their cases, have been properly inquired into.

(b) They desire to advocate the introduction of the provident dispensary system, or some modification of it, by which the patients contribute something, however small, for their medical attendance. By this means they cease to receive relief *in formâ pauperis*, while by the aggregation of the small sums paid by them, some remuneration is made to the medical officers.

### EPIDEMIC DIPHTHERIA IN RURAL DISTRICTS.

DR. SQUIRE, in his article on Diphtheria in Reynolds's *System of Medicine*, asserts that this disease existed in the earliest ages of medical history. The disease, however, has only been known by this name since Bretonneau investigated the epidemic at Tours in 1818 and so named it. It is even now sometimes described in medical certificates as putrid sore-throat or cynanche maligna. The disease was, however, severely epidemic in France in 1855-57, and, about the same time, became fatally prevalent in England. It first appeared under a separate heading in the Registrar-General's nosological classification in the Report relative to the year 1859. In this year, the disease was epidemic, and the deaths referred thereto were equal to 492 per million persons living, since which the highest rate from the disease was 320 per million in 1863, whereas in 1863 the rate did not exceed 94. The fatality from diphtheria appears to fluctuate in sympathy with that from scarlet fever.

Diphtheria appears to be generally accepted as one of those diseases which have aptly been described as "filth-diseases"; but there is a somewhat remarkable feature in its fatality which distinguishes it from other diseases of this class. Unlike most other zymotic diseases, diphtheria is far more fatal in rural than in urban districts. Dr. William Farr, in his letter to the Registrar-General in the Supplement to the thirty-fifth Annual Report, calls attention to the fact that, of 1,000 children born, 4.9 die of diphtheria in the whole of England and Wales, 4.4 in Liverpool, and so many as 10.3 in the healthy districts of England and Wales which are exclusively rural. The numbers in a thousand born who die from all zymotic diseases other than diphtheria are 161 in all England and Wales, 281 in Liverpool, and but 115 in the healthy districts. Now, the annual death-rate from all causes in the ten years 1861-70 was 22.5 per 1,000 in England and Wales, 38.7 in the district of Liverpool, and only 16.9 in the healthy districts.

Why diphtheria, which is one of the most distinctly contagious of all zymotic diseases, is so far more fatal in sparsely populated rural districts than in densely populated urban districts, would be an interesting subject for investigation. This is a fact which is continually being exemplified by epidemic outbreaks of diphtheria in rural districts and small villages, which are noted from time to time in the Registrar-General's quarterly reports. One of the most noticeable of these outbreaks occurred during the past summer in the village of Brilles, which is situated in the rural sanitary district of Shipton-on-Stour. This outbreak was the subject of a special investigation by Mr. W. H. Power, one of the Local Government Board medical inspectors, whose report contains information which, while it allays any surprise that the epidemic should have been there so fatal, does not assist to explain why the disease seldom, if ever, assumes a similarly fatal epidemic character in crowded towns, where the sanitary condition appears to be fully as favourable to the development of filth-diseases.



The village of Brailes, which is described as very old, has a population of 918 persons, and consists of a single street extending over upwards of a mile of the high road between Shipston and Banbury. With regard to the houses, a considerable proportion are described as being so built that free circulation of air is next to impossible. Many of the older cottages are small, ill-contrived, have insufficient window space, and, in some instances, the small windows are not made to open. There are cottages without back doors or back windows, and, in addition, so dilapidated as to be, in their present condition, quite unfit for human habitation. The water-supply is said to be abundant, and is derived from wells and springs. The wells are, however, for the most part but surface-wells, yielding water which, from its taste, smell, and colour, is obviously unfit for drinking purposes. The water, moreover, of some of the wells, not presenting the same objectionable physical characters, has been proved by analysis to contain an excessive proportion of organic impurity. Springs in the immediate vicinity of the village are abundant, but the greater part of the water is allowed to run to waste, finding its way to a neighbouring brook, which is much polluted from various sources. There is in the village no organised system for excrement disposal; pit-privies are in general use, which are not even professedly water-tight, and, in some instances, they discharge directly over water-courses. Neither is there any system of drainage, except such as is provided by rubble drains on the high roads, which convey in ordinary weather storm-water and some slop-water to the water-courses.

With regard to the previous health history of the village of Brailes, there is no evidence of its having been especially prone to the prevalence of epidemic disease. During the past twenty years, scarlet fever has twice been fatally prevalent, and in six months of 1870-1 caused ten deaths; but there is no record of diphtheria having ever been epidemic in the village previously to the recent outbreak.

The recent epidemic appeared about the beginning of May, and, in the fifteen weeks ending August 12th, 48 cases occurred in twenty-five of the houses, causing 23 deaths. The severity of the outbreak is shown by the fact that 48 per cent. of the cases proved fatal. It may here be noted that, up to November 18th, the deaths from diphtheria since the beginning of the outbreak had been 28, showing a proportion of 3.1 per cent. of the population at all ages. Mr. Power's report, however, only deals with the 48 cases and 23 deaths which occurred prior to August 12th. Of the 48 cases of attack, 44 were of children aged under fifteen years and 4 were of adults; 13 per cent. of the children living under fifteen years of age were attacked, whereas the proportion among adults was less than one per cent. Not one of the adult cases proved fatal, but the proportion of deaths to attacks was 52 per cent. among children. The percentage of deaths to attacks among children was greatest among infants under three years of age and declined in each group of three years; no case proved fatal over the age of twelve years. Only one child was, however, attacked under three years of age, which case proved fatal.

The disease appeared almost simultaneously in the early part of May in two families in Brailes, and all attempts to trace the outbreak to contagion failed. The two houses in which the disease first occurred were situated in different parts of the village, and differed in character to a remarkable extent. One was small, old, badly constructed, having neither back doors or back windows, was overcrowded, and needed both cleansing and repair; the other was a comparatively new cottage, and had no such defects, which, however prejudicial to health, can hardly, in the present state of our knowledge of the causation of diphtheria, be said to have produced the disease. Examination of the water-supply, drainage, and privy-accommodation of the two dwellings failed to throw any special light upon the cause of the outbreak in these two dwellings; neither did the inspection satisfactorily elucidate the variable incidence of the epidemic upon the 215 families living in Lower and Upper Brailes, of whom 25 were attacked and 190 escaped infection, notwithstanding reckless communication of the sick and healthy children.

With regard to the dissemination of the disease, Mr. Power appears to have carefully investigated the effect thereon of attendance at schools. In Brailes village, there were, at the time of the investigation, 341 children under fifteen years of age, of whom 232 were attending school and 109 not attending school. Sixteen per cent. of the children attending school were attacked and only six per cent. of those not attending school. These figures at first sight appear to show that school attendance had an important part in the dissemination of the disease; but a careful examination of the facts enabled Mr. Power to discover that nearly all the children who stayed at home were aged either less than three or more than twelve years, and thus contained but a small proportion at those ages when children appear to be most susceptible of attack. It was also found that thirty-one children belonging to fifteen

families living outside the village attended the schools at Brailes, but not one of them was attacked by the disease. Taking these facts into account, Mr. Power concludes that it is unsafe to assert that school attendance had any of that influence in spreading diphtheria which a casual consideration of the figures might lead one to suppose, as the disease was proportionately introduced into other families more frequently by children who were not at school, than by children who were attending school. The difficulty attending the discovery of the law which governs the contagion of the virulently fatal type of diphtheria in Brailes is enhanced by the knowledge that, in a large number of instances, persons living in the same room, sleeping in the same, or, at the farthest, the next room, and often in the same bed with diphtheria patients, escaped contagion. Of those exposed to contagion, very few were attacked under three years of age or over twelve years, whereas two-fifths of the children between three and twelve years contracted the disease.

The large proportion of the attacks to population, and the exceptional proportion of mortality to cases in the Brailes epidemic, afford ground for satisfaction that diphtheria seldom assumes an epidemic form in large towns, although the explanation of this fact still supplies a problem for solution. If Liverpool were to be attacked by an epidemic of diphtheria equally fatal to that from which the village of Brailes has recently suffered, the deaths within the borough would exceed sixteen thousand. As, however, isolated cases of diphtheria do from time to time occur in nearly all large towns (they average about seven a week in London), it appears evident either that the disease is of a far less virulent type than that which occasionally attacks rural villages, or that there are some special conditions prevailing in the population of some villages which are more favourable to the development of the disease than are the sanitary defects which still exist in so many of our large towns. Mr. Power remarks that the prevailing disease in this Warwickshire village of Brailes is a type of low fever, probably the combined effect of the unsatisfactory conditions of the dwellings, and the poor quality of the food upon which the agricultural population in some of our counties are, from low wages, forced to subsist.

Copies of Mr. Power's report have been sent to the guardians of Shipston-on-Stour, as the rural sanitary authority, but no copy has been furnished to Mr. W. H. Hitchens, the medical officer of health; this appears to be either an unaccountable oversight or the result of a most objectionable policy upon the part of the Local Government, as the central health authority. The suggestions made by Mr. Power for improving the sanitary condition of Brailes include the adoption of some organised system for excrement disposal and general drainage; a system of water-supply which might be inexpensively obtained by impounding the natural springs at their source; a general improvement in the condition and construction of the dwellings, and the closing of all those which are manifestly unfit for habitation; and, lastly, the provision of hospital accommodation for the isolation and treatment of cases of infectious diseases occurring in Brailes and in other parts of the Shipston-on-Stour sanitary district.

It remains to be seen how far this sanitary authority will carry out these suggestions, which, under our permissive system, may unfortunately be disregarded now that the epidemic of diphtheria has abated. The authority and the owners of the cottage property will, however, incur a grave responsibility by disregarding the severe warning afforded by this remarkable visitation.

#### HARVEY TRICENTENARY MEMORIAL FUND.

WE are requested to state that subscriptions for the erection of a statue of Harvey, the discoverer of the circulation of the blood, and father of English physiological science, at Folkestone, his birth-place, are earnestly requested. They may be sent to Sir G. Burrows, Bart., M.D., F.R.S., 18, Cavendish Square, London, W.; or Mr. Prescott Hewett, F.R.S., 1, Chesterfield Street, Mayfair, London, W., the temporary, honorary treasurers; or to Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W., or Mr. W. G. S. Harrison, B.A., town clerk, Folkestone, the honorary secretaries; or they may be paid to the account of the fund at the Western Branch of the Bank of England, Burlington Gardens, London, W. A meeting of the committee, of which the Right Hon. the Earl of Derby is chairman, will shortly be held for the purpose of commissioning a sculptor to undertake the work.

It is most desirable that this very excellent project should be completed during the present London season, inasmuch as the three-hundredth anniversary of Harvey's birth will be upon us next year. We would, therefore, strongly urge upon our readers the necessity of



sending in their donations at once. It must no longer be a reproach to scientific Englishmen that, though statesmen, warriors, and poets are honoured in our midst with statues, not one public monument is found to demonstrate the admiration felt by his countrymen for the great work in physiological investigation achieved by William Harvey.

## SPECIAL CORRESPONDENCE.

### THE MEDICAL PROFESSION IN INDIA.

[FROM OUR OWN CORRESPONDENT.]

*Landing at Bombay.—Journey Inland.—Deolalee.*

My last letter brought the voyage in one of the Indian troop-ships to an end in the beautiful harbour of Bombay. The city is about half a mile off, and the white and red buildings intermixed with dark-green tropical foliage are pleasing to the eye. The tall broad-leaved coconut palms are seen growing in all directions. But one has hardly time to look round, when the health-officer comes on board to inquire if there is any contagious or infectious disease. Generally there is a clean bill of health, all the men, women, and children having been medically inspected the previous day, to find out if there are any symptoms which might be suspicious. After the health-officer has left the ship, permission can be obtained from the captain, and the officer commanding the troops, to go on shore. Before doing so, however, an interview has to be held with the Custom House officer; but matters are very pleasantly arranged by him. Every officer on board has had a paper given him a week previously, and in it he enters everything he has with him. All articles for personal use are allowed to go free; the amount payable on other things is noted, and thus all the bother and confusion of unpacking and packing boxes are avoided. If there be any sick who cannot travel at once, they are sent to the military hospital at Colaba, close by. The troops have one day allowed to clean accoutrements and brush up before landing. Every medical officer has to report his arrival personally to the Surgeon-General of the British or Indian Medical Department, as the case may be. So, having buckled on one's sword and put on the white helmet (which is now made light and comfortable, and a capital protection against the rays of the sun), one of the boats that swarm round the ship is entered, and the boatmen, clad in the lightest attire (with only a turban and a cloth round their loins generally), pull on shore. Everything is strange to a man visiting India for the first time, but all the new sights and the clear balmy atmosphere give a feeling of buoyancy to the spirits that is very enjoyable. Having landed, and procured a four-wheeled conveyance called a *gharry*, drawn by a wretched four-legged animal called a horse (this is the place to appreciate that well-abused vehicle, a London cab), one proceeds rather slowly through the dusty streets to the office of the principal medical officer. Progress is frequently impeded by the loudly creaking country carts, made of bamboo, and drawn by two bullocks, the driver using the tails as reins, which he pulls at and twists sometimes energetically to make the beasts quicken their pace. Having arrived at the building, and sent up a card, a well-dressed native messenger shows the way to the room where the surgeon-general is. There orders are received where one is to go. The Indian medical officers are detailed for the three different Presidencies of Bombay, Bengal, and Madras, in England; but officers of the British Medical Service may be required, on an emergency, to proceed anywhere. However, as a rule they accompany the troops with which they have come out, and most of them travel as far as Allahabad, where final orders await them. The officers of the Indian Medical Service usually go at once by rail to Madras or Calcutta, according to their Presidency, to study the languages, before being attached to native regiments. Of course, those for Bombay are already at home, *pro tem*. The British medical officers disembark with the troops. Let us follow for a while the fortunes of one of the latter.

Having returned on board, and received instructions officially from the Assistant Quarter-master General or the Brigade Major as to the portion of the troops to which he is to afford medical assistance, preparations are made for disembarkation next day. Final entries are made in the case-books of any severe attacks of illness, especially those requiring extras, wine, etc. Some cases of pneumonia have sometimes to be recorded; but the sick list, except for venereal patients, is small. However, returns showing the name of every man who has been in hospital have to be prepared, and separate ones for those sick who are sent to Colaba. When the time for disembarkation has arrived, two flats towed by a steamer come alongside. The sick, women, and children go ashore first; then the men are taken off in two batches. Nearly one hour is occupied in

wending our way through a number of merchant vessels and a few men-of-war, and then we land at the Carnac *bunder* (wharf). The usual place of landing is the Apollo *bunder*, but the railway comes to the water's edge at the former one, and the troops just march out of the flat into a train. So they are not allowed to go into Bombay at all: a very wise precaution, as after the voyage a great many of them would be sure to get drunk, probably on liquor drugged with *bang* (cannabis Indica) which would first madden them and then leave them comatose. Besides, the chances are that a good many would contract venereal disease in the low haunts of the town; precautions are therefore taken to prevent all this. Meanwhile, the heavy baggage has been landed and sorted, and all is ready for a start. The sun being very powerful, the troops travel by night and rest at the halting camps during the day-time. As the men have to be packed close, of course they cannot lie down, but the nights are cold and they do not suffer much discomfort. But if there are a number of women and children, especially infants in arms (as is almost sure to be the case), they have rather an uncomfortable time. But the management of women and children with soldiers travelling is always a difficult business, and gives more trouble than all the rest of the work put together. Some of them, though, are very much to be pitied. The officers and their wives journey in comparative luxury. Each long seat of a first-class carriage can be converted into a sofa-bed, so they can have a sound sleep all night. It takes some time for all to get into their places, but at last, in the cool of the evening, the train starts for Deolalee, the halting dépôt, about one hundred and thirty miles from Bombay. There is a steep ascent up the Western Ghats, as the range of hills running down the Malabar coast are termed. Deolalee is nearly two thousand feet above the level of Bombay, and the trains are pulled up zig-zag by means of reversing stations, on the same principle as the trains used to go over Mount Cenis before the great tunnel was cut. The scenery is very grand, but those travelling by these special troop-trains lose the treat of seeing it. The change of temperature during the ascent is very marked, and during the early morning great-coats and rugs are gladly made use of. About twelve hours after leaving Bombay, the train is shunted on to a siding close by the barracks, and the party fall in on the platform and are marched to their breakfasts, which are waiting for them.

Deolalee is situated on a plateau formed, like the hills around, by the eruption of igneous rocks. Granite is seen cropping up out of the ground in all directions. Consequently the place was formerly very bare, but now pretty little gardens are beginning to make the cantonment look pretty, and young trees are coming up; but the soil in which they grow has to be made, and well manured, as naturally it appears to be nothing but the detritus of granite. There are a good many barracks, but at certain times, when the place is crowded with troops both coming from and going to Bombay, some of the men have to be put into tents. There are sufficient quarters generally for all the officers, and there is a very nice mess. The married officers have sets of rooms in wooden huts, which were sent to Abyssinia, and after the campaign brought back to Bombay, and finally erected at Deolalee.

What strikes a person at first is the power of the sun during the middle of the day and the great cold at night. The rapid variation of temperature is very trying to a great many, and slight feverish attacks are consequently frequent. A consideration of this matter may form the subject of some future remarks, but, with regard to what has been recently written by several observers, it seems probable that a sudden chill in a tropical climate *alone* will sometimes give rise to symptoms not to be distinguished from true ague; although, after a careful perusal of the evidence on both sides, it seems impossible to account for the epidemics of so-called malarious fever solely by the *chill theory*.

A halt is generally made at Deolalee for three or four days, and then the detachments start for Allahabad.

THE foundation-stone of a new Institute for the Deaf and Dumb of Manchester and the district has been laid by Mr. Hugh Birley, M.P. The estimated cost of the building and its furniture is £3,500, and the committee need about £1,000 to make up this amount. The number of deaf-mutes under the supervision of the chaplain (Mr. Downing) is stated to be 400.

DEPUTY SURGEON-GENERAL NEIL HENRY STEWART, M.D., medical charge of the Lahore Division of the Bengal Army, died on April 22nd, when on the eve of his departure for England. Dr. Stewart, who joined the Army Medical Department in December 1848, became Surgeon in June 1855; Surgeon-Major, August 1857; and Deputy Surgeon-General, April 28th, 1876. He was for several years in medical charge of the 9th Foot, and was also Surgeon to the 3rd Dragoon Guards, with the wing of which regiment he served in the Abyssinian campaign, and was present at the fall of Magdala.



## ASSOCIATION INTELLIGENCE.

## EDINBURGH BRANCH.

THE annual general meeting of the above Branch will be held at 5, St. Andrew's Square, on Tuesday, June 12th, at 4 P.M.

CHARLES E. UNDERHILL, *Honorary Secretary*.

Edinburgh, May 30th, 1877.

## SOUTH EASTERN BRANCH.

THE thirty-third annual meeting of this Branch will be held at the Burlington Hotel, Eastbourne, on Wednesday, June 13th, at half-past Twelve o'clock.

The President-elect kindly invites members to luncheon after the meeting.

Sundry excursions will be made in carriages provided by the Local Committee.

Dinner will take place at the Burlington Hotel, at Five o'clock precisely. Tickets (exclusive of wine), 7s. each.

A meeting of the Executive Council of this Branch will be held at the Burlington Hotel, Eastbourne, on Wednesday, June 12th, at 12 noon.

CHARLES PARSONS, M.D., *Honorary Secretary*.

2, St. James's Street, Dover, June 5th, 1877.

## THAMES VALLEY BRANCH.

THE next general meeting will be held on June 14th, at the Griffin Hotel, Kingston, at Five o'clock.

Papers will be read by—1. Dr. Fenn: On Nocturnal Enuresis. 2. Dr. Hooper: On Post-scarlatinal Uræmia. 3. Dr. Atkinson.

Dinner at the above hotel at Seven o'clock. An immediate reply is requested from those intending to be present.

F. P. ATKINSON, M.D., *Honorary Secretary*.

Surbiton Road, Kingston-on-Thames, June 6th, 1877.

## SOUTHERN BRANCH.

THE fourth annual meeting of the Southern Branch will be held at the Royal Hotel, Winchester, on Wednesday, June 20th, 1877, at 1 P.M.

An Address will be delivered by the President-elect, F. J. BUTLER, Esq., M.D.

During the afternoon, the members will have an opportunity of visiting the various places of interest in the locality.

The dinner will take place punctually at Five P.M. Tickets, 14s. each, including wine.

The Committee particularly request that those gentlemen who intend to be present at the dinner will send in their names to Mr. T. C. LANGDON, Winchester, on or before Monday, the 18th instant.

J. WARD COUSINS, M.D., *Honorary Secretary and Treasurer*.

Southsea, June 6th, 1877.

## BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE annual meeting of this Branch will be held at the Midland Hotel, New Street, Birmingham, on Tuesday, June 26th, at 3 P.M. An Address will be delivered by the President, SAMPSON GAMGEE, Esq., F.R.S. Edin.

The annual dinner will also take place at the Midland Hotel, at 5 P.M. precisely, for the convenience of country members. Dinner tickets, exclusive of wine, 7s. 6d. each. Members intending to be present are requested to communicate with the Honorary Secretaries on or before June 23rd, in order that suitable arrangements may be made.

JAMES SAWYER, M.D.,  
EDWARD MALINS, M.D., } *Hon. Secretaries*.

Birmingham, May 29th, 1877.

## CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.

THE annual meeting of the above Branch will be held in the Board Room of the Saffron Walden Hospital, on Tuesday, June 26th, at 2.15 P.M.: HENRY STEAR, Esq., President, in the Chair.

Gentlemen intending to read papers, or be present at the dinner, are requested to inform the Secretary on or before June 19th.

Dinner will take place at the Rose and Crown Hotel, at 6.15 P.M. Tickets (including wine), 12s. 6d. each.

J. B. BRADBURY, M.D., *Honorary Secretary*.

Corpus Buildings, Cambridge, May 28th, 1877.

## YORKSHIRE BRANCH.

THE annual meeting of this Branch will be held at the Museum, York, on Wednesday, June 27th, at 2.45 P.M.

The members will dine at the Black Swan Hotel at 5 P.M. Tickets, 6s. 6d. each.

Gentlemen intending to bring forward communications, or to join the dinner, are requested at once to communicate with the Local Secretary.

W. PROCTER, M.D., *Honorary Secretary*.

24, Petergate, York, June 6th, 1877.

## LANCASHIRE AND CHESHIRE BRANCH.

THE annual meeting of this Branch will be held at the Medical School, Dover Street, Liverpool, on Wednesday, June 27th, at 1 P.M.: President, GEORGE WOODS, F.R.C.S.; President-elect, Dr. STEELE.

The dinner will take place at the Adelphi Hotel, at 5 P.M. Tickets (exclusive of wine), 7s. 6d. each.

Notice of papers (which must not exceed fifteen minutes) should be forwarded at once to the Honorary Secretary.

E. J. LEECH, *Honorary Secretary*.

96, Mosley Street, Manchester, June 4th, 1877.

## EAST ANGLIAN BRANCH.

THE annual meeting of the above Branch will be held at the Magistrates' Room, Diss, on Thursday, June 28th, at 2.30 P.M.: T. E. AMYOTT, Esq., President, in the Chair.

Dinner at the King's Arms Hotel at 5 P.M. Tickets, 12s. 6d. each.

The President kindly invites members to luncheon at his residence at One o'clock.

Members intending to read papers and cases, or to exhibit pathological specimens, or to join the dinner, are particularly requested to communicate as early as possible with one of the Honorary Secretaries, in order that proper notices may be given.

B. CHEVALLIER, M.D., Ipswich,  
J. B. PITT, M.D., Norwich. } *Honorary Secretaries*.

Norwich, June 1st, 1877.

## SOUTH WALES AND MONMOUTHSHIRE BRANCH: SPRING MEETING.

THE ordinary spring meeting of the South Wales and Monmouthshire Branch was held at the Swansea Hospital on May 15th; ANDREW DAVIES, M.D., President, in the Chair. Eighteen members attended.

*New Members*.—Six gentlemen, already members of the Association, were declared members of the Branch.

*Communications*.—1. Mr. J. H. WATHEN (Fishguard) read notes of a case of Extra-uterine Fœtation, in which the fœtus was removed successfully by incision *per vaginam*, labour-pains having set in several days previously.

2. Mr. RUSSELL (Neath) related a case of Gangrene of the Eyeball.

3. Mr. J. G. HALL (Swansea) read notes of a case of Ununited Fracture of the Humerus, in which the ends of the bones had been resected and brought together with silver wire. The patient's age was thirteen, and the result was entirely successful.

4. Mr. PADLEY (Swansea) gave an account of a case of Acute Ovaritis (right) with Suppuration, discharged *per cæcum*; a second collection being got rid of by absorption.

*Habitual Drunkards*.—A petition in favour of compulsory detention of habitual drunkards with a view to their cure, was adopted and signed by almost every member present.

*Dinner*.—The members dined together at the Mackworth Hotel in the evening.

Dr. C. J. B. Williams, F.R.S., who was in the neighbourhood on a visit, attended and took part in the meeting as a visitor.

*The Annual Meeting* will be held at Brecon, on July 11th next; President-elect, Talfourd Jones, M.B.

## SOUTH-EASTERN BRANCH: WEST KENT DISTRICT.

THE second meeting for the twentieth session was held at Gravesend on May 25th; Dr. MONCKTON, the President of the Branch, in the Chair. Twenty gentlemen were present.

The Honorary Secretary was re-elected; and C. H. C. Huddart, B.A., M.B., of Greenhithe (already a member of the Association), was admitted a member of the Branch.



*The late Dr. Carr.*—A vote of condolence to the widow of the late William Carr, Esq., was passed, and ordered to be conveyed by the Honorary Secretary to the son, Dr. W. W. Carr.

*Meetings.*—The meeting took into consideration the number and character of the district meetings, and it was resolved to hold two meetings next session—one at Maidstone in November, and one at Rochester in the spring of 1878. Evening meetings might be convened, if called for by the members.

*Papers.*—The following papers were read.

1. A Case of Excision of the Knee-joint, with pathological specimen and a splint for the after-treatment. By F. B. Jessett, Esq.
2. A Case of Cleft Palate and Harelip in a Child aged 8 years. By F. B. Jessett, Esq.
3. Two Cases of Mechanical Obstruction of the Bowel caused by Accumulation of Fæces, reduced by large Enemata and Galvanism. By F. B. Jessett, Esq.
4. A Case of Tumour of the Mediastinum (cancerous), with pathological specimen. By F. B. Jessett, Esq.
4. A Case of Hæmorrhage from the Retroflexed Uterus: with Remarks. By J. Braxton Hicks, M.D., F.R.S.
6. A Case of greatly Enlarged Kidney, with Abscess of its lower portion, accompanied by fæcal accumulation, but without urinary indications of its existence. By R. I. Nisbett, Esq.

*Dinner.*—The members and visitors adjourned to dinner to the number of sixteen.

## CORRESPONDENCE.

### COMMISSIONS OF LUNACY.

SIR,—In the JOURNAL of the British Medical Association of May 26th, you make a charge against me, who am a member of the Association, that I “appeared for the defence” at a certain lunacy inquiry, where the case was so clear that the jury did not think it necessary to go seriously into it. In the JOURNAL of June 2nd, I pointed out to you that, by my advice, no defence was made or contemplated on that occasion, and that the course advised by me, and pursued by counsel, met with the emphatic approval of the Master who presided. You do not controvert that statement, but, without any acknowledgment of the injustice which you have done, pass away from the inquiry to new matter, founding another charge, either of ignorance or of dishonesty, on garbled extracts from an affidavit made by me six weeks before the inquiry. I would fain believe your possession of that affidavit, and the use which you have made of it, to show—that the annotation betrayed—that you have unwittingly allowed an interested party to use your columns to slander me.

As a member of the Association, permit me once more to call your serious attention to the gravity of the offensive imputation, and to request you either to substantiate or retract it. That is the present issue between us. When it is settled, I shall be quite ready, if necessary, to go into the question of the lady's capacity to manage her affairs, concerning which you have seemingly been as ill informed as about the law relating to the bearing of insane delusions upon civil capacity.

I will not inquire now whether the Master's opinion or yours, as to what lies within the province of a jury, is right. I take leave to prefer the Master's; but I may remark that your statement, “that it is for the Lord Chancellor and the Justices, through their officers, to decide about the arrangements for the care of the patients”, is not altogether ingenuous, seeing that the responsible officer, who is their representative in the matter, is the Master who tries the case.

Your obedient servant, “A WELL-KNOWN ALIENIST.”

### THE HOMŒOPATHIC SCHISM.

SIR,—The forthcoming meeting of the British Medical Association in Manchester affords such an opportunity of holding out a hand of reconciliation to the homœopathic practitioners that, for some months past, I have debated whether or not to solicit the general feeling of the profession upon the subject. The matter might, and probably would, have remained a mere thought, had it not been for Dr. Richardson's communication, enclosing Dr. Wyld's letter, in last week's *Lancet*. The frank and manly tone of Dr. Wyld's letter encourages me now to hope, more strongly than ever, that this reconciliation may, after all, be effected, and without any sacrifice of principle on our part. Homœopathy is understood to mean the doctrine that “like cures like”, including, as a lesser law, the doctrine of the infinitesimal dose. It appears from Dr. Wyld's letter, that both these dogmas are now aban-

doned; and when we further learn that homœopaths decry the very name of homœopathy, we may for a moment wonder why their Ishmael-like condition continues, and whether we have any right longer to exclude them from our societies and our consultations. The fact is, however, that something peculiar does cling to them still; and that, in their materia medica and their method of administering certain drugs, we find distinctive features; but I think, in reference to this point, it may be affirmed, in the first place, that their crotchets are not a jot more objectionable than crotchets held by many of our own body as to the *modus operandi*, the dose, and the use of remedies; and secondly, it may fairly be argued that, in such works as those of Dr. Sydney Ringer and Dr. Charles Phillips, we cannot fail to see how largely beneficial an extensive knowledge of the homœopathic *Pharmacopœia* has been to us.

In thus urging, with Dr. Richardson, the burial of the hatchet, no one can accuse me any more than him of homœopathic proclivities. I have written against the fatuity of their pseudo-laws more than once, and have been singled out by the homœopathic press for special vituperation; but if their leaders, like Dr. Wyld, publicly announce that they have abandoned their doctrines, that they have practically struck their flag, I think it ill becomes us to maintain the feud, or, by a paltry jealousy, to continue to exclude from our discussions a body of gentlemen educated on the same lines with ourselves.

May I then hope, sir, to gather the feeling of the leaders of our profession upon this momentous question, in order that, if it be favourable to a reconciliation with that moderate party represented by Dr. Wyld, we may extend our invitation to them to our annual gathering, and then finally extinguish the bitterness of the discussions which have separated us for so many years.—I am, sir, yours, etc.,

Manchester, June 5th, 1877.

S. M. BRADLEY.

### SERBIAN HOSPITALS.

SIR,—A statement in the BRITISH MEDICAL JOURNAL of last week, under the heading of “Serbian Hospitals”, based upon an account in the *Glasgow Herald*, calls for some remarks from me.

The English Hospital at Belgrade was opened by the representatives of the National Aid Society, at the instance and by the advice of the Serbian authorities and the English Consul-General. In November, the Society resolved to discontinue on December 1st its operations in Serbia, deeming that, with the cessation of hostilities, the Serbian Government might well be left to undertake the care of the patients remaining in the hospital. I stated to the English Consul-General that it was, in my opinion, desirable that the hospital should be maintained some time longer in other than native hands; and I expressed to him my intention of undertaking its continuance, with the consent of the Serbian Government, hoping to find in England public or private support. My reasons for this course were that the hospital contained, at the time, above ninety cases, many of them severe; that the Serbian treasury was known to be in an exhausted condition; that adequate surgical treatment would be found wanting; and that the admirable state of the hospital, with its well-devised arrangements and considerable quantities of stores, due to the forethought and liberality of the Society's managers, would render it no impossible task for me to maintain the hospital, with comparatively slight pecuniary assistance, until a great proportion of the patients were cured or out of danger. I was fortunate enough to be aided by two of the surgical staff, Dr. Wattie and Mr. Hume, who kindly offered to stay as long as there should be need for their services, by an Austrian surgeon, and by an efficient nursing staff, composed of Serbian ladies who had tended the wounded in various parts of the country during the campaign. The total expense of carrying on the hospital, from December 1st until April 1st, was a little over £700, towards which aid was received to the extent of £330. The National Aid Society sent a contribution of £100, and generously continued to my colleagues and myself our allowance of £1 *per diem* until February 1st. That we should not have received more support from other sources, we naturally regretted; but we quite understood that there was at the time little sympathy in England for the Serbians.

It will be seen that it is not the case that the English Hospital at Belgrade was established through the intervention of myself and others, but that it was established and supported, until after the end of the war, by the National Aid Society. It cannot be held just to blame the Society for not longer maintaining the hospital, seeing that it must have seemed little likely, except to those on the spot intimately acquainted with the existing conditions, that the Serbian authorities were not fully able to take charge of their sick and wounded when the fighting had come to an end. As to the Serbian Government, I am not aware that they have “openly avowed total indifference to the suffer-



ings of their soldiers", although the somewhat apathetic character of the Servian nature may have led some observers to debit them with such indifference.—I am, sir, yours obediently,

Carlton Chambers, June 6th, 1877.

F. L. ATTWOOD.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### THE POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

At a Council meeting, held on Tuesday, the 5th instant, it was resolved that it was expedient to adjourn the Annual General Meeting of the Association from Thursday, June 21st, as *previously* announced, to Tuesday, July 3rd. The meeting will be held at 3, Bolt Court, Fleet Street, at 3 P.M. precisely, when several matters of much interest to the Poor-law Medical Service will be brought under consideration. The Council, therefore, earnestly hope that all members and friends of the Association will make it convenient to attend.

### POOR-LAW MEDICAL OFFICERS' (ENGLAND) SUPERANNUATION ACT.

SIR,—Can you oblige me by informing me how many medical officers have received grants under the Superannuation Act passed a few years since, and what has been the average amount of such grants? I am a medical officer of upwards of forty years' standing, and am about to apply to the Board for an allowance, in consequence of failing health and seventy years of age.—I am, yours faithfully,

May 22nd, 1877.

GEO. HOLMAN.

\*. In the Annual Reports of the Local Government Board may be found the number of Poor-law officers, inclusive of medical officers, who have been superannuated during the year referred to in each report. Our correspondent has, therefore, only to look through the successive reports since the Act was passed to find the number of medical officers who have been superannuated. The grant must not exceed two-thirds of the salary, inclusive of the average for extra fees for three years preceding, but exclusive of vaccination. The applicant must obtain a certificate, recommending him for superannuation, from the Poor-law inspector of his district, and must resign office before his application can be attended to, and then can it only be considered at a meeting of the Board specially summoned.

### DRUNKENNESS OR EPILEPSY.

SIR,—As the medical superintendent of a very large metropolitan workhouse infirmary, I (and in my absence the assistant medical officer) have had frequent occasion to complain of the conduct of the police in bringing their cases of intoxication here for the night and removing them in the morning, thus making a convenience of the place. As this happens on an average about two or three times a week, I am anxious to know if we are not entitled to recover a fee from the police authorities, even if a certificate be brought from the divisional surgeon. The practice hardly seems fair that the divisional surgeon should obtain a fee for visiting the case, and transfer all the work and responsibility on to the workhouse medical officer, who frequently is not overpaid. I should be prepared to share in the expense of obtaining the opinion of counsel on the question.—Yours truly,

April 1877.

M.D.

### PUBLIC VACCINATION.

SIR,—The objections which, in your article in the *JOURNAL* of April 21st, you raise to Dr. Ducat's recommendations for the more efficient performance of public vaccination, do not, to my mind, carry much weight.

You first of all say that the stations and attendances were too numerous under the old system, and that the operation itself was not efficiently performed. No doubt, this was frequently the case; but Dr. Ducat does not wish to alter the present system as far as the stations and attendances are concerned, and I have yet to learn that Poor-law medical officers are incapable of vaccinating efficiently.

You next say that it has hitherto been a chief principle of legislation and administration in vaccination matters to keep public vaccination as distinct as possible from Poor-law relief. If this were so, I ask you why the Local Government Board sanctioned the appointment of the relieving officers of the Bristol Union as vaccination officers, and allowed the room where the poor attend before the guardians for relief to be used as a vaccination station; whilst it refused its sanction to the reappointment of the medical officers as public vaccinators, though it was intended that they should attend at the same station and vaccinate persons belonging to their respective districts in accordance with Dr. Ducat's plan.

Your next objection, that Poor-law medical districts and vaccination districts are not continuous, does not seem to me a very forcible one. Surely, it cannot be such a difficult matter to form one vaccination district out of two, three, or four Poor-law districts; but I think, as a rule, you will find that they are continuous either separately or in aggregation.

In answer to your next objection, that, in order to make Dr. Ducat's proposal practicable, provision would have to be made for the attendance of dispensary and club doctors, as the children of paupers are not the only attendants at vaccination stations, I beg to say that Poor-law medical officers attend the children of other people than actual paupers, and have generally a pretty fair knowledge of people residing in their districts, and would pretty well know what children would, or would not, be fit to be used as vaccinifers, certainly they would have an advantage in this respect over the present public vaccinators.

To every unprejudiced mind, there can be no doubt that, if Poor-law medical officers were the public vaccinators, outbreaks of small-pox could be more success-

fully dealt with. At present, how absurd it is to have an Act of Parliament permitting the medical officer, if there be small-pox in a house, to vaccinate and re-vaccinate. I ask, where is he to get the lymph from? If he writs to the Local Government Board, he will, perhaps, get *two*, or at most *three*, tubes, which might not have the desired effect, through the lymph not being sufficiently recent. If he apply to the public vaccinator of the district, he is told that he has none to spare, is directed to apply to the Local Government Board, or, perhaps, as a great favour, gets *one* tube.

I think Dr. Ducat's plan merits the attention of those in authority, and hope yet it will have your powerful advocacy.—I am, sir, yours obediently,

JOSHUA JAMES,

Medical Officer of No. 1 District of the Bristol Union, and formerly for many years Public Vaccinator to a District containing a population of over 30,000.

Park Row, Bristol, April 23rd, 1877.

### NOTICE OF INFECTIOUS DISEASES.

SIR,—May I ask for information of the practice of our Association in the following case? A demand is made upon the medical practitioners by the Corporation of this city to furnish the particulars of every case of small-pox occurring in their practice, with the object of limiting the disease. This is a question that involves a conflict of duty—on the one hand to the State, on the other to the private patient.—I am, sir, your obedient servant,

FRED. JAS. BROWN, M.D.

Rochester, May 5th, 1877.

### PUBLIC HEALTH MEDICAL APPOINTMENTS.

THOMAS, J. Raglan, M.R.C.S., appointed Medical Officer to the Llanelly District of the Llanelly Union, and Officer of Health to the Rural Sanitary District of that Union.

\*THORP, Charles W., L.K.Q.C.P.I., appointed Medical Officer of Health to the Todmorden Local Board.

## MILITARY AND NAVAL MEDICAL SERVICES.

### THE ARMY MEDICAL DEPARTMENT.

SIR,—As the affairs of the above department are likely soon to come up in Parliament, perhaps you will allow me to make a few remarks. Firstly, allow me to state that I doubt whether, as respects popularity or efficiency, anything will come up to the old regimental system; but, even without going back to that, I think much might be done if Mr. Hardy would agree to a few things. I would suggest—1. That retirement after ten years on a bonus of £1,000 should be optional; 2. That exchanges should be allowed as freely in the medical department as among combatant officers; 3. That the rules as to sick-leave should be assimilated to those which hold good with respect to combatant officers; 4. That the rule with regard to sixty-one days' leave only in the year should be so far relaxed that all commanding officers should have the power to grant forty-eight hours' leave, which should not count against the total; 5. That civil surgeons should be competent to take charge of dieted hospitals when a military medical officer is on long or short leave. Mr. Hardy may be certain that any employment must be either well paid or tolerably agreeable to attract many recruits. Men cannot be expected to join a profession to be turned out probably at the end of ten years.

If there are, as stated by the *Army and Navy Gazette* (if I remember right) about three hundred medical officers on home service, No. 2 exchanging with No. 98, the latter the second last home, can do no harm to anyone, as all the intermediate numbers remain in the same place. The strictness of the rules about sick-leave are by comparison grossly unfair. The sixty-one days' rule is a nuisance, as men constantly want to get away on private affairs for a day, and there is a disposition among principal medical officers to stretch the rule against the executive officers from fear that they themselves would get into a row, till a few hours is made out a day. Lastly, if civil surgeons are not allowed to take charge of dieted hospitals, military surgeons can hardly get the sixty-one days' leave that they are supposed to get in many cases.—Yours, etc.,

FAIR PLAY.

April 3rd, 1877.

P.S.—There were two grievances in connection with the above department which I have forgotten to mention. The first is that, after we were promised forage on promotion, Government now refuse to give it us, except when a horse is necessarily kept for the public service; and secondly that, although when most of us entered the service we never undertook to look after the militia, we are now saddled with that extra duty. In fact, the authorities have taken from militia surgeons the pay which they promised to give, and have made army medical officers do a duty which they never undertook to do. Young medical men thinking of joining the army may guess from this what reliance can be placed on the honour of Government.



## EXCEPTION.

THIS is a protest against the principle of selection for promotion to the highest grade in the Bombay Medical Service. Of course, we cannot say, in this particular instance, whether the selection was or was not a good one; but we have a clear opinion that the principle is a sound one, and should be upheld. A man may be a very good executive officer, and yet quite unfit to be at the head of a department. It is the interest of the Government to select the best man they have for such a post, as he is the adviser of the Government in its civil and military departments on all medical questions. The old principle of promotion to the highest grades by mere seniority was the curse of the service. Selection is the principle now in all services; and unless it can be shown that in any particular instance jobbery, or favouritism, or nepotism, has been the governing motive, the principle should be upheld.

## UNIVERSITY INTELLIGENCE.

## UNIVERSITY OF OXFORD.

**CHEMICAL LABORATORIES.**—In a Convocation held on June 5th, a decree, authorising the expenditure of £7,000 on the construction and fittings of new chemical laboratories at the University Museum, was introduced by Professor H. Smith. The decree was opposed by Mr. Ogle, who asked whether it was true that the shell of the building had been designed before the internal fittings had been decided on. Professor Odling answered that he had inspected the best Continental laboratories, in addition to having had some experience in the construction of similar buildings at St. Bartholomew's and the Royal Institution. The proposed addition was for elementary teaching, and the fittings would be a simple matter. Professor Holland and Mr. Wilson maintained that the decree touched a principle which it was the province of the coming Commission to settle, viz., whether the University or the Colleges ought to provide for the instruction of elementary students. The decree, which was further supported by Mr. Sidgwick and Dr. Acland, was carried on a division by 64 against 42.

## MEDICO-PARLIAMENTARY.

## HOUSE OF COMMONS.—Thursday, May 31st, 1877.

*The Cost of Vaccination.*—An amendment moved by Mr. PARNELL, in Committee of Supply, to reduce the cost of public vaccinators by £10,000, was negatived by 115 to 2.

## Friday, June 1st.

*Medical Act (1858) Amendment Bill.*—Dr. LUSH moved that the order for the second reading of this Bill be discharged to enable him to bring in a new one.—The motion was agreed to.

## Monday, June 4th.

*Public Health (Metropolis) Bill.*—Mr. SCLATER-BOOTH obtained leave to bring in a Bill to consolidate and amend the law relating to the public health in the metropolis.—The Bill was brought in and read a first time.

*The Arctic Expedition.*—Dr. L. PLAYFAIR asked the Under Secretary to the Admiralty, in the absence of the First Lord, whether, having received a report, of date March 3rd, from the Admiralty Committee on Scurvy, to the effect that the early outbreak of scurvy in the spring sledging-parties of the late Arctic Expedition was due to the absence of lime-juice from their provisions; and, further, that in not including lime-juice, the officer in command of the expedition deviated from the memorandum of recommendations and suggestions of the Medical Director-General, furnished to Sir George Nares by the Admiralty for his information, and that such deviation was not proper, any steps have been taken in respect to this report with a view to prevent similar calamities on future occasions.—Mr. A. EGERTON: There is no intention at present to fit out any Arctic expedition, and therefore there is no necessity to take any immediate steps with regard to the issue of lime-juice. If, at any future time, an expedition should be sent out, the experience of the last one would, doubtless, not be lost on the Admiralty. Directions had been given that the communications to Sir G. Nares on the subject of the report should be laid on the table.—Dr. L. PLAYFAIR gave notice that on the navy estimates he would call attention to the report of the Scurvy Committee.

PRINCE LEOPOLD has signified his intention to lay the first stone of the Detached Infirmary of the Earlswood Asylum for Idiots sometime about the second week in July.

## MEDICAL NEWS.

**APOTHECARIES' HALL.**—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, May 31st, 1877.

Coates, William Henry, Hackney Road  
Floyd, John, Oxford  
Nariman, Kulkosro Sorabji, Bombay  
Tritton, William Parsons, Kilburn

The following gentlemen also on the same day passed their primary professional examination.

Cheesman, George Edward Alexander, Charing Cross Hospital  
Marsh, Frank, King's College  
Stone, John William, St. Bartholomew's Hospital

## MEDICAL VACANCIES.

THE following vacancies are announced:—

**BOLTON UNION**—Resident Assistant Medical Officer.  
**CARNARVONSHIRE and ANGLESEY INFIRMARY**—House-Surgeon. Salary, £100 per annum, with board and lodging. Applications to be sent in on or before the 14th instant.  
**CITY OF LONDON LYING-IN HOSPITAL**—Consulting Surgeon. Applications to be sent in on or before the 19th instant.  
**EAST RIDING ASYLUM, Beverley**—Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, and attendance. Applications to be sent in on or before the 23rd instant.  
**ISLE OF WIGHT INFIRMARY, Ryde**—House-Surgeon and Secretary. Salary, £50 per annum, with board, lodging, and washing. Applications to be made on or before the 19th instant.  
**LINCOLN UNION**—Medical Officer for No. 6 and 12 Districts.  
**NEW HOSPITAL FOR WOMEN, Marylebone Road**—Junior Physician; also, Resident Medical Officer. Women only eligible. Salary, £50 per annum, with board, lodging, washing, and attendance.  
**NORWICH UNION**—Medical Officer for the Workhouse.  
**NOTTINGHAM GENERAL HOSPITAL**—Assistant House-Surgeon. Salary, £80 per annum, with furnished apartments and board. Applications to be made on or before the 11th instant.  
**RIPON DISPENSARY and HOUSE OF RECOVERY**—Resident House-Surgeon and Dispenser. Salary, £100 per annum, with furnished apartments, coals, and attendance. Applications to be made on or before the 16th instant.  
**ROYSTON UNION**—Medical Officer for No. 5 District. Salary, £80 per annum, and extra fees. Applications to be made on or before the 19th instant.  
**SALOP INFIRMARY, Shrewsbury**—Resident House-Surgeon. Salary, £100 per annum, with board and residence. Applications to be made on or before the 15th instant.  
**WEST SUSSEX, EAST HANTS. AND CHICHESTER INFIRMARY**—Surgeon-Dentist. Applications to be made on or before the 18th instant.  
**WOLVERHAMPTON and STAFFORDSHIRE GENERAL HOSPITAL**—House-Surgeon. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before the 11th instant.

## MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

\*PARKER, Rushton, F.R.C.S., appointed Lecturer on Surgery at the Liverpool Royal Infirmary School of Medicine, *vice* \*Reginald Harrison, F.R.C.S., resigned.

## BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

## MARRIAGE.

CRISP—*English.*—On June 6th, at St. Luke's, Chelsea, by the Rev. A. G. W. Blunt, M.A., Rector, Eliza Minnie, eldest daughter of Edwards Crisp, M.D., Chelsea, to Thomas Johnstone English, M.R.C.S., only son of Thomas English M.D., of Fulham Road, Brompton.

**TESTIMONIAL TO DR. A. H. HASSALL.**—A presentation of a very handsome service of plate has just been made to Dr. Hassall. Viscount Eversley and Sir Lawrence Peel were the treasurers of the fund. The tray bears the following inscription: "This silver tray, with the tea and coffee service and three hundred guineas, were presented to Dr. Arthur Hill Hassall by a numerous body of contributors, in recognition of his valuable services as the originator and founder of the Royal National Hospital for Consumption and Diseases of the Chest located at Ventnor."

**WEST KENT MEDICO-CHIRURGICAL SOCIETY.**—The eighth and last meeting of the twenty-first session was held on Friday, May 4th, at the Royal Kent Dispensary, Greenwich: W. Johnson Smith, F.R.C.S. (senior vice-president), in the chair. The following cases were brought forward for discussion:—Dr. F. Moon: Uterine Fibroids. Dr. R. Gooding: Case of Prostatic Disease. Dr. H. K. Hitchcock: Case of Acute Orchitis. Dr. H. Wilcox: Treatment of Chronic Ulcers of the Leg. Dr. J. Anderson: Simaruba Bark in Dysentery. Mr. H. G. Cable: Aortic Aneurism, with Pathological Specimen.—The annual dinner will take place on Thursday, June 28th, at the Ship, Greenwich, at 6.30 P.M. precisely.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.
THURSDAY...	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—Charing Cross, 2 P.M.
FRIDAY .....	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—Epidemiological Society, 8.30 P.M. Election of Officers, etc. Surgeon-Major Colville, "On Plague in Baghdad".

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## MEDICAL ETIQUETTE.

SIR,—Will you be kind enough to give me your opinion as to the proper course to pursue under the following circumstances? A lady, who has engaged A. to attend her in her confinement, is taken in labour, and sends for A., who is away from home, having been away for a week, leaving his partner in charge. She refuses to have the partner: having, she says, arranged with A. that she should not. Under these circumstances, B. is applied to, and attends, knowing the above particulars. Should B. hand over the case to A. on his return? or should he retain it, as her husband wishes?—I am, sir, your obedient servant,  
June 5th, 1877.

QUERY.

\* \* B. should inform A. of the particulars, and offer to hand over the case to him. If the husband insist on his remaining in charge of the patient, he would be justified in complying, after having done his duty towards A.

## INCUBATION OF GONORRHOEA.

D. O. F. writes:—I have found the average period of the "incubation of gonorrhoea" about six days, it being sometimes more, sometimes less; but, with regard to the longest period possible to elapse between infection and the appearance of the disease, I consider we have no reliable data on which to form an opinion. The other day a patient, who came to me on the first appearance of the discharge, alleged that he had had no intercourse for more than four weeks, a statement which I received with some reserve. However, I have known the time to be extended to sixteen days.

It is, we believe, universally held by the profession that such advertisements as that enclosed from Dr. Storey are professionally improper.

## GOA-POWDER, OR CHRYSOPHANIC ACID.

SIR,—In your issue of May 19th, Mr. Mayo Robson records a case of pityriasis versicolor treated by Goa-powder, under the impression that it had not been previously used for that disease. In an article on Goa-Powder and Chrysophanic Acid in the *Lancet* of January 27th, I related a case which had been treated with this substance, and which was also "one out of several cases".

In the same article, I warned practitioners of the inflammatory effects and discoloration of skin that were frequently induced by the application of chrysophanic acid, and some time ago showed a case at the Harveian Society illustrating the unpleasant results alluded to by another of your correspondents as attending the use of this substance.—I am, sir, yours obediently.

H. RADCLIFFE CROCKER, M.D., M.R.C.P.,

Assistant Medical Officer in Skin Department of University College Hospital, 135, Gower Street, W.C., May 29th, 1877.

NOTICE TO ADVERTISERS.—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

## THE MEDICAL COUNCIL AND FOREIGN REGISTRATION.

SIR,—In the report of the Medical Acts' Committee, discussed before the General Council of Medical Education and Registration on Thursday, May 17th, I find that Mr. Simon, *inter alia*, moved "that the Council would not approve that foreign qualifications should be registrable, as 'additional qualifications' under the Medical Act, by persons primarily registered under British qualifications".

Now, with due deference to the opinions of Mr. Simon and his colleagues, I should like to know by what process of reasoning can it be made out that the public would suffer if doubly qualified medical practitioners already registered were permitted to enter their foreign degrees as additional qualifications upon the Register. Anyone who is sufficiently intelligent to look up the *Medical Register* in order to ascertain the qualifications of his medical attendant would surely know that John Brown, M.D. London, must have graduated at the University of London, and that Thomas Jones, M.D. Brussels or Erlangen, must have graduated on the Continent, and what harm would there be in this? In whichever way the question may be viewed, the Council are wrong in their proceedings. They are quite prepared to admit the qualifications of a graduate of the Calcutta College, of which they can know nothing, to the Register; while in the same breath they deny a doubly qualified Englishman the privilege of registering all additional qualifications not obtained in the United Kingdom.

They say that foreign degrees "were obtained because of the additional importance supposed to be attached to them". If these degrees have no value in reality, then, why deny them admission to the Register? Further, the Council assert that "the object of those who sought the privilege of registering the foreign degrees was to obtain a higher qualification in the eye of the public". To this, it may be replied, Is it for the benefit of the individual or for the good of the public that men graduate at all? and why does anyone seek a higher qualification or endeavour to improve himself? Can a foreign graduate not do this as well as a home one? and is it a fact that degrees are absolutely necessary for attaining the highest success in professional life? If so, according to their mode of reasoning, all the practice and appointments in the country ought to be in the hands of the M.D.'s only.

Lastly, the Council observe: "But it should be known that the title of doctor in foreign countries was a minimum title to practise; and, to sanction it as comparable with the higher titles on the Register, would be misleading the public". On what authority has this statement been made? and where are the data to warrant such an assertion? and to what countries does it refer? If such were true, why should foreign practitioners graduate at all? A pet argument with those whose minds have not yet been expanded by travel is that, in Germany, for instance, degrees are inferior to the State examination, because the latter only entitles one to practise. The fact is that the "Staats Examen" is the minimum examination entitling to practise, similar to our own testate graduate afterwards. Now, but all who hope to attain distinction in medicine graduate afterwards. If anyone can explain to me satisfactorily why anyone should accept a minimum qualification after having passed the maximum, I shall be happy to hear from him. I must say that I have been much surprised at the small proof of intellect displayed by our representative Council in respect of this subject. What do they fear? Is it the competition of foreign graduates, or the loss of money which might occur if all our intending graduates were to make a rush for the Continent?—I have the honour to be, sir, your obedient servant,  
M.D. ERLANGEN.

## THE ST. ANDREW'S M.D.

SIR,—A very sensible letter, signed Γαμμα, appears in your impression of to day, and no doubt the experience of your correspondent is that of hundreds upon hundreds who were prevented from graduating during their student days, but who now, wishing to get the M.D., find that they are shut off from it for ever, or at least that it is so fenced round with restrictions that but few can obtain it. At forty, a man is, generally speaking, either "made or marred", and it is difficult to see what a degree can do for him then—much less avail is it when he reaches the age of fifty. My object, however, in writing this, is to draw your correspondent's attention to the fact that, being forty, he can present himself for examination at the University of Durham; and as I believe no limit is placed upon the number of candidates, he would only have to wait until the date of the next examination, when, if successful, he would be in possession of an English degree—an advantage so great to any one practising south of the Tweed, that it need not be enlarged upon.

Now, there are many, like myself, nearer the age of thirty than forty, who would willingly submit to the ordeal at Durham, but who cannot present themselves on account of the age clause; and if the authorities would reconsider the question, and admit to examination those whose qualifications to practise, dated ten years before the day on which they entered thousands of the profession (the active workers chiefly), and would raise the good name of the University in a manner that no other course would or could. Let us trust that the University of Durham will one day extend the liberal policy it commenced last year, and admit us to their degrees.—I am, sir, yours faithfully,  
EXCELSIOR.

May 26th, 1877.

## HODGKINSON'S POCKET INHALER.

SIR,—We beg to inform you we are the makers of the pocket inhaler, from the design of Dr. A. Hodgkinson, a notice of which appeared in the JOURNAL of May 12th, and in the report of the meeting of the Medical Society of this city on March 7th, when the instrument was exhibited. Having had since then a large number of inquiries (especially after the appearance of the account of it in your paper, which was necessarily more or less limited, and which does not seem to have conveyed anything like a clear idea of its construction or uses), we have thought it just possible that you may consider it sufficiently interesting to your readers, and therefore worth giving space for the insertion of the enclosed illustrations, together with a more detailed account of it. We have been at great cost and trouble in bringing the inhaler to its present state of efficiency, and are therefore anxious (for the sake of those it is intended to benefit as well as for our own) to have the opportunity of bringing its merits before the profession in a JOURNAL so justly pre-eminent as your own.—We are, sir, your obedient servants,  
68, Market Street, Manchester, May 30th, 1877. LYNCH & BATEMAN.

P.S.—If desired, we should have great pleasure in forwarding an inhaler, as well as the blocks for the illustrations.



CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

THE COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN MAY 1877.

The following are the returns made by Dr. C. Meymott Tidy to the Society of Medical Officers of Health.

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, etc.	Nitrogen As Nitrates, &c.	Ammonia.		Hardness. (Clarke's Scale.)	
				Saline.	Organic	Before Boiling.	After Boiling.
<i>Thames Water Companies.</i>	Grains.	Grains.	Grains.	Grains.	Grains.	Degs.	Degs.
Grand Junction ..	20.50	0.049	0.135	0.001	0.007	13.2	3.3
West Middlesex ..	20.20	0.059	0.150	0.000	0.007	13.2	4.2
Southwark and Vauxhall .....	19.60	0.052	0.150	0.001	0.008	13.2	3.3
Chelsea .....	20.10	0.052	0.135	0.000	0.007	13.2	3.3
Lambeth .....	21.00	0.053	0.180	0.000	0.008	13.7	3.7
<i>Other Companies.</i>							
Kent .....	31.00	0.003	0.420	0.000	0.002	19.4	6.5
New River .....	19.40	0.036	0.138	0.000	0.006	12.6	3.3
East London ....	18.80	0.028	0.180	0.000	0.007	11.6	3.3

*Note.*—The amount of oxygen required to oxidise the organic matter, nitrates, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters, the quantity of organic matter is about eight times the amount of oxygen required by it. The water was found to be clear and nearly colourless in all cases but the following, when it was slightly turbid—namely, the Grand Junction, the West Middlesex, and the Lambeth.

#### THE LIBRARY OF THE ROYAL COLLEGE OF SURGEONS.

SIR,—I am glad you have invited discussion on the subject of opening the library of the College of Surgeons in the evening. There are doubtless many, like myself, whose time is fully occupied by practice or public duties throughout the day, and who are thus unable to avail themselves of the valuable library at the College, except at the sacrifice of something else equally important. It is those most actively engaged in the practical departments of our profession who have the greatest need of a familiarity with its literature. Personally, I should esteem it a great privilege to be able to make use of the library in the evening. I am under the impression that the hours during which continental libraries are open are more extended than those at the Royal College of Surgeons, or at least that in Berlin and some other places the libraries open as early as eight o'clock. Our confrères abroad are earlier risers than we are, but it may be that some amongst us would be glad at times to steal an hour from sleep and spend it in the library. It is the evening, however, which would be most generally convenient, I imagine. If the library, instead of closing at five, remained open until ten o'clock, it would be available to many who are practically debarred from using it at present. I hope, therefore, the Council of the College will seriously entertain the question, so as to develop to the utmost the utility of what may be truly considered the national medical library. If they can find a way to effect the opening of the library in the evening, they will be conferring a favour on many diligent students. No one, I am sure, would willingly impose any additional burden upon the courteous librarian, Mr. Chatto, or his subordinates; but probably the funds of the College would allow the appointment of one or more assistants to Mr. Chatto, and an extra porter or so, if necessary.

It may be that the number of readers who would immediately avail themselves of the privilege of using the library in the evening would be small, or that there is not any very widespread feeling of need of increased accessibility to libraries. But it seems to me to lie within the function of the Council of the College to encourage or create such a want, and thus educate the profession to the greater use of the public libraries. Medical literature is becoming truly enormous—so vast, indeed, that the feeling grows that it is useless to attempt to master it. Among the evil effects of this, is that many discover anew what others have already described. They who do so suffer much disadvantage in this, for they are exposed to the humiliation of having their claims to originality discussed, or to the charge of an ungenerous omission to acknowledge the labours of others. But this evil is small compared with the far greater one of wasted labour. It is, of course, of advantage that original research should be tested and supplemented by independent workers; but we all live and act on the experience and the results of those who have preceded us; it is the principle which guides daily life; and it is in the highest degree important that a knowledge of what has been done in any department should precede new research. It is ignorance of this kind which leads to so much fruitless labour. It has been truly said that there would be fewer writers there were more readers.

Owing to its vastness, a necessity has arisen of having brought under our notice, in an accessible form, a knowledge of the progress of medical literature. This necessity has been met in various ways—in our country very admirably, by the establishment of the *London Medical Record*. But valuable as such a periodical is, both to readers and writers, it is liable to do a disservice rather than a service to medical science, unless there coexist ready accessibility to, and systematic use of, public libraries; for, failing these, many are compelled or content to read abstracts and notices of works instead of consulting the originals. Now, whilst such abstracts are most valuable—and, indeed, sufficient for those who merely wish to keep up a general acquaintance with our increasing knowledge—it is most important that they should not supersede the study of original treatises by those actually engaged in original research or writing. Moreover, the library contains many most valuable works to which reference cannot elsewhere be made. Any obstacle to ready access to libraries ought, therefore, to be removed. It being thus desirable, for many reasons, to encourage and extend its use, I hope the College will lay the profession under a debt of gratitude by causing the library to be kept open in the evening.—I am, sir, etc.,

STEPHEN MACKENZIE, M.D.

NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

#### DOUBLING OF THE FIRST SOUND OF THE HEART.

SIR,—Dr. George Johnson's explanation (BRITISH MEDICAL JOURNAL, April 28th) of the doubling of the heart's first sound in some cases of renal disease is scarcely satisfactory. In his little diagram, and throughout the lecture, he treats the first and second sounds heard as being equal in intensity. The first he attributes to the contraction of a hypertrophied auricle, thus making the sound produced by this equal to that of ventricles and valves together, or rather ignoring altogether the part played in the production of the heart's first sound by the tension of the valves. This is eminently unsatisfactory to me, who believe that the first sound of the healthy heart is produced by the tension of the valves (mitral and tricuspid) only, and the second by the semilunar valves only, and that the difference in the sounds arises from the difference in the mode of their causation. The sounds are essentially single, and not suggestive of a complication of causes; and the singleness of the first sound in particular is evidenced by its remarkable distinctness in patients with enlarged ventricles and thinned walls, in whom it becomes indeed like the sound given out by a piece of linen suddenly stretched. I cannot see the logical sequence from an auricular presystolic murmur, due to valvular disease, or the friction-sound of the roughened external surface of an auricle against the pericardium, to a sound produced in the wall of that auricle. The latter of his two arguments only proves that the auricle contracts before the ventricle, which is abundantly evident to all, and not that under dissimilar circumstances it would or could produce a sound equal to that of ventricle and valve combined.

I think that Dr. Sibson's mode of accounting for the doubling—we should rather say the splitting up—of the first sound in those cases is the correct one. It was that which suggested itself to me at a time when I had not heard of his having treated the subject. A fellow-student, whose heart I many times examined, had the first sound doubled, or split up. He had no renal disease, was a first-class oarsman, captain of his club, an ardent football-player, and very strong. To rowing, however, he was chiefly addicted, and I supposed and told him that it was to the great demands made on the lungs by this exercise that the synchronous action of the right and left heart was due; the breath being long held or pantingly drawn, whilst the action of the body supplied by the systemic circulation was steadily regular. Such cases as his are not uncommon, and, it seems to me, have a direct bearing on the question. I do not attempt to account for the fact of the diastolic sound remaining single either in my friend or in the sufferer from renal disease. Dr. Johnson's main argument against the asynchronous theory is founded on the interlacing of the fibres of the two ventricles; but are not the fibres governed by different nerve-centres in the base of the heart? and if any cause affect the centres of one side and not of the other, may not the ventricles then contract independently? The cause is to be sought for in the lung, whose arterioles, as Dr. Johnson describes, contract against the vitiated blood produced by renal disease. The interlacing fibres of the ventricles secure simultaneous action only so long as the centres act together. Have we not in the eyes organs well-nigh as closely connected as the two sides of the heart? and in their strabismic action during certain diseased conditions, a parallel to the suggested independent action of the ventricles, and in the cause—disturbed nerve-centres—an exact counterpart? Dr. Johnson states that the two sides contract together in the heart of an animal dying from apnoea; but first one acts ineffectually, and, at a later stage, the other. Now, this is varying action; and may it not easily vary a little further, and become asynchronous?

In many persons, and in diverse disordered states, one sound of the heart is split up; but the disorder is remedied—the undigested meal is removed, for instance, and the irregular action ceases. In the cases of the patient with contracted kidney, and in the athlete, the cause is permanent and the effect equally lasting.—I am, yours, etc.,

J. F. O'RYAN.

#### THE RESULTS OF CHRONIC PERITONITIS.

SIR,—In your report of some remarks I made during the discussion on a case of Dr. Day, of "Ascites in a Child", at a meeting of the Clinical Society on April 27th, an error occurs, which, if true, would imply such ignorance on my part that I must ask your permission to correct it, especially as I attribute the fact stated to the teaching of Dr. Wilks.

The report states: "He was under the impression (gained, he thought, from Dr. Wilks) that inflamed serous membranes never produced serous effusions, but always lymph or pus." It should have been "the inflamed peritoneum, unlike other serous membranes", etc.

I wished particularly to direct the attention of the Society to the fact that a chronic peritonitis always produces an exudation of lymph (causing adhesions) or pus, never merely serous fluid; that a peritonitis producing serous effusion must be either of a tubercular or cancerous nature; in other words, that, given a case of distension of the abdomen by serous effusion and that it be not of a dropsical character (that is, due neither to obstruction of the portal circulation nor to general dropsy), it must of necessity be the result of either a tubercular or cancerous peritonitis; that, if the abdomen be tapped and a clear fluid be withdrawn, the disease is probably tubercular; whereas, if the fluid be stained by altered blood, it is probably cancerous peritonitis. This is a general clinical law, often stated by Dr. Wilks, but, I think, not as generally recognised as it should be. I have often known it the key to an obscure diagnosis, and a striking instance of the truth of the rule concerning the results of chronic peritonitis is afforded by the case mentioned by Dr. Burney Yeo in the same discussion, and which, indeed, caused my remark. Dr. Yeo described a case, at present under his care, of a male twenty-three years of age, in whom "ascites had gradually supervened during a period of eight weeks, there being no evidence of hepatic disorder or struma. Dr. Yeo thought the case probably one of subacute or chronic peritonitis, especially as the patient dated the commencement of the dropsy from an attempt to reduce a hernia, which was effected with difficulty." Dr. Yeo informs me that this patient has since been tapped, and the fluid proved to be pus.

Dr. Wilks and Dr. Moxon mention in their *Pathological Anatomy* that they have seen cases of effusion into the peritoneal cavity in children, such as that described by Dr. Day, which may possibly be due to a condition of the peritoneum of the nature of a catarrh, and similar to that seen in the pleura, but they state that they have never had an opportunity of examining such a case, all of them having recovered. Dr. Wilks, moreover, tells me that he has very great doubts of the existence of such a condition, that these cases are all probably due to some undiscovered cause of obstruction to the portal circulation.

Dr. George Johnson contributes four similar cases to the BRITISH MEDICAL JOURNAL of September 16th, 1876; but all these cases recovered, so that no definite conclusion could be formed as to their cause; in two of them, there was also



pleuritic effusion, and in one of these there was albuminuria: this case, at least, may, therefore, be put out of the question. Dr. Johnson believes the ascites in these cases to be due to a subinflammatory condition of the peritoneum, but he again brings no *post mortem* evidence in support of this view.

Indeed, the only *post mortem* record I find of this condition is the oft quoted case recorded by Andral, in which a peritonitic effusion with flocculent lymph is said to be metastatic from rheumatism, and on which, in the absence of other cases to support it, grave doubts may be thrown.

If, however, we tabulate all the cases which during life are considered to be instances of effusions into the peritoneal cavity, the result of subacute or chronic peritonitis, they divide themselves into two great classes, namely those which die and those which recover; in every case, however, among the former class in which a careful *post mortem* examination is made, some good cause is invariably found for the ascites; these are too numerous to mention at length; they are chiefly either tubercular or cancerous peritonitis, or pressure on the portal vein or one or more of its branches by tumours connected with any of the abdominal viscera, aneurisms, thrombosis of veins, enlarged glands, gummata, fecal impactions, biliary calculi, hydatids, and constrictions the results of adhesions or contractions of inflammatory products, etc. In the latter class, namely, those which recover, no cause is discovered, and they are, therefore, classed as cases of a disease which has no existence in the dead-house, and for which we are compelled to invent a new pathological condition which is directly at variance with the teachings of the *post mortem* room. Whether this condition thus unsupported by facts is likely to be a true one, or, on the other hand, exists only in theory, and serves merely as another cloak for our ignorance, I will leave you, sir, and the profession to judge. To me it bears a strong resemblance to the disease known in former days as "serous apoplexy", and to many others of a like nature.—I am, etc., F. A. MAHOMED.

31, Lower Seymour Street, W., May 5th, 1877.

#### BUGS.

SURGEON-MAJOR G. K. POOLE writes:—The best remedy for bugs in hospitals is a bug-trap, made by boring a series of holes in a piece of soft wood with a gimlet, and placing this under the mattress of each cot. The piece of wood is to be put periodically into a basin of boiling water. This is an Indian hospital plan.

#### TRANSFUSION OF BLOOD.

SIR,—In your issue of May 26th, there is an article entitled Death from Transfusion of Blood, *à propos* of accident at Liverpool. As you mentioned my name, I hope, in justice to myself, you will state in your next issue that the said transfusion of blood in Liverpool was not done by me nor by my method, but by the old system of opening the vein in the open air, inserting a tube and fixing it there with a ligature, and so withdrawing the blood. This method I have always fought against for fifteen years, because I know all its dangers.

This answer is of great importance to the science of transfusion, since in the same article and under the same heading, probably inadvertently, you say: "Together with this report, we receive at the same time a little pamphlet by Dr. Roussel advocating the more frequent practice of transfusion by the aid of his now well-known instrument, with a few introductory words of recommendation by one of the most thoughtful of surgeons, Sir James Paget, who adds the following words, on which the above accident furnishes a striking commentary: 'As to any damage to be sustained by the person who gives the blood for transfusion, no fear of this can be felt by anyone who, like myself many years ago, bled healthy people in any number without harm.' Unfortunately, your quotation is not complete. Sir James Paget ends by saying: 'To a healthy person, the loss of a few ounces of blood by venesection is, I believe, absolutely harmless.' Since the Liverpool transfusion was not done by venesection in a healthy person, no one can say Sir J. Paget is mistaken in asserting that venesection is harmless to healthy persons.

Everyone knows the talent and prudence of the head of the surgical profession in England well enough to be certain that he never will honour an introduction to a method so well-known as dangerous for those operated on and insecure for the operation as that which was employed at Liverpool. I can assert that he always condemned it, and he never considered transfusion practicable until he knew my invention, by means of which it is possible to practise a simple venesection under water and without exposure to air.

I will not have transfusion compromised by people who flatter themselves they can practise it without knowing anything about it, and who wait for an accident before applying to me for lessons, as has occurred three times already.—I am, sir, 23, Gloucester Place, Hyde Park, May 28th, 1877.

DR. ROUSSEL.

#### DIALYSED IRON.

SIR,—I should feel indebted for information as to the composition and process of manufacture of dialysed iron. It is pleasant to prescribe a medium one knows all about than empirically.—Yours obediently, R. E. F.

#### HOSPITALS FOR INFECTIOUS CASES.

SIR,—I have much pleasure in informing your correspondent "E. L. F." that the Birkenhead Sanitary Authority has established a small hospital for non-pauper infectious cases. The hospital I refer to makes up eighteen beds; and since February 13th, 1876, when it was opened, it has received 149 patients.

The following brief extract from a circular letter, advising members of the medical profession practising in Birkenhead and the neighbouring townships of the completion of the hospital, will explain the terms on which patients are admitted.—"The hospital is at present open for the reception of patients, and the care-taker is instructed to admit any sick person ordinarily residing in the urban sanitary district on whose behalf application for admission may be made, on those in charge of such person producing a certificate from a qualified medical practitioner that the patient is suffering from a contagious or infectious disease, other than specific venereal disease, and engaging to pay for the patient's maintenance while in hospital at the rate of fourteen shillings per week. Patients suffering from contagious or infectious diseases who do not ordinarily reside in the urban sanitary district of Birkenhead, but in one of the out-townships, may also be received into the Commissioners' Fever Hospital, only in any such case an undertaking to pay at the rate of twenty-one shillings per week for maintenance will be required. Medical practitioners, should they desire to do so, may attend their own patients during their stay in hospital."—I am, sir, yours very sincerely, FRANCIS VACHER, Medical Officer of Health for Birkenhead.

SIR,—In reply to the request of "E. L. F.", I beg to inform him that the Sanitary Authority of the Borough of Birmingham has established a hospital for the reception of patients, not being paupers, suffering from small-pox or scarlatina; thus enabling the public to limit the spread of those diseases without having recourse to the eleemosynary aid of the subscription hospitals.—Your obedient servant, Birmingham, June 1877. HENRY DENNE.

#### BROMIDE RASH.

SIR,—I have lately had occasion to keep a patient under the influence of large doses of bromide of potassium for some considerable time; but having found it necessary to substitute another drug, in consequence of the extreme amount of rash produced, I have given the bromide of ammonium with equally favourable therapeutic results, and accompanied by a rapid disappearance of the eruption. The spots were confined to the head, face, and arms.—I am, sir, yours faithfully, LOUIS LEWIS, M.D.

June 2nd, 1877.

ERRATUM.—In the second last sentence of the second paragraph of Mr. Cartwright's letter in the JOURNAL of May 19th (page 639, column 1), for "surgeons in special practice, or dentists", read "surgeons in special practice as dentists".

#### FUNCTIONAL HEART-DISTURBANCE.

SIR,—I shall be obliged for my own satisfaction and in the interest of a long suffering patient for any suggestions likely to relieve the following case, which has baffled all my efforts.

A. B., aged 62, of spare habit, has been an invalid about four years. His early symptoms were those of bronchitis. There is still a troublesome cough of a paroxysmal character, occasionally simulating asthma. Expectoration is copious, but not purulent. There is slight emphysema. The appetite is good; digestion fair; the bowels regular. The urine is free from albumen or sugar. He has little or no flatulence. For eighteen months, the patient has been made miserable by functional palpitation at night, which wakens him from sleep, and persists often through the whole night. Frequently he is conscious of a distressing dream on first awaking. The pulse varies from 85 to 100, and is regular. The sounds of the heart are normal. He has spent two winters at Llandudno, but sea-air increases the disposition to asthma. The treatment has been necessarily varied and expectant; a mild nutritious diet, little or no stimulant, which disagrees; among other drugs, zinc, valerian, digitalis, belladonna, ether, opium, bromides of ammonium and potassium, hydrobromic acid, and galvanism by the constant current.

A. B.

#### MEDICAL PUPILS.

SIR,—Will some of your readers kindly inform me what are the usual charges for taking a youth, who has just passed his preliminary Arts' examination, to board and lodge and instruct in dispensing, anatomy, etc., prior to his going to the hospital?—Yours faithfully, A COUNTRY SURGEON.

#### TREATMENT OF ECZEMA BY CHRYSOPHANIC ACID.

SIR,—Having read a short time since in the BRITISH MEDICAL JOURNAL an account of the successful treatment of psoriasis by Mr. Balmanno Squire, I was induced to try chrysophanic acid in chronic eczema.

My son, aged 16, has been a great sufferer from eczema from his infancy, and I think I may safely say that almost every kind of treatment, external and internal, has been adopted; but, while he has at times obtained some relief from some of the remedies employed, he was, until the chrysophanic acid ointment, about as far as ever from cure. On May 12th, the chrysophanic acid ointment, prepared according to Mr. Squire's plan, was used; and, from the first application, almost instant relief from his ordinarily great pain and annoyance was experienced; all inflammatory action steadily died away; and, at the end of three weeks, he is coming out with a new skin. From the first use of the ointment, I discontinued all other treatment.

After I had commenced the plan with my son, and in two or three days finding the results so thoroughly satisfactory and beyond my expectations, I put another youth, aged 16, also a sufferer from eczema from his infancy, under similar treatment; and I may at once say that the results have been equally satisfactory.

As many of my patients and friends are somewhat doubtful about the propriety of curing so rapidly chronic skin-affections such as eczema, I shall be glad if some of the readers of the BRITISH MEDICAL JOURNAL will give their experience on the point, as I think it very important.

CHARLES W. CHUBB.

Porte Rouge, Torpoint, Devonport, June 5th, 1877.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The York Herald; The Bridlington Quay Gazette; The Scarborough Daily Post; The Blyth Weekly News; The Glasgow Herald; The Malvern News; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; The Manchester Free Lance; The Belfast News Letter; The Manchester Courier; The Macclesfield Courier; The North Wales Chronicle; The Sunderland Daily Post; The Western Daily Mercury; etc.

\* \* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

#### COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. W. M. Ord, London; Mr. Howard Marsh, London; Mr. E. P. Hardey, Hull; Dr. J. Hughlings Jackson, London; Dr. W. Fairlie Clarke, Southborough; Dr. George Johnson, London; Dr. Bradbury, Cambridge; Dr. Francis Warner, London; Dr. Twining, London; Dr. J. W. Moore, Dublin; Dr. J. Milner Fothergill, London; Dr. Joseph Bell, Edinburgh; The Registrar-General of England; Mr. Richard Davy, London; Dr. Thomas Barlow, London; Our Indian Correspondent; Dr. F. P. Atkinson, Kingston-on-Thames; Our Paris Correspondent; Mr. Crookshank, Roustchouk; The Registrar-General of Ireland; Mr. Jacobson, London; Dr. Maudsley, London; Dr. Holland, London; Dr. L. Lewis, London; The Secretary of Apothecaries' Hall; Mr. T. F. Raven, Broadstairs; Mrs. M. Chevallier, Paris; Mr. R. M. Craven, Southport; Dr. Fletcher Beach, Clapton; A Militia Surgeon; Dr. Ridge, London; M.D. Ed.; Our Edinburgh Correspondent; Dr. A. W. Edis, London; The Secretary of the Clinical Society; Mr. Eastes, London; Dr. W. Squire, London; Mr. Thurston, Ashford; Dr. Fountaine, London; Mr. S. M. Bradley, Manchester; Dr. G. H. Evans, London; Dr. Macnaughton Jones, Cork; Dr. A. Downes, London; Dr. McKendrick, Glasgow; Dr. Hodgkinson, Manchester; Mr. Vacher, Birkenhead; Mr. Meadows, Hastings; Dr. B. Webster, Alderley Edge; The Secretary of the Epidemiological Society; Mr. Nettleship, London; Dr. Procter, York; Dr. Wrightson, Halesworth; Mr. Coleman, London; Dr. Arlidge, Stoke-upon-Trent; Dr. Bush, Nottingham; Mr. J. A. Hedges, Leighton Buzzard; etc.



# A CLINICAL LECTURE ON OVARIOTOMY.

*Delivered in University College Hospital, London.*

By CHRISTOPHER HEATH, F.R.C.S.,  
Holme Professor of Clinical Surgery, etc.

GENTLEMEN,—You have recently had under your notice a case of multilocular ovarian cyst, and have had the opportunity of seeing me remove it by the operation of ovariectomy, with, I am happy to say, complete success; and I propose now to make a few clinical remarks upon the subject. The patient was a married woman aged 29, and the mother of four children. In 1873, after a confinement, she noticed that her abdomen remained large. She was confined again in July 1874, the enlargement still persisting, and she wore an abdominal belt for nine months. In the early part of 1876, she noticed a hard lump in the abdomen, and applied for advice at a special hospital, when she was told that she had a fibrous tumour of the uterus, and attended for some months without benefit. She was recommended to me by a medical friend, and was admitted here on December 2nd, 1876, when the following was her condition, as reported by Mr. Smith, the clinical clerk.

The abdomen is greatly distended and of conical shape, the apex being midway between the umbilicus and pubes. There is dullness over the front and sides of the belly, reaching three inches from the umbilicus on the right side, and almost to the flank on the left side, with tympanitic percussion above and to the sides of the dull area. The surface of the tumour, as a whole, is rounded, several sulci marking off distinct rounded portions; these are very tense and fluctuating, but there is no fluctuation from side to side of the whole tumour. Just to the right of the umbilicus, a flat and very hard lump is felt, about the size of an almond in its shell. The abdominal wall is marked with purple lines from stretching; it is thin and freely movable over the tumour. *Per vaginam*, the uterus was found to be normal in size, but pushed over the left side; to the right and in front of it, rounded masses were to be felt through the vaginal wall.

Now, I beg you will understand that the diagnosis of abdominal tumours, presumably ovarian, is by no means easy, and that the most experienced ovariectomists are liable to mistakes. Thus, tumours of the uterus have been confounded with ovarian tumours, and, *vice versa*, cysts of the kidney and liver and enlarged spleens have all been taken for ovarian tumours; and, in fact, in many cases the late Mr. Baker Brown's dictum is undoubtedly true, that one cannot be certain about the nature of a given tumour until one's hand is actually upon it. Still, this was a remarkably easy case for diagnosis; the thin abdominal wall allowed the multiple cysts to be very distinctly felt, and the only unsolved question was whether the dullness in the left flank was due to some solid matter or, as it proved, to tightly packed cysts with viscid contents. Under these circumstances, a preliminary tapping could have been of no service, as it sometimes is in cases complicated with considerable ascites by which the tumour is obscured, or cases of one very large cyst, possibly in the broad ligament, where a single tapping will often cure the case altogether.

I, therefore, recommended the patient to undergo the operation of ovariectomy, putting the risks fairly before her and her husband; and, upon her assenting, had her transferred, with Dr. Grailey Hewitt's kind consent, to the house close by, which is devoted to the treatment of such cases under his care. My reason for doing this was that undoubtedly cases of ovariectomy do not do well in the general wards of a hospital, and that the only single ward at my disposal is at the top of the general staircase, and liable, therefore, to have noxious matters carried into it from below. I do not believe that the patient would have sustained any harm whatever if I had operated in this theatre, provided she could have been placed in an isolated bed afterwards; but, this being practically impossible in our present building, you had to follow the patient over the way to witness the operation. Now, the operation was done on a Thursday; and, on the previous day, I had made my visit here as usual, and the only restriction I put upon those who attended the operation was that they should not be in actual attendance upon cases of contagious disease. I learn from a paragraph in an American journal, that an eminent ovariectomist requires all who witness his public operations to sign a paper certifying that they have

not seen a dead body or an infectious living case for seven days; but such a sweeping precaution, even if it can really be enforced, seems to me uncalled for, when the operator must, in the ordinary course of practice, be daily placing his fingers in contact with discharges from the uterus quite as offensive, and probably as dangerous, as anything met with even in a *post mortem* examination. I do not think anyone would be justified in making a *post mortem* examination or going to an infectious case just before an ovariectomy; but I have great faith in a night's rest and a morning bath for removing all taint from the living body. Were it otherwise, indeed, I do not see how anyone could practise his profession with safety, and the effect of such a regulation as that given above would be to confine ovariectomy to a very select circle of operators.

The operation was performed on December 6th, the patient being under the influence of ether. I made an incision exactly in the middle line, three inches and a half long, beginning about midway between the umbilicus and pubes, and carrying it down towards the pubes. Having opened the peritoneum, I divided it to the same extent on a director, and the bluish cystic tumour at once came into view, there being no ascitic fluid. I then passed my hand in to make sure that there were no adhesions, and afterwards tapped the presenting cyst with a large trocar. Through this cyst, I tapped other cysts, but was unable to reach the large cysts in the left flank; and, therefore, having drawn the empty cysts forward, I tapped at a fresh spot. Having emptied two or three cysts through this opening, I was then able to draw the entire tumour out; Dr. Williams, who assisted me, carefully guarding against any prolapse of the intestines. The fluid of these cysts was thin, and ran readily through the cannula; but not unfrequently one meets with such dense cyst-contents that it is necessary to scoop them out with the fingers, the aperture in the cyst being enlarged with scissors so as to admit the hand, and the greatest care being exercised to prevent any escape of the contents into the peritoneum. The only adhesions were two of the omentum to the tumour, and these I tore through, afterwards putting fine silk sutures upon a couple of bleeding vessels.

Next came the important question of the treatment of the pedicle. Having tried all the modern plans, I gave the preference to that of "tying and dropping"; i.e., I tied the pedicle with silk and cut the ligatures short, so that I might close the wound completely. In doing this, it is important that there should be no risk of the ligatures slipping, and the best way is to use a double ligature, passing it through the pedicle with a probe, and then tying the two halves separately; and then, as an extra precaution, one of the ligatures is made to encircle the entire pedicle again on the uterine side of the other ligatures. I then divided the pedicle half an inch beyond the ligatures, and removed the tumour, which weighed three pounds and three quarters after the removal of five pints of fluid by the tapplings. The tumour involved the left ovary; and I proceeded to examine the opposite one, and, finding cystic disease commencing there, I removed it with the same precautions. The edges of the incision were brought together with five silk sutures, which were passed deeply through the entire thickness of the abdominal wall, including the peritoneum. Mr. Spencer Wells settled the question of including the peritoneum by experiments on animals (the specimens from which are in the College of Surgeons' Museum), and showed that, if the edges of the peritoneum were brought together, they united rapidly by lymph, and thus effectually closed the peritoneal cavity again, and prevented the access of inflammatory products. The same rule would hold good in cases of accidental wound of the peritoneum. No superficial sutures were used, but the abdomen was padded with cotton-wool and carefully strapped with plaster, so as to give support to the abdominal wall and contents, and thus to obviate vomiting to a great extent.

I need not trouble you with the details of the after-treatment, which consisted simply in careful nursing, a dose or two of morphia to relieve pain, a simple injection on the fourth day, and a dose of castor-oil on the fifth day. The sutures (one of which set up a little suppuration) were removed on the seventh day after the operation; and the patient went home on December 23rd, seventeen days after the operation, in order to spend Christmas with her family.

Although ovariectomy was first performed in 1809 by McDowell of Kentucky, who was a pupil of John Bell, the operation in modern times has been entirely of British cultivation. Mr. Lizars of Edinburgh was the first to attempt ovariectomy in this country, and by the long incision, i.e., from the umbilicus to the pubes; his example was followed by a few other surgeons, and from time to time a success was recorded. The short incision, with withdrawal of the contents of the cyst, was adopted in 1836 by Mr. Jeaffreson of Framlingham, but the pedicle and ligatures were still allowed to hang out of the wound and to set up suppuration in the peritoneal cavity. The late Mr. Duffin, in 1850, first called attention to this danger, and proposed to keep the strangu-



lated pedicle outside the peritoneum; and this method was improved upon in 1858 by Mr. Jonathan Hutchinson, who devised the clamp now in common use in some form. Mr. Spencer Wells, who has had the largest experience of any ovariotomist, had his first case in 1858; and since that time the operation has been performed by numerous surgeons, both in this and other countries, and is now a thoroughly established proceeding. My own experience has been comparatively small; the case you have seen being only my fifteenth; but the mortality has been small also, viz., three deaths, or one in five cases—this being, I believe, about the rate in Mr. Wells's much larger number of cases. One of my deaths was accidental, *i.e.*, it resulted from slipping of the clamp some hours after the operation, when internal hæmorrhage occurred before the pedicle could be secured. On the other hand, I have never had occasion to abandon an operation, though one of two cases have been rather desperate ones, one case having been already attempted by another operator, who gave up and closed the wound successfully; and others having been already declined on account of adhesions. In the first of these, the parts were so matted together that I unawares divided a coil of small intestine; but, by making an artificial anus, the patient recovered, and is now in perfect health, with only a small faecal fistula, which gives her no inconvenience. (The case is recorded in the *Clinical Society's Transactions*, vol. v.)

The method of treating the pedicle I adopted in this case, viz., "tying and dropping", was brought into practice by the late Dr. Tyler Smith, who had a series of most successful cases, and it appears to me to possess two great advantages—1. That it is applicable to all pedicles, whether long or short; and 2. That it admits of immediate closure of the wound in its whole length. My personal experience of the clamp is limited to the case already mentioned, in which a fatal result ensued from the slipping of the pedicle through the clamp, for I never again employed it; but I have seen it used frequently, and it does very well when the pedicle is long. But in many cases the pedicle is so short that very considerable traction upon the uterus is exercised in order to get the clamp outside the abdominal wall, thereby causing pain. Another objection is that the stump sometimes gives trouble if it becomes adherent to the cicatrix, a regular menstrual discharge taking place occasionally every month. Still, it is right that you should know that Mr. Wells has employed the clamp in the greater number of his cases. Mr. Baker Brown introduced the practice of dividing the pedicle with the actual cautery, and devised a cautery-clamp, which I show you here. I have employed it in several of my cases with good effect, but I do not think it so safe as the ligature; for, however careful you may be to cut the pedicle slowly with an iron not too hot, so as to sear the cut edges thoroughly, there is always the risk of some small vessel bleeding and requiring a ligature, and sometimes the burnt edges become separated and the bleeding is free. It is exactly the difference between applying torsion to a large artery and putting on a ligature; with the last, one feels perfectly safe, whilst with the former something may go wrong.

You may ask what becomes of the ligatures left in the abdomen. They become rapidly coated with lymph and buried completely, so that it is impossible to find them a few months afterwards. Possibly silk, being an animal product, may undergo partial absorption, as has been suggested; but twine ligatures do practically just as well, and are as completely hidden.

#### A CASE OF ALBUMINURIA WITHOUT ECLAMPSIA.

By A. E. AUST LAWRENCE, M.D.,  
Physician-Accoucheur, Bristol General Hospital.

As the condition of albuminuria in pregnant women is often complicated at the time of labour with eclampsia, it is of importance, I think, that cases where the connexion does not exist should be put on record, to assist somewhat in elucidating the pathology of puerperal eclampsia.

Briefly, my case is as follows.

Mrs. C. called on me last February and engaged me to attend her in her first confinement, expected in May. She did not complain of being out of health; and, except that she looked rather pale, I did not notice anything particular about her to suspect that anything was wrong.

On March 30th, I was sent for, as she was supposed to be in labour. I found her in a very nervous and restless condition, complaining of pain over the abdomen, lumbar region of the spine, and back of the head. The skin was hot and dry. Temperature 101°. There was no redema of any part of the body. The pulse was hard and wiry, 110 beats per minute. The heart-sounds were very distinct, yet normal. The lung-sounds were normal. She had had no action of the bowels for three days. The quantity of urine passed in the last twenty-four

hours did not exceed two fluid ounces. It was dark in colour, of specific gravity 1025, and loaded with albumen; so much so that, on boiling with nitric acid, the contents of the test-tube became nearly solid. There were a large number of blood-corpuscles and casts. There was no uterine action. The fœtus was alive.

I concluded the case to be one of congestion of the kidneys, possibly from pressure of the gravid uterus, and I feared eclampsia. The indications for treatment were to get the skin and bowels to act well, and also to allay as much as possible the nervous condition. I did not hope to obtain much benefit until after the confinement.

The bowels I kept moved daily with the compound jalap powder and calomel. For the first three days I gave her a mixture containing tartar emetic, hydrate of chloral, and bicarbonate of potash, which had the effect of promoting the action of the skin, removing the high arterial tension, and increasing the quantity of urine to about twelve ounces daily. The diet consisted of three pints of milk and two eggs daily. This treatment was continued, with the exception of omitting the tartar emetic, until April 8th, when labour came on without any convulsion and terminated naturally in about eight hours. The child was born alive. Up to this time, the urine had contained very nearly as much albumen as at first, and was very scanty, but within twenty-four hours after confinement the amount had increased to thirty-six ounces *per diem*, and three days afterwards she was passing about two pints and a half. The albumen gradually diminished, and at the end of three weeks the urine was normal.

Here was a case, then, in which one would fully expect eclampsia, if intense albuminuria were always the cause, which fortunately it is not, although the kidney condition is, no doubt, an important factor in producing it. When I first saw my patient, she was evidently suffering from slight uræmic poisoning, and, had labour come on then, I fear the results would not have been so good; although the rapid improvement after confinement would tend to show that, in the face of serious symptoms, the most likely course to benefit the patient would be to induce premature labour.

#### CASE OF RHEUMATIC FEVER SUCCESSFULLY ARRESTED IN FIVE DAYS BY THE USE OF SALICIN.

By KEITH NORMAN MACDONALD, M.D. Erlang.,  
F.R.C.P. Edin., L.R.C.P. Lond., Cupar Fife.

J. M., a printer by trade, aged 28, of dark complexion and spare habit of body, enjoyed very fair health up to September 1873, when he was seized with an attack of rheumatic fever following an eruption of boils in the axillæ, on which occasion he was confined to his bed for nine weeks with severe pain in all his joints, accompanied by shortness of breath and pain in the præcordial region, which, his then medical attendant assured him, implicated the heart. He made, however, a good recovery, and, with the exception of some dyspnoea, he resumed his occupation without suffering further inconvenience, until February 10th, 1877, when, on exposure to cold and damp after a hard day's work, he was seized with rigors, pains in the joints, and general constitutional disturbance, similar to what he experienced in his former attack. These symptoms increased on the 11th, and I was called in on the 12th, when I found him in the following condition:—Severe pain and swelling in the knee, ankle, wrist, elbow, hip, and shoulder-joints, with the head and neck immovably fixed; temperature, 102 deg.; pulse, 120; furred tongue, high-coloured urine loaded with urates, restlessness, sour-smelling sweat, suffusion of the eyes, and general malaise. I immediately put him upon ten-grain doses of salicin every four hours, and ordered a saline mixture, containing twenty grains of bicarbonate of potash, three times a day, and ten grains of Dover's powder at bedtime, the joints in the meantime being wrapped up in cotton-wool covered over with oiled silk; an aperient, and light farinaceous diet, with milk.

February 13th. He slept for two hours after taking the powder, but complained of intense headache, with little or no abatement of the other symptoms. Temperature, 101 deg.; pulse, 120 (as at yesterday's visit). The head and neck were still immovable. He felt the weight of the bed-clothes, which had been relieved by the use of a cradle to protect the knee and ankle-joints. He had pain in the region of the heart, over which a slight systolic murmur, loudest at the apex, was distinctly audible. The treatment was continued as before, with the addition of a mustard plaster over the region of the heart, followed up by hot fomentations, and two grains of calomel to be added to the powder at bed-time.

February 14th. He passed, if anything, a better night; but was



still very restless, with little abatement of the more prominent symptoms, except in the right arm, which could be moved more freely. The systolic murmur was unchanged, without dulness on percussion. Temperature, 101 deg.; pulse, 116. He had great thirst and profuse perspiration. He was ordered to continue the salicin, and to have potash-water *ad libitum*.

February 15th. He slept better last night. The pains in the joints were somewhat relieved, but were still very painful on motion, without any sensible difference in the swelling of the knee and ankle-joints. He could move the arms, which he was able to take from underneath the bed-clothes without assistance. The pain at the nape of the neck was still severe, but that in the heart had disappeared, though the systolic murmur was still audible. Temperature, 100 deg.; pulse, 112. The treatment was as before, omitting the poultices to the chest.

February 16th. He was much relieved this morning. The swelling and tenderness in the large joints were considerably abated. He could move both arms freely, and altogether felt surprised at the rapid improvement, being able to turn in bed with a little assistance. Temperature, 100 deg.; pulse, 108; bowels costive. He was ordered to have an ounce of castor-oil immediately. Chicken-soup was added to the diet, and linimentum opii was ordered to be rubbed into the affected joints morning and evening.

February 17th. There was marked improvement this morning. He could move both arms and legs freely, and was able to turn in bed without assistance. The pain in the head was gone, but there was still some stiffness in the neck. The systolic murmur was still audible—probably a permanent result of his former attack—but he felt no pain or inconvenience in the region of the heart. Temperature, 99 deg.; pulse, 96. The swelling in the joints was disappearing. A little brandy was ordered to be added to his potash-water, and diet to be increased by the addition of eggs and white fish. Convalescence having been now established, it need only be further remarked that he continued steadily to improve; was found sitting up in bed on the 20th without a vestige of pain anywhere, and resumed his occupation the last day of the month, on which date he also discontinued taking the salicin.

REMARKS.—Without entering into details, there is scarcely room for doubting that the favourable issue in this case was mainly due to the salicin, and that in it we possess a valuable therapeutic agent in this troublesome and mischievous disease.

#### RETROFLEXION OF THE VIRGIN UTERUS, WITH SEVERE AND ACUTE SYMPTOMS, IN A GIRL AGED 14.

By E. HOLLAND, M.D., M.R.C.P., F.R.C.S.,

Assistant-Physician to the Hospital for Women.

E. M., AGED 14, of scanty frame, with puberty advancing normally, and whose last menstruation had been somewhat profuse and attended with severe vomiting, failed, with symptoms very like the decided invasion of typhoid fever, about a week after the cessation of the flux. There were sharp pyrexia, dry brown tongue, frontal headache, and general abdominal tenderness. With these, however, there was pain of a peculiar character, severe, crampy, paroxysmal, and circumpelvic, and there was also "cutting" micturition. Poppy fomentations were ordered, with small doses of opium and acetate of ammonia; but the pain continued and was exaggerated. The mother observed that the pains were like those of labour, and came on every twenty minutes, doubling her up and occasioning wild cries of distress. At this stage, a vaginal examination disclosed retroflexion of the uterus, the retroflexed portion being hot and extremely tender; and restitution was at once effected by the sound. The paroxysmal pain did not again recur, and the next day found our patient cheerful, happy, and well.

COMMENTARY.—The case referred to occurred in private practice, in genteel life, and where its nature might have been readily overlooked or imperfectly investigated. Such cases, however, cannot be very common; for, in upwards of a thousand special cases treated by me in the Hospital for Women, I have not observed similar conditions in early puberty. It is highly probable that the flexion was occasioned by the vomiting and straining of the last period; that secretions accumulated owing to obstruction at the angle of flexion, the obstruction of flexion; and that the violent paroxysmal pains were dysmenorrhœal in character, and to be explained by an irritable uterus making futile efforts to disgorge its flooded interior. In any such case, I should advise a like procedure wherever circumstances admitted its being carried into execution.

#### ON A NEW FORM OF REMOVABLE PATTEN FOR SURGICAL OR GENERAL USE.

By RICHARD DAVY, F.R.C.S.,

Surgeon to the Westminster Hospital.

THERE are many working people, as well as rich, who are obliged to use a high boot for walking purposes. Hip-joint disease, fractured thighs, and arrest of development on one side, furnish examples.

I have never yet met with a cork boot that can withstand constant fair usage; the majority of them soon give way at the toe, and the cork laminae are ground away.

From an æsthetic point of view, the steel patten is more graceful than the funereal-looking block of leather encasing the cork; for it is impossible to disguise seven by ten inches of black sole. By reason, also, of the inability of a patient to divest himself of the cork sole without taking off his boot, I have been led to invent the simple mechanism which is here engraved.



The boot should lace up high, fit well, be square in the toes, and low in the heel. The anterior elevations receive the sole at the welt; the posterior semicircle adapts itself around the heel, and a strong screw fixes the whole at the spur-box. The complete gear for a countryman, with seven inches of shortening, weighs under three pounds. The groundwork of the patten should be convex, to allow the swing of the body in progression; the patient himself being, as a rule, the best judge of the most fitting curve. I have as yet only three men wearing this mechanism, but they report very favourably on it; stating it to be convenient, clean, and serviceable. From a non-professional point of view, pattens have been going out since the introduction of goloshes; pattens are, however, yet worn in rural districts, as they were by Sairey Gamp in Pecksniff's cab; and I shall be pleased if some modification of this mechanism leads to the inducement of outdoor exercise on the part of women who object to soiled boots, wet feet, or slippery goloshes. Messrs. Blaise and Co., 67, St. James's, Street, S.W., are the mechanicians.

#### TREATMENT OF SCABIES WITH THE FIXED OIL OF STAVESACRE.

By BALMANNO SQUIRE, M.B.,

Surgeon to the British Hospital for Diseases of the Skin.

I HAVE endeavoured in the pages of this JOURNAL to add to the number of such ascertained chief therapeutical constituents in the instance of chrysophanic acid as the active therapeutical principle of Goa powder. I now desire to make another addition in the case of the fixed oil of stavesacre. In the prosecution of an investigation as to the pathology of prurigo senilis, the details of which were published in this JOURNAL



some years since, I had occasion to employ an ointment of stavesacre-seeds, as a means of therapeutically testing the accuracy of my conclusions as to the pathology of that disease. This remedy, as is well known, is a parasiticide, in the sense that it is fatal to all of those animal parasites, properly so called, with which the human skin is wont to be infested in this country: that is to say the pediculus capitis, the pediculus corporis, the pediculus pubis, and the acarus scabiei. However, I have found that an ointment of stavesacre-seeds is a very coarse and unsightly preparation. On inquiring of those wholesale firms who undertake the business of "drug-grinding" for the general body of pharmacists, I ascertained that it was impossible to grind the seeds to any finer condition than that of a coarse meal, on account of their excessively oily nature. It then occurred to me that I could obtain a much more finely pulverised condition of the seeds by first removing their oil from them. This, for the purposes of my experiment, was accomplished by percolating the bruised seeds with ether—a process which completely abstracted the oil. The seeds could then, as I found, be readily ground to a very fine powder, and a very smooth and excellent looking ointment was thus obtained; but, on making trial of it, I found that my ointment thus prepared had lost all its virtue as a parasiticide. It therefore became probable that the virtue of stavesacre-seeds was contained in their fixed oil. On making trial of ointment made with this oil, I found that such indeed was the case. Now this oil may be obtained much more cheaply than by the method I employed; namely, by simply expressing it from the seeds in the same manner that linseed-oil is commonly obtained from linseed. The fixed oil of stavesacre is quite colourless. It is also odourless, and so is a very unexceptionable remedy. Ointment of stavesacre-seeds has been obtained by digesting the bruised seeds in hot lard, and then straining the admixture; but this produces a strongly coloured brown ointment, whereas an ointment prepared with the fixed oil is perfectly colourless. The absence of smell and colour in an ointment so prepared gives it considerable advantages over sulphur-ointment in the treatment of scabies, if only its efficacy be the same; and I find it to be quite equally efficacious, but it possesses also another considerable advantage. It is well known that in the treatment of scabies by sulphur it is necessary to beware of the remedy as much as of the disease. The strongly stimulating action of sulphur-ointment sets up in many persons a persistent dermatitis of a very irritating kind, which is remarkably slow to subside, and which constitutes a condition rendering it very difficult for many practitioners to determine how far the persistent itching is due to the natural disease and how much to the artificial one. Now an ointment of the fixed oil of stavesacre, besides being colourless and odourless, is also non-irritant. By this I do not mean that it will not serve as an irritant to exceptionally sensitive skins, but that its irritating effects are vastly less in degree than those of sulphur-ointment, and that in the majority of cases it does not irritate in the least. I will adduce a case in illustration of my views.

A man, aged 21, recently admitted as an in-patient of the British Hospital for Diseases of the Skin, under my care, had been sent up by Dr. Moger of Carshalton, affected with a copious pustular eruption of his hands and upper limbs. His hands, forearms, and arms were so brawny and swollen with their inflamed condition that he could scarcely bend them, and was unable to take off his coat unassisted. He complained only of his hands and arms, and at first said that there was nothing else the matter with him; but, on stripping him, slight scratch marks were visible on different parts of the trunk and lower limbs, but no other notable kind of eruption; and on questioning him, he confessed to a general itchiness of a moderate kind. On close examination of his hands, several of the characteristic furrows of the acarus were discernible, and from one of these an acarus was extracted on the point of a pin, and placed under the microscope. He had been affected with his complaint for about six weeks. He was ordered to rub in over the whole of his skin excepting his scalp and face, an ointment containing one drachm of the fixed oil of stavesacre to an ounce of lard. This he continued to do every morning and evening for nine days. He was then dismissed completely cured. No other treatment of any kind was employed. On the third day of his treatment, he began to lose his itching. On the fourth day of treatment, there was no more itching. At the time of his dismissal, the pustular eruption, and the swelling and inflammation of his hands and upper limbs, had completely subsided, so that he could use his hands freely and with ease. Nothing more remained of the original condition beyond comparatively faint and slightly livid red stains, the traces of the considerable eruption which had recently existed.

The frequent and thorough applications of the ointment had throughout occasioned him no irritation or smarting in even the least degree, and on no part of the skin could any trace be perceived of any irritant action of the ointment.

## THE GERM-THEORY OF ENTERIC FEVER.\*

By ROBERT S. HUDSON, M.D., Redruth.

FEW districts are more favourably situated for the study of infectious diseases than the peninsula corresponding to West Cornwall. The main lines of traffic, whether by road or rail, may be said to converge at Truro. There is little cross-country commerce, except in the neighbourhood of mines; and the sea, which surrounds the district to the greater part of its extent, forms an effectual barrier to the admission of any contagium, unless at Falmouth, Penzance, St. Ives, Hayle, and a few of the minor ports. The course of any infectious disease arising from without might, therefore, readily be traced by proper sanitary organisation; and, at little expense, the whole district might be as free from epidemic disease as were the Scilly Islands during the ten years 1851 to 1860, when not a single death was reported from small-pox, scarlet fever, measles, or diphtheria. The mortality is very low in the country districts, and I believe there is no part of England where the soil and climatic conditions are more conducive to health and longevity; but our towns and villages, with their dense populations, are so prejudicial to health as to make the total death-rate of the Truro, Redruth, Penzance, and Falmouth Unions higher than any districts in the five South-Western Counties, with the exception of Plymouth, Exeter, East Stonehouse, and Bath.

It is my purpose, however, to confine my remarks to the etiology of one of these infectious diseases: that fever variously named typhoid, enteric, or pythogenic; and to explain why I have been converted to a belief in the germ-theory of its causation.

When I was a student, preparing for examination and getting up the differences between typhus and typhoid, certain ideas were acquired, which I carried with me into practice; for example—typhus: highly contagious, doctors and nurses frequently catch it; typhoid: non-contagious; if two people are ill in the same house, there is a common cause. I was accustomed to look on Dr. Murchison as infallible on all questions appertaining to fever, and was convinced that the term pythogenic—begotten of filth—was a great step in the attainment of a correct nosology.

I should state that in Redruth typhoid is a rare visitor, and is never epidemic; most of the persons attacked have recently visited neighbouring towns. We have no common system of sewers with which our water-closets are attached; there is, therefore, little opportunity for the contagium to spread, if it exist in the discharges of the patient; whereas the country districts around the town, whose inhabitants obtain their drinking-water from shallow wells or adits, provide an annual supply of typhoid cases; but it is an interesting fact that these cases crop up in the same spots year after year, whereas other parts of the country are as free of typhoid as is Redruth itself.

I well remember a commercial traveller, whom I attended in 1873 for typhoid; he had been staying at various Cornish towns during the week preceding the initial shiver. His wife came from Birmingham to nurse him, and one of the housemaids at the hotel was appointed to wait solely on them. Every care was seemingly taken in the disinfection of stools and vessels, yet this housemaid contracted the disease, and had a genuine attack after his convalescence and return to Birmingham. I must say this case staggered me, and I could only explain it on the supposition that contagium from the discharges had not been deprived by the disinfectants of their vital power. This contagium was volatile, mixed with the air, and she had inhaled some when performing the necessary duties of cleansing. He consulted me on the day of his arrival at Redruth, so, unless the incubative period can be compressed into a few hours, it is clear that there could not have been a common cause at work. As a further proof that it did not originate in Redruth, I may add that no other person in the hotel was attacked.

In November and December 1874, Portreath—a village on the north coast, four miles from Redruth—was visited by an outbreak of typhoid fever. A girl named N. had been in service in Truro; after the death of her mistress from typhoid, she felt unwell, and wished to return home; becoming worse, she placed herself under the care of Mr. T. S. Reed of Pool. On the twentieth day after her return, her sister shivered and suffered in a similar way. A family named S. lived next door, and two daughters of the house were seized with fever; and Mr. Reed tells me that these four had gastric irritation, spots, ochre stools, and tardy convalescence. Next door to S., a boy named R. was then attacked; he was under the care of Mr. J. S. Hichens of Redruth, and had troublesome hæmorrhage from the bowels with delirium. S. had a married son, living on the other side of the village;

\* Read before the South Devon and Cornwall Branch.



his wife visited her father-in-law's house, and she was next attacked ; then her four children. These five were typical cases of typhoid. A man named T., who used the privy in common with S., also suffered from a feverish attack, which lasted four weeks ; he ascribes his illness to a visit to the privy where the dejections were emptied ; he is most positive in stating that he felt sick immediately, and went into his house ; that evening, he shivered ; and next morning remained in bed. A sewing-girl named B., whose residence was two miles distant, but was employed by Mrs. T. in dressmaking during the day, was next attacked ; her symptoms were like those of T. ; no pain in right iliac fossa ; no diarrhoea ; merely loss of appetite, wasting, and elevation of temperature to 102 deg. Fahr., these symptoms lasting in T. twenty-nine days, in B. twenty-five days. A boy named H., living in another part of the village, worked with the father of R. in repairing an open sewer near the house of N. ; he was also seized, but his symptoms were more like typhus than typhoid : delirium of a furious character on the sixth day, and temperature as high as 106.5 deg. Fahr. His mother nursed him most assiduously, and could not be induced to go to bed ; she next sickened, absolutely declined nourishment in any form, and died in four days. Thus, from that single imported case, thirteen people suffered from the symptoms of continued fever. The boy H. died from syncope when getting out of bed in the ninth week of his illness. His death greatly surprised me, as the skeleton form, with its ghastly features, was being clothed with muscle, and he promised a fair convalescence.

The conditions of filth which existed previously to and during the outbreak were no worse than they had been for years. If filth in a state of decomposition could of itself generate the specific poison which produces such a definite train of symptoms, is it not strange that Portreath should have been free ever since, and that its appearance in the village should have been coincident with the arrival of a girl from a fever-stricken house twelve miles distant ?

The alarming increase of typhoid of late years in our well-drained towns is a matter of the greatest importance. Those who look on it as caused by sewer-gas in a state of decomposition, cry "Ventilate, ventilate". To this advice we cannot take objection ; it is admirable in its way, but does not go far enough. The germs or active principles of this disease should not be allowed to enter the sewers, amidst the foul air of which they hold high revelry and become intensified in energy.

The medical men practising in those towns where typhoid is practically endemic cannot help much in the study of this question. The network of drains prohibits successful search ; but those living in country places, among scattered populations, or in towns where it appears at intervals, can do much, by careful observation and exact notetaking, to unravel the mystery which at present surrounds the origin of typhoid and its relationship with typhus and simple continued fever. If these thirteen cases had been sporadic, or if there had been any difficulty in tracing the contagion, I should have classified them as follows : typhoid, nine cases ; typhus, two ; simple continued, two.

According to the census of 1871, Redruth parish had a population of 10,685 ; about 2,000 in the country, and the rest in town. The records of the Miners' Convalescent Hospital—generously built and to a great extent maintained by Lord Robartes—confirm my statement as to the practical immunity of Redruth town from typhoid fever. During the past six years, forty-one convalescents from typhoid have been admitted ; and although Redruth sends one-fifth of the total convalescents, only three of the forty-one typhoid cases came from Redruth, and even these were from the country—not a single case from town. They also support my statement as to typhoid lurking in certain spots to break out into virulence every autumn, as, of these forty-one cases, thirty-eight are chargeable to six hamlets, miles away from one another, and without any apparent bond of connection. A polluted water-supply and overcrowding in bedrooms may have something to do with it ; but from the data at present before me, I am of opinion that these conditions are only powerful in the spread of the disease, but they do not in any sense originate it, as precisely similar conditions exist in other parts of the country to an equal extent, yet no typhoid. The wells and pumps of Redruth have been drained, since 1853, by a mine called Pednandrea, situated on the eastern of the two hills on which the town is built. The pure but insufficient water-supply comes from an adit in the same hill, but above any source of animal contamination ; and to the purity of our drinking-water, coupled with the absence of any system of deep drains of the old type, we attribute our freedom from typhoid.

Correct ideas must be held on the etiology of this disease, if we desire to be successful in its prevention. The pythogenic theory would induce us to recommend the utmost cleanliness, and the removal of all filth before it decomposes. The germ-theory would, in addition, pre-

scribe disinfection of the excreta, and the application of the same principles which guide our recommendations when we have to deal with small-pox or scarlet fever.

It is full of interest to compare these zymotic diseases with fermentation, from which the class derives its name. The yeast-plant, living and growing before your eyes under a microscope, buds and divides, but still multiplies with rapidity so long as there is any sugar in the liquid on which it may feed. May it not be that the typhoid virus is similar to the yeast-fungus, multiplying in the blood or tissues with astonishing rapidity, and producing the train of symptoms we call typhoid ? I fear Dr. Klein's description and the accompanying drawings may, in virtue of Dr. Creighton's recent communication to the Royal Society, be considered "not proven". The power of reproduction possessed by the members of the fungus family is simply surprising. If you examine a little mildew under a microscope, you will see the field covered with the mycelium and spores. In the case of one variety, the spores seem to be in threads of hundreds or clusters of thousands, but all possess the property of specificity, they produce their like. You can grow them in Pasteur's fluid, and be as sure of a certain result as is the farmer when he sows wheat in his field, and knows that the crop will be wheat and not oats or other grain. Is there no analogy between this fact and what we know of the specific poisons of these diseases ? If filth, in a decomposing state, originated typhoid, or scarlet fever, or measles, why do these diseases appear at certain times, and follow certain tracks of communication, travelling as surely in certain directions as an engine on a railway ?

To conclude, there are two views regarding the origin of typhoid or enteric fever : the contagionist or germ theory, represented by the older school, Alison, Christison, Hughes Bennett, Stokes of Dublin, and William Budd of Clifton ; the non-contagionist or pythogenic, represented by Murchison, A. P. Stewart, Niemeyer, Liebermeister, and Hudson of Dublin. According to the contagionists, a specific poison or germ (if you like so to call it) is conveyed from the body of the patient mainly by the intestinal discharges ; it lodges in cesspools or sewers, polluting air, water, and soil, and so spreading the disease. According to the non-contagionists, typhoid stools, however concentrated, do not poison the air, but must be mixed with decomposing sewage to acquire their virulence ; and decomposing sewage—animal matter in a state of putridity—is sufficient to develop the poison *de novo*, and produce the fever.

The latter theory was that of my text-books, and in it I concurred ; but it fails to explain the facts coming within my own experience. I do not deny the possibility of the independent origin of typhoid from faecal fermentation ; no case of such has, however, come before me, and faecal fermentation in the cesspits of Redruth is of everyday occurrence. Adopt the germ view, and you have something definite to guide you in sanitary precautions. Adopt the pythogenic view, and you have scepticism and silent, if not avowed, opposition on the part of the public, who well know that the biggest stinks in a parish have not their invariable complement of fever-cases. I trust that my remarks will not have the tendency to induce laxity in dealing with filth as the great propagator of typhoid fever. I merely wish to advise further action. Destroy the specific germs before they mix with the filth ; look on filth as the agent for the dissemination of the poison, not the poison itself, and you are more likely to be rewarded by success.

My attention was directed to the germ-theory by a perusal in the JOURNAL of a lecture, by Professor Tyndall, on Dust and Disease. It has since been published in his *Fragments of Science*, and will well repay perusal by any member of the medical profession.

**RURAL DISTRICT OF ASTON.**—This district comprises thirteen parishes and hamlets, and has an estimated population of 19,310. There were 646 births and 403 deaths registered during the year, so that the births were 32.4 and the deaths 20.88 per 1,000 population. The zymotic death-rate was as low as 2.42 per 1,000 inhabitants, which is less than usual. Two cases of small-pox occurred at Minworth, one of which died ; but the disease was prevented from spreading by isolation of the sick. Vaccination is very well carried out in the district, as only twelve of the births were unaccounted for. Dr. Hickinbotham complains of the bad management of infants, both as regards food and dress, from which many deaths had resulted. There were 174 sanitary notices served and 168 nuisances abated. The rainfall during the year 1876 was unusually large, having been nearly 33 inches, which is more than 3½ inches above the average of the previous twenty years. The highest temperature recorded in the shade was 83.6 deg. Fahr., and the lowest 24.3 deg., giving a range of nearly sixty degrees in the year.



## REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN  
THE HOSPITALS AND ASYLUMS  
OF GREAT BRITAIN.

## WEST LONDON HOSPITAL.

EXTRAVASATION OF URINE: FREE INCISIONS: INTERNAL URETHROTOMY SEVENTEEN DAYS AFTERWARDS: GOOD RESULT.

(Under the care of Mr. TEEVAN.)

JOHN P., an omnibus-driver, aged 52, was admitted into the hospital on September 23rd, 1876, having been put under Mr. Teevan's care by Mr. F. Alderson.

From notes taken by Mr. Angove, the house-surgeon, it appeared that the patient had suffered from stricture for five years, and that he had had three attacks of retention of urine, which had been relieved by leeches and the catheter. Latterly, he had become much worse, the urine only coming in drops. A week ago, he ceased to pass any urine, and the perinæum soon began to swell.

When the man was admitted, he was in a very critical position. The tongue was dry and brown; expression of face anxious; temperature 104; pulse 100; and he complained of much pain. The penis, scrotum, and perinæum were all greatly swollen, tense, and of dark purple colour. The swelling and discoloration extended into the groins and to within a few inches of the umbilicus. Distinct fluctuation could be felt in the perinæum. No catheter of any description could be passed. The patient having been put under the influence of ether by Mr. Alderson, at 2 P.M. Mr. Teevan made a long and deep incision into the raphe of the perinæum, whence gushed forth a large quantity of urine and pus smelling most offensively. Four cuts were then made into the penis, and an incision into the suprapubic tumefaction.—September 24th, 10 A.M. The patient had a slight rigor in the night. Pulse 104; temperature 103.2. The urine passed freely through the perinæum, and the swelling of the different parts was subsiding.—September 25th. He was better; he slept well. Pulse 58; temperature 100.—September 28th. He was improving. Pulse 68; temperature 98.5.—September 30th. Mr. Teevan tried to introduce a small elastic catheter, but could only succeed in passing the instrument a short way into the stricture. The patient suffered a good deal of pain afterwards. His pulse went up to 116, and temperature to 102.—October 1st. He had a slight rigor in the night, but felt better to-day. Pulse 72; temperature 99.—October 6th. The patient was gaining strength. The wounds were looking healthy. A little urine now came through the penis.—October 7th. After considerable difficulty, Mr. Teevan passed a No. 2 elastic English catheter.—October 8th. More urine came through the urethra and less through the perinæum.—October 9th. To-day, on examining the urethra, Mr. Teevan found a very tough stricture half an inch long situated three-quarters of an inch from the meatus externus, and another one inch long distant three inches and a quarter from the meatus. As the strictures were exceedingly hard and encircled the urethra like iron hoops, and as the introduction of catheters was followed by pain and considerable constitutional disturbance, Mr. Teevan considered internal urethrotomy indicated.—October 10th, at 3 P.M., the patient was put under the influence of ether by Mr. Alderson; and Mr. Teevan, having removed the foreskin on account of the irreducible phimosis from which the man suffered, divided both strictures from before backwards. The meatus externus was enlarged, as it was not capacious enough to permit the introduction of full-sized instruments. No. 25 was then passed into the bladder and immediately withdrawn.—October 11th, 1 A.M. The patient had a rigor. 10 A.M. Pulse 106; temperature 103; tongue furred. 6 P.M. Pulse 112; temperature 103.—October 12th. He had slept well, and felt much better to-day.—October 13th. The perinæal wound was closed. No. 25 was passed. From this date, the patient's progress was uninterrupted, and he left the hospital on November 4th with all the wounds healed, and able to pass No. 25 elastic "bougie olivaire à ventre" with ease for himself.

March 25th, 1877. The patient remained quite well. A No. 25 catheter slipped into the bladder without encountering the least obstruction.

Mr. Teevan observed that the successful termination of a case like the present depended on a free use of the knife. Punctures were of no good: deep and free cuts through the textures were demanded in order to give an exit to the pus, urine, and broken-down tissues. The

chief point in the after-treatment was to give a plentiful supply of milk, which generally acted like a charm in resuscitating the patient. It was very clear that the urethra had given way behind the dense thick stricture at the root of the penis; and, as it was not amenable to dilatation and resented any interference, he considered internal urethrotomy indicated; for there could be no safety for the patient against the recurrence of another attack unless he were able to pass a large-sized catheter with ease for himself, which result could not be attained with strictures of such a character as those from which he suffered. The peculiarity of all penile strictures was, that they were not usually successfully treated by gradual dilatation, whereas they could always be divided without any risk to the patient. In the present instance, the operation had been attended with perfect success; and, when the patient was seen five months afterwards, he could pass a large-sized instrument with the greatest facility.

## STANLEY HOSPITAL, LIVERPOOL.

CASES OF INFLAMED KNEE-JOINT, CURED BY MECHANICAL TREATMENT, WITH ASPIRATION, OR INCISION AND THE "OPEN METHOD".

(Under the care of Mr. RUSHFON PARKER.)

CASE I. A strong healthy boy aged 13½ applied, on May 27th, 1876, on account of his right knee, which was bent to a slight extent, very stiff, and a little tender on attempting forced movement, more so on pressure over the joint. Voluntary movement has ceased to be possible; and, although he can walk painlessly with the affected limb, the flexion is increasing. No history could be elicited. No injury, and not even the duration, had been noticed.

On June 2nd, he was fitted with Thomas's splint, reaching about four inches below the heel, with a compensating patten attached to the left boot. He was treated throughout as an out-patient, sitting on the oval padded upper ring of the splint (made of rod-iron, a rod on each side the limb, joined to a large oval ring round thigh and perinæum above, and to a patten-ring below the lowest reach of the extended toes), on which he walked to and from hospital, about half a mile, twice a week.

In the first fortnight, the limb was quite straightened, and was then kept immovably bandaged to the splint. By the end of a month the stiffness was gone, and in six weeks more he had acquired some power of voluntary extension after flexion.

At the end of the third month, the joint felt elastic and distended below the patella; accordingly, two drachms of clear straw-coloured jelly-like fluid were drawn off by aspiration through a steel needle the size of No. 2 catheter. In another two months he could perfectly extend the joint after flexion; so, on November 4th, the splint was removed.

A week later, he came, having spent the interval in the country, exceeded his liberty, and knocked about on the limb without the splint. The joint was found distended again, and at once an ounce of fluid was aspirated. He was directed to wear the splint by day and to remove it at night.

December 6th. He was directed to wear the splint at night only.

January 20th, 1877. He had discontinued the use of the splint during the daytime, except occasionally when tired, or when walking more than usual.

March 14th. The movements were perfect, the joint was strong, and he had left off the splint altogether. The soft parts were naturally a little thickened, but there was no fluid, pain, or tenderness in the joint.

CASE II. A healthy boy aged 8½ was playing in a warehouse on October 6th, 1876, and was knocked over by a loaded truck, striking his left knee. The following night, pain began, and gradually became worse. He came to hospital on October 14th suffering constant pain, with loss of appetite, furred tongue, and feverishness. The left knee was also bent, swollen, quite tight, and very tender, and swelling continued halfway up the thigh.

The limb was put up immediately in a Thomas's splint, and then two ounces and a half of pale greenish sero-purulent fluid were aspirated with a No. 3 needle; after which the joint resumed its natural shape, and he was sent home to bed.

He was carried to and from the hospital on 18th, 21st, and 25th, and then admitted. The joint gradually filled; aspiration failed on the 21st; and on the 25th, under ether, four ounces and a half of grumous blood and pus were withdrawn by a No. 4 needle. On October 27th, three ounces were aspirated with a No. 6 needle, and three ounces and a half on November 1st.

November 3rd. The last puncture was open, and sanious pus oozed



out. He had again lost his appetite. Under ether, the joint was freely incised for three or four inches on the inner side of the patella slantingly backwards, so as to secure perfect drainage from this side. A counter-opening was made on the outer side, but not free enough, for pus was retained here for a few days. However, on November 10th, this side was opened freely, after which no more pus formed. A scale of blood formed, and was followed by clear serous ooze. The inner wound healed first. The back of the joint was supported by a zinc plate having large perforations. No dressing of any kind was used. The boy's appetite returned the day after the first incision, and healing rapidly progressed.

A new splint, properly fitting, and suitable for walking in, was put on him on December 13th.

On the 23rd, he was up and stumping about the hospital with a patten on the sound foot. The wounds had contracted to small sores, on which scale formed, which he occasionally removed.

He was made an out-patient on January 7th; two months after the free incision and three months after the receipt of the injury.

He made uninterrupted progress, and on March 17th the joint (which had never been stiff) was soundly healed, had nearly regained its shape, and was capable of perfect voluntary extension after flexion. This last is the practical test of approaching fitness for use.

As a precaution, he was told still to wear the splint by day, and remove it at night.

REMARKS.—In the first case, a stiff joint was fixed completely and became slack in a month; in the second, a joint was fixed from the first, and kept immovably straight till it healed, though acutely suppurating, aspirated, and incised; yet it never became stiff. The secret of the splints employed is that they secure immobility of the limb, because they reach from the head of the femur to beyond the sole of the foot: immobility is thus a fact instead of a mere word.

Suppuration in the joint ceased as soon as fluid accumulation became impossible. It ceased first on the inner side where free incision was first made, and non-suppurative healing began here though suppuration continued for a few days on the outer side. As soon as complete emptying was secured by incision to the lowest corners of the capsule, suppuration and hemorrhage gave place to clean granulation, and cicatrization, with a pellucid serous ooze from the unsupported but unirritated granulations. This is antiseptic surgery.

The aspirator-needles were at first too sharp, and scratched the inside of the joint, which refilled repeatedly with blood. This is one cause of the failure of the aspirator. Since they have been blunted, the needles have never since been the cause of similar mishap.

## REPORTS OF SOCIETIES.

### ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 22ND, 1877.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

#### ON THE CLINICAL CONDITION OF THE HEART AND VESSELS IN CHLOROSIS. BY J. PEARSON IRVINE, B.A., B.S., M.D.

CERTAIN cardiac physical signs have been long associated with chlorosis and allied conditions, and above all a "hæmic" murmur at the base, by some said to be generated in the aorta, by others in the pulmonary artery. It is rare to find in text books mention of any other of the cardiac signs met with in the above diseases. The most important change in the circulatory system is dilatation of the ventricles of the heart, especially perhaps of the left. This is hardly noticed by writers in this country. In Germany, Stark (*Archiv der Heilkunde*, 1863) insisted on its occurrence in severe cases; but it is common to find it in those of moderate degree. Besides physical signs, subjective symptoms favour this opinion, such as frequent palpitation, dyspæa, cough, and the state of the pulse, as do also the results of treatment in its direction. The physical signs are often almost conclusive. The apex beat in chlorotics is carried too far outwards, is too diffuse, and in this respect corresponds with the general cardiac impulse, which is usually "slapping", and like that met with in organic disease followed by dilatation. Sometimes the impulse is distinctly heaving, and hypertrophy undoubtedly occasionally occurs. Virchow and others have maintained that this is the usual condition in chlorosis, and have ascribed it to narrowing of vessels. Perhaps, however, when it occurs, it is simply secondary in most cases to anæmic dilatation. The cardiac murmurs heard in chlorosis are various, and exclusiveness should not be claimed for one or the other. They may be heard in one or several of the following positions. All being systolic in rhythm, yet separable from one or another when two or more coexist: 1. Over the aorta; 2.

Over the pulmonary artery; 3. Over the left auricle and its appendix; 4. At the left apex; 5. Over the fourth left costal cartilage, limited there or transmitted downwards to the right or left; 6. In the fifth left space, below it, or over the sternum adjacent to these parts. Thus, murmurs may be heard "all over" the cardiac area, and yet it be possible to localise them. The effects of pressure in intensifying murmurs in the area of the pulmonary artery are almost conclusive of their generation within it. Frequency of aortic murmurs is more doubtful, but their occurrence has been asserted by many eminent physicians. At the apex, a *bruit* will often be found if looked for, and in its case the question arises whether or not it is due to mitral regurgitation. It can be explained on better grounds than supposition of the latter. Over the auricular appendix, a murmur is certainly sometimes heard, as Naunyn says, who believes it to be due to the eddying of thin regurgitated blood in the auricular appendix. Dr. Balfour supports this theory, and by its supporters almost complete exclusiveness is claimed. Perhaps this murmur has been confounded with *bruits* generated in arteries about the clavicle and with those whose greatest intensity is over the fourth cartilage. Dr. Balfour asserts that this auricular murmur is heard in all cases where the venous hum in the neck is decided. This is certainly not the case. The murmur audible over the fourth cartilage, or below it, or in parts adjacent, is of great importance. It is as common as any abnormal sound heard in chlorotics. Quite ten years ago Parrot of Paris described a murmur in the area mentioned as met with in acute anæmia from hæmorrhage, and associated with evidences of tricuspid regurgitation in the veins of the neck. He has since argued that all the murmurs heard in chlorosis are due to tricuspid regurgitation. But this exclusive view is altogether arbitrary. The murmur at the fourth cartilage is sometimes transmitted downwards to the apex or towards the ensiform cartilage. A consideration of hæmic murmurs is likely to aid in explaining many so-called organic ones. In chlorosis, the murmurs heard at the fourth cartilage, and below it, are, perhaps, due to dilatation of the ventricles, to their consequent imperfect emptying and the eddying of thin residual blood in them. Sir Dominic Corrigan long ago gave this explanation of some apex-murmurs in mitral disease, and it has been renewed by later writers. In chlorotics a murmur thus generated is possibly sometimes best heard at the apex, but oftener over the fourth cartilage or adjacently, because the stethoscope is then immediately applied over the source of the murmur. There are many other explanations, plausible enough, of these murmurs, such as irregular vibration of valves, irregular action of the muscular papillares, and in rare cases actual incompetency of the mitral or tricuspid orifice secondary to ventricular dilatation. The pulse in chlorosis is not always rapid, as is everywhere advanced; it is very often, indeed, slow and suggestive of a state of hibernation, though easily excited into rapidity. It is often irregular from moment to moment, both as regards fulness and frequency, and thus such as one would expect in anæmic dilatation of the ventricles. The excitement of examination makes the pulse irregular in this way, but sometimes produces no change whatever in it. Venous murmurs are certainly best heard in the right neck, and in most cases are audible on this side only. The effects of respiration on the *bruit du diable* are much disputed, but the statement of Hope that respiration causes the "humming" to become "rushing" is probably correct. Inspiration favours the return of blood from the veins, and thus brings this about. Curious changes in the venous hum may be made by modifying respiration. Clinical observation of the heart in chlorosis and allied anæmic conditions is of therapeutical importance. To meet the cardiac states mentioned, belladonna seems most suitable, its use being indicated by its known physiological effects, by its action in cases of fever as asserted by Graves, and by the condition of the heart. It makes the pulse regular in force and rhythm, and increases the number of beats. Of course, iron is the essential remedy, but many cases improved much more rapidly generally, whilst various troublesome symptoms at once disappeared, when belladonna was added to the prescription, doses of from about 8 to 12 minims of tincture being employed.

Dr. BARNES spoke of the necessity for more accurate and extensive observation on the subjects referred to by Dr. Irvine, and especially as to whether the symptoms of chlorosis are due to changes in the blood or the tissues, especially in the heart itself. He thought that the observations on which Dr. Irvine's views were grounded were insufficient. It seemed to him more probable that the dilatation of the heart was due to the altered condition of the blood; in pregnancy there were also altered blood-condition and hypertrophy of the heart. Probably the deterioration in the quality of the blood stimulated the heart to excessive exertion to make up for the deficiency. Perhaps, also, some part of the increased area of cardiac dulness might be due to the want of tonicity of its muscular fibre; the weak, watery, and flabby condition giving the appearance of real dilatation. More-



over, the perfect recovery in many cases showed that there was not likely to be any real organic disease of the heart. The changes which occurred in chlorosis might be likened to those occurring in the blood in pregnancy, which sometimes gave rise to simulated organic disease, such as the albuminuria of pregnancy, which (although even casts might be found in the urine in primipare) was probably not really organic.—Dr. BARCLAY observed that all murmurs were produced from altered relation between the blood and the cavities and orifices of the heart. The murmurs in chlorosis were, he thought, probably due to changes in the blood, causing it to vibrate more readily. In such cases, the murmurs might be equally audible all over the heart, but were usually best heard at the apex, owing to that being the most superficial part in many cases. The murmurs heard in the neck were arterial or venous, according to the way in which the stethoscope was held.—Dr. IRVINE agreed with Dr. Barnes that the first changes were probably in the blood, and those in the heart secondary, as shown by the entire disappearance of the symptoms under treatment. He admitted, with Dr. Barclay, that all murmurs were "hæmic" in the sense of being produced by altered relations of the blood and heart. As to the murmurs in the neck, it had been pointed out that arterial murmurs were increased and venous murmurs diminished by pressure over the vessels by the stethoscope.—Dr. WEST observed that, so far as his observation went, the murmurs heard in children were far more commonly organic, and that hæmic murmurs were much less frequent in them.

ON CONTRACTION OF THE FINGERS (DUPUYTREN'S CONTRACTION),  
AND ITS TREATMENT BY SUBCUTANEOUS DIVISIONS OF THE  
PALMAR FASCIA, AND IMMEDIATE EXTENSION.

BY WM. ADAMS, F.R.C.S.

THE author directed attention to one form only of finger contraction, viz., that which has been proved by Dupuytren to depend upon contraction of the palmar fascia and not involving the tendons, or sheaths of the tendons, as generally supposed. After quoting the account of Dupuytren's dissection, the author referred to another dissection by Goyrand, which confirmed the account given by Dupuytren; and also to Mr. Partridge's specimen in King's College Museum; and to a severe case of contracted fingers under his own observation, in which the hand was torn open by a horse. In all these instances, the contraction was shown to depend upon the fascia alone, which passed across, like the string of a bow, whilst the tendons, in their sheaths, were seen lying at a distance, along the concavity of the curve. The greater the contraction, the greater the distance between the fascia and the flexor tendons. With regard to the cause, the author considered that it depended entirely upon constitutional causes and not upon any local cause, such as the use of tools in various occupations, etc. The author believed it to be essentially of gouty origin, though occurring generally where there is a tendency to rheumatic gout, rather than true inflammatory gout. With regard to treatment, the author reviewed the operations by open wound, as practised by Dupuytren, Goyrand, and more recently by Professor Busch of Bonn, whose results are reported by Dr. Madelung; after which he referred to the subcutaneous method of operating, which has not been, generally, regarded with much favour. The author compared all the operations by open wound, on account of their severity, risk of suppuration, and tedious healing. He then fully described the details of the subcutaneous method of operating, with some improvements; and also the method of after treatment which he had adopted of late years. These consisted in the following processes: 1. Subcutaneous division of all the contracted bands of the palmar fascia, and its digital prolongations, that can be felt, by as many punctures as might be necessary, the smallest tenotomy-knife being passed under the skin, and cutting from above downwards; 2. Immediate extension of the contracted fingers, the fingers and hand to be bandaged to a splint; 3. The bandage not to be removed until the fourth day, when the punctures will be found to be healed; 4. An extension splint to be worn night and day, for two or three weeks, and afterwards at night for three or four weeks, motion being employed every day. The author believed relapse of the deformity was guarded against by this method of multiple subcutaneous division of the fascia, and immediate extension.

A CASE OF PRIMARY CYLINDRICAL EPITHELIOMA OF THE LUNG.

BY TAYLOR W. LITTLE, M.D., AND ROBERT W. PARKER, M.R.C.S.

THIS case was interesting rather from a pathological than from a clinical point of view. Clinically the features differed little from an ordinary case of cancer of the lungs. H. P., a ship's carpenter, aged 37, was admitted into the Royal Hospital for Diseases of the Chest on February 8th, 1877. His illness dated six months back, previous to which time he had always been perfectly healthy. His first symptoms

were cough with shortness of breath, a pain in the left infra-axillary region, which was aggravated by deep inspiration. When first seen, he was observed to lie on his back or right side, and was unable, in fact, to lie on the left side. His expression was anxious; his face dusky; his lips livid; ætæ nasi dilating with each inspiration; external jugular veins prominent and distended; fingers somewhat clubbed. There was absolute dulness on percussion over the lower two-thirds of the left back. Over this dull area the breathing was feeble, accompanied by sonorous râles and diminished vocal vibration. In short, the physical signs were those of a limited collection of fluid within the chest with thickened pleura. In view of this, exploratory punctures were made, but with no satisfactory result. The patient died a month after admission. At the necropsy, both lungs were found studded with a large number of nodules of a soft spongy nature of varying size. The pleura also contained a few independent nodules, some of the bronchial glands were affected, and there were three nodules of the same character in the liver. The other organs were healthy. The microscopic examination showed that this new growth consisted of epithelium, for the most part arranged in cylinders. The cylindrical arrangement of the epithelium was most marked in the lung. It was found lining spaces which corresponded in size and general appearance with the alveoli of the lung. The walls of the alveoli, beyond some inflammatory thickening, did not seem to participate at all in the cancerous deposit. In no part of the lung did the cancer affect the parenchymatous structure. In some instances, the alveoli were larger than normal, but this was obviously due to the fact that two or more alveoli had coalesced. The examination of the pleura showed a similar arrangement, but as a rule the cylindrical arrangement of the epithelial cells was less regular and less typical. The bronchial glands presented appearances similar to those found in the pleura. The liver-growths were also less typical than those in the lung. The authors regarded this case as one of primary cancer of the lung, from the fact that the symptoms pointed to an affection of the lungs *ab initio*; and they believed that this opinion was borne out by the microscopic examination of the new growths, which showed a more perfect type of stricture as well as a more typical arrangement of all elements in the lung than elsewhere; and further, the amount of cancer found in the lungs was very much greater in point of quantity than that found in the rest of the organs put together.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 25TH, 1877.

G. W. CALLENDER, F.R.C.S., F.R.S., President, in the Chair.

*Misplaced Testes.*—Mr. EDMUND OWEN brought before the Society an infant from the Hospital for Sick Children, Great Ormond Street, whose right testicle was situated in the perineum. He considered that no operative interference was advisable; that, if the gland were to be eventually useless, it might as well be left alone; whilst, if it were to undergo perfect development, it would be protected, in the sitting posture, by the ischial tuberosities.—Mr. Owen next gave an account of the dissection of the generative apparatus of a cryptorchid. The subject was forty-eight years old at the time of his death; he had never been married; but used to live in common lodging-houses. His voice was known to have been high-pitched and harsh. The face was sleek and feminine, and the trunk and limbs, though well-developed, were thickly encased in fat. A large amount of fat lay over the pubic symphysis. The external organs of generation were puerile, and no testes could be made out until dissection showed them lying just outside the external abdominal rings. They were small and flabby, and their proper tissue was represented by yellow fat. Filiform vasa deferentia led to slender seminal vesicles. The bladder was large, and the prostate extremely small. Mr. Owen considered that the dissection supported the inference drawn by John Hunter, that the penis, urethra, and all the parts connected with them would not have existed had there been no testes in the original construction of the body. In a well-known case of a cryptorchid who committed suicide, it was shown by Sir Astley Cooper that the testes were nearly of the same size as healthy testes. Allusion was also made to a case related by Mr. Poland of a young man whose testes had never descended, but whose penis was well-developed, and who had all the other signs of virility. The man married at twenty, had two children by his first wife, and married again. Mr. Owen quoted Mr. Curling's opinion as being in favour of the sterility of such men; and the late Mr. Coulson's (given in 1859) as being not absolutely against their power of procreation. He then placed cryptorchids in three classes: those who have neither the desire nor power of sexual intercourse, but resemble animals whose testes have been early removed; secondly, those who, like many eunuchs, have the desire, but whose power of fertilisation fails, resembling



animals which have been emasculated late in life; and, lastly, those whose testes, though undeveloped, may be well formed, as in Cooper's case), and secrete seminal filaments (as in Poland's case). He was of opinion that, if the subject were fat, had a puerile or harsh voice, a small penis, much adipose tissue over the pubes, a scanty amount of thready hair in that neighbourhood, and little or none on the face, no spermatozoa would be discoverable by the microscope. In answer to Mr. Callender, Mr. Owen said that the testes in the dissection were covered in the ordinary way as regards the tunica vaginalis.

Dr. FARQUHARSON, in alluding to the case of the infant, said that he had seen an inflamed testis in the groin of a Guardsman, which presented many of the appearances of an enlarged inguinal lymphatic gland.

*Microscopic Appearances of the Skin of a Patient whose Case was described by Mr. Morrill Baker in the Eighth Volume of this Society's Transactions.*—Dr. GEORGE THIN read this report. The child who presented the peculiar eruption described by Mr. Baker died of empyema in March of this year. The spots on the skin were still visible after death. The morbid appearances found, on microscopical examination, consisted essentially in the presence in the corium of cells which were not found in the healthy structure, and in the disintegration and subsequent disappearance of the bundles of connective tissue. The cells were rounded, oval, or polygonal, the smallest being of the same size and appearance as white blood-corpuscles, whilst others were much larger, their diameter being double that of the former. There were transition-cells between the extremes of size, and they had all a single spherical nucleus. The cellular infiltration began in the superficial stratum of the corium immediately surrounding the blood-vessels. Thence it spread downwards, following the blood-vessels, hair-follicles, sweat-glands, and arrectores pili muscles, and extending along the spaces between the bundles which were nearest the vessels. It had not extended directly to the deeper parts of the corium, a considerable thickness of the connective tissue being unaffected; only in the vicinity of the hair-papillae it had reached the most superficial projections of the panniculus adiposus. In some parts, the cell-infiltration ascended along the blood-vessels into the papillae. Wherever the cells were found, the gelatinous connective tissue was disintegrating, or had entirely disappeared. The elastic fibres resisted longer. There were thus patches in the superficial portion of the corium and in the contiguous papillae, in which the fibrillary substratum had been replaced by the so-called granulation-cells suspended in a fine reticulum of elastic fibres. Amongst these cells, small arteries and capillaries could often be seen entire, and of the normal calibre. The disintegration had in some parts advanced to such an extent as to show that, at the time the child died, superficial ulceration was imminent. The epidermis was normal. The appearances were identical with those described by Virchow as being characteristic of lupus, but could be distinguished from the other morbid conditions which were known to be accompanied by cell-infiltration.

*A Case of Undescribed Eruption occurring in a Tuberculous Child.*—Dr. T. BARLOW described and exhibited the case, which was first under the care of Dr. Lee at the Children's Hospital. The child, who was two years old, had been under observation for a year. The eruption first appeared when she was about four months old as circular brown patches on the chest; they increased in size until the child was a year old, since when they had remained stationary. They existed as pigmental patches over the front and back of the chest and abdomen, and over the front and back of the arms, forearms, thighs, and legs; were very slightly raised; varied in size from the area of a split pea to that of a shilling; and were of an uniform olive-brown colour. The face, hands, and feet were free, and the child had not had jaundice. The skin lesion was very similar to that in Dr. Tilbury Fox's case of xanthelasmaidea and to Mr. Morrill Baker's case of undescribed eruption, both published in the eighth volume of the Clinical Society's Transactions. Scratching the child brought out well-marked wheals; and Mr. Hutchinson and Mr. Baker, in a former discussion, considered a similar skin-affection as allied to the erythemata, more especially to urticaria perstans. Other eruptions had appeared in this child. On the back of the neck, one ear, and the chin an impetiginous rash had formed and scabbed over. Beneath the scabs deep ulceration had occurred, leaving punched-out sores, where there was very little suppuration, and for some time no attempt at granulation, the floor of the ulcers being covered with a thin serous discharge. Ultimately, the sores healed with considerable loss of substance. The cicatricial tissue at the back of the neck now manifested a slight tendency to outgrow the level of the surrounding skin. The child, whilst the ulceration was in progress, was pyrexial and had obstinate diarrhoea. For months she had also suffered from strumous ophthalmia. Altogether, she appeared to be tuberculous. Such ulceration of the skin as this child

had, Dr. Barlow had seen in four cases associated with acute tuberculosis, verified *post mortem*; and it was described by Hardy in his scrofulides. There was no suspicion of congenital syphilis in the family; but there was phthisis on the father's side, and two of the patient's brothers had died of rapid acute tuberculosis. The ulceration of the skin and the child's diathesis were, said Dr. Barlow, in harmony with Dr. Thin's views as to the nature of the skin-disease in Mr. Baker's case. But the secretion of the skin did not appear to bear any distinct relation to the pigmental patches, and it must still remain a question whether recurrent vaso-motor disturbances of the skin were not a factor in their causation.

Mr. MORRANT BAKER remarked that the Society was much indebted to Dr. Thin, whose observations had now made one of these cases complete. As regarded his facts, there was no doubt the disease was one of the corium extending deeply. Mr. Baker did not, however, think the case was one of lupus, or that it resembled lupus. With microscopical appearances alone on one side, and clinical facts on the other, it was *tant pis pour le microscope*. Dr. Tilbury Fox had two years ago, in describing cases of the kind, said they were instances of xanthelasmaidea. There was, however, no jaundice. If asked in what class to place these cases, he (Mr. Baker) would be somewhat in doubt. They seemed to be allied to urticaria; they were not exactly cases of urticaria perstans, but might, perhaps be called urticaria permanens.—Dr. R. J. LEE said that Dr. Barlow's case was certainly not syphilitic; it had certain symptoms alluding to the scrofulide of Hardy. The skin on the back of the shoulders first began to ulcerate and was impetiginous; and this scrofulous ulceration led to considerable destruction of the skin, resulting in permanent cicatrices. The ulcers were irregular, painless, depressed, with yellowish bases and irregular margins. Some parts healed in the course of weeks, whilst other edges of the ulcers were spreading. The scars were now different to what they had been at first. The pigment had disappeared from them. There were some prominences now in the skin which were almost fluctuating, as if about shortly to break down and become ulcers. In some of Dr. Thin's admirable sections, the cells were approaching the skin, and they would soon have broken down if that child had lived. The disease seemed to be the scrofulide of Hardy, or the tubercular disease of the skin of English dermatologists. The urticaria seemed to be due to irritation of the skin, the child's skin having been much handled at the meeting. In Mr. Baker's case, the mother had had a distinct fright when she had carried the child six months. Such cases were not rare. In another that he remembered, the child had one leg pigmented, the mother having witnessed a surgical operation during her pregnancy.—Dr. SANGSTER thought the pigmentation should not be lost sight of. Multiple lupus was well-known. The distribution of the disease in this case was not against its being of that nature; but the fact of the disease existing for so long without ulceration was opposed to the opinion that it was lupus. He did not think it resembled urticaria, which was an acute inflammatory oedema, and had not been described as a cellular growth.—Dr. THIN said that many acute and chronic affections of the skin were characterised by cell-growth. Such growth, in the case examined by himself, had lasted for years, and was yet comparatively localised. The disease was one of slow destruction of the skin, and of cell-growth. But which was cause and which effect was doubtful. Had the child lived, ulceration would have occurred.

*A Case of Small-pox, and its Sequelae, as reported from the Commission of Chicken-pox.*—Dr. FARQUHARSON read notes of this case. Referring to the identity formerly believed to exist between variola and varicella, and to the labours of Heberden in apparently disproving this, the author drew attention to the opinion of Hebra, that no essential difference existed, and that, under favourable conditions, a severe epidemic of the major might arise from the infection of the minor disease. In illustration of this, he brought forward some cases recently under his observation in the Belgrave Hospital for Children. Three mild cases of varicella occurred in surgical patients there during the month of May; and, after the regular period of incubation, a fourth made its appearance, so much more severe in type as to give rise to a suspicion of small-pox. But this view was negatived, on the ground of the source of infection from a varicella patient in the next bed, the character of the eruption, and the perfect success of a primary vaccination, which became developed whilst the pustules were fully matured on the skin. About three weeks later, the nurse in attendance on this patient was seized with vomiting, pain in the back and chest, violent febrile symptoms, and a rubeoloid rash, on which the true variolous eruption subsequently became developed. The case was removed to St. Thomas's Hospital, and ran a very severe course, the secondary fever being strongly pronounced, and all the symptoms being those of the disease in an unmodified form. The question naturally arose, whether a direct line of infectious sequence could be traced between this and the fourth



case of varicella; and although absolute proof was, of course, impossible, the circumstantial evidence pointed strongly in this direction for the following reasons. 1. The wards were at this time closed to visitors, and the chances of accidental outside infection were thus materially lessened. 2. The nurse's own absences from the hospital were, for the same reason, much limited, and probably stopped. 3. The nurse herself was thoroughly convinced that she had derived the source of the illness from the little patient whom she had faithfully tended for so many days. And, granting the integrity of this chain of evidence, the conclusion seemed undoubted that one must allow that Hebra's teaching might be right after all, and small-pox might actually breed itself, under duly favourable conditions of soil and atmosphere, from chicken-pox.

The PRESIDENT said the point urged by Dr. Farquharson was very important; for, if it went forth to the public that it was held by the Clinical Society of London that varicella led up to variola, a panic would ensue in many families to which chicken-pox gained admittance. —Dr. MURCHISON thought the non-identity of varicella and variola had been fully settled forty years ago by Dr. Gregory's observations at the Small-pox Hospital. The crucial test was, that cases of varicella, mistaken for variola and sent to the hospital, took variola from going there. Cases of varicella could be easily vaccinated, and three of Dr. Farquharson's cases had been vaccinated before having varicella. The case of the nurse was one of small-pox; but whether the illness of the child who had been last ill was one of modified small-pox, he had not quite gathered from the description. In practice, one ought to be able to distinguish varicella from modified variola. But even if all the children had varicella, and the nurse true variola, the evidence did not seem sufficient to show that she had taken it from either of them. He (Dr. Murchison) had seen cases of scarlet fever and of typhoid both come from the same house. Moreover, seeing that the small-pox poison was so widely diffused at present in London, it was difficult, perhaps, to say exactly how she caught her illness. But she was not even kept at home; though, had she been, she might have contracted the disease from outside the hospital. —Mr. PUGN THORNTON inquired if the house-surgeon of the hospital was not attending at St. George's Hospital, where the small-pox was then raging. —Mr. M. BAKER inquired what proof there was that the boy Henry Barnes had caught the varicella from the other patients. —Dr. THIN said that, when he was at Vienna, he never saw cases of varicella; and an American physician who met him there had confirmed the remark. A young dermatologist in that city had, in Dr. Thin's presence, handed round to his class two cases, one as being typical variola, the other as varicella; but Dr. Thin had recognised the latter as modified small-pox, not true varicella as seen in England. —Dr. GREENHOW said the case of the boy was one of varicella, because the vesicles, being pricked, did not collapse. A child at a seaside town had caught small-pox from the clothes supplied to it. He did hope it would not go forth that the members of that Society supported Dr. Farquharson's views on this question. He had seen four sisters in a house ill with typhoid, and then a fifth in the house have typhus. She had been brought there to nurse her sisters, and came with the typhus already upon her. In her case, the typhus had not been caught from the typhoid patients; but was freshly imported from without. —Mr. G. BROWN said that a case of chicken-pox, if carefully watched, could scarcely be mistaken for variola. —Dr. FARQUHARSON said that the fact that a thing had been believed for a hundred years was no reason why it should not be reconsidered. Replying to the different speakers, he said the house-surgeon had had no communication with St. George's Hospital, and indeed there were no cases of small-pox at St. George's at that identical time. He acknowledged, with Dr. Murchison, that there were some weak points in his case, and that he could not absolutely say where the nurse caught the disease.

A CASE of *Enteric Fever* treated by Salicylate of Soda. —Dr. MURCHISON communicated this case. —The patient, a labourer aged 20, who had always enjoyed excellent health, came under treatment on the eighteenth day of his illness; he had then had no diarrhoea, nor delirium, and no medical treatment. He had headache, sleeplessness, furied dry tongue, loss of appetite, great thirst, slightly distended abdomen, and slightly enlarged spleen. The bowels were acting about once daily. There were rose spots over the abdomen; the skin perspired freely; the temperature (1.30 P.M.) was 102.5 deg. Fahr.; pulse 100, regular; respiration 26. At 8.15 P.M., the temperature was 104.8 deg.; at 9.30, 104.4 deg.; and at 10 P.M., 104.4 deg. He was then ordered the salicylate of soda, 20 grains every two hours, increased, the second dose, to 30 grains every two hours. At midnight, the temperature was 105.6 deg. At 2 A.M. of next (the nineteenth) day, it was 99.6 deg. At noon, when eight doses had been taken, the patient was rather deaf, and the medicine was ordered to be given every four

hours. That day the temperature never exceeded 101.2 deg.; on the whole, the patient was better. At midnight, he took the eleventh dose of the medicine. Next day (the twentieth), he took the twelfth dose at 4 A.M.; his temperature was then 99.8 deg., and his feet felt cold. Shortly afterwards, he felt "muddled in the head". At 8 A.M., his temperature being 98 deg., he took the thirteenth and last dose. An hour afterwards he vomited; his temperature that day never exceeded 100.4 deg.; towards the afternoon, he became delirious, and at 7 P.M. was very violent, shouting "Murder", and insisting that his throat was about to be cut. He had to be restrained by two hospital porters. At 8 P.M. no urine having been passed for 24 hours, a catheter was introduced, but only a few ounces of urine came away. This contained 1-4th (in volume) of albumen, with granular epithelial casts and salicylic acid. At midnight, he was sleeping soundly and perspiring profusely. On the twenty-first day, at 9 A.M., he was rational; temperature, 100.4 deg.; urine still scanty. At 7.30 P.M., the temperature was 103.6 deg., and at midnight 104.4 deg. On the twenty-second day, in the morning, the patient was better, and had no headache nor deafness; he had passed only seven ounces of urine in twenty-four hours. There were no rose-spots visible. At 7.30 P.M., the temperature was 105.2 deg. Twenty-five ounces of urine had been passed in ten hours; the latter portion contained no albumen, but salicylic acid was still found in it. During the next few days the pulse was about 84; the temperature varied from 101.2 deg. to 104.3 deg. The salicylic acid gradually disappeared from the urine, but a trace of albumen was again found, and then was lost. There was slight diarrhoea. On the thirty-third day, the evening temperature was normal; the appetite gradually returned, and the patient left the hospital quite well on the fifty-eighth day. Dr. Murchison remarked that the case was a good one for testing the drug, as there was high temperature without any complication. The effect of the drug was to reduce the temperature as rapidly as it did in rheumatic fever, but when the drug was discontinued the pyrexia returned, and the case subsequently progressed as might have been expected if the salicylate had not been given. The drug induced violent delirium whilst the patient was under its influence; and the delirium ceased as soon as the pyrexia returned and the effect of the drug passed off. The salicylate further caused albuminuria and almost suppression of urine. Temporary albuminuria had also been frequently seen in patients suffering from acute rheumatism whilst under the influence of salicylate of soda. Probably the cerebral symptoms were due to the suppressed elimination by the kidneys of the nitrogenous detritus of the blood and tissues. The salicylate of soda used in the case had been examined by Dr. Bernays, who had found it to be quite free from carbolic acid. The cerebral symptoms could not, therefore, have been due to any admixture of the drug with carbolic acid.

Dr. BARLOW said that, as regarded the albuminuria which was present in the patient, it had yet not been much noted in cases treated with the salicylate. He had recently seen a paper, by a Swedish physician, of the treatment of all pyrexial attacks in children with salicylic acid, and in some of those cases acute nephritis had been induced. In a case of rheumatoid arthritis, similarly treated by himself, albuminuria ensued, with vomiting and some delirium, which latter symptom, he had thought, was due to the albuminuria. A woman, with a large cancerous wound treated locally with salicylic acid, had also albuminuria produced. —Dr. WHIPHAM had, since January 1st of this year, treated four cases of enteric fever by salicylate of soda, given every two hours. The temperature fell in these cases. If delirium came on, he reduced the doses in quantity and gave them less frequently. In one extremely bad case, the salicylate was discontinued, and ether and ammonia were given. The case was complicated with pneumonia, and the patient died. In another case, the salicylate was at first given every two hours; the temperature then fell, and the drug was subsequently administered every six hours. A gentleman, treated with the salicylate, had uncomfortable nervous symptoms. A good dose of whisky being given, the nervous disturbance at once ceased. Another case, treated with salicylic acid, after two days became violently delirious; a good dose of alcohol being thereupon given, took away the delirium at once. —Dr. MURCHISON said that, as to the effect of alcohol given with the salicylate, he was not prepared to speak. In such a case as the one he had described—one of delirium, with almost suppression of urine—he did not think one could have expected much good to come from a dose of alcohol. Besides, there was one particular fallacy possible. In his case, the patient was violently delirious, requiring two porters to keep him in bed, and yet, in half an hour afterwards, was quietly sleeping without having taken alcohol or drug of any kind. If the salicylate of soda had been kept up, the temperature would probably not have risen. But Dr. Murchison had wished to see if the disease was shortened by the drug, and he had found that such was not the case. After the temperature had been reduced to the level of



health, it rose again at once directly the salicylate was discontinued, as if that treatment had never been adopted.—The PRESIDENT hoped that the case so admirably recorded by Dr. Murchison would be a type of the cases of which more would be prepared by the members for their meetings during the next year.

**Excision of Elbow-joint.**—Mr. MAUNDER said most surgeons present were aware that, a few years ago, he had drawn attention to his method of excising the elbow-joint, by which a most important function of this articulation (active extension of the forearm) could be secured. A gentleman, upon whom he had operated some eight years ago, had just returned from abroad, and was present and willing to show his arm. The patient stated "he had travelled all over the world, and, taking an interest in surgery, had shown his arm to surgeons in all parts; and the general opinion was that 'it was the best arm in the world without a joint'." He could perform every movement with it, and could compete with the best at billiards, quoits, 'the gloves', wrestling, and other trials of strength." The arm was examined, and the power of the triceps proved in several ways.

## MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, FEBRUARY 7TH, 1877.

J. D. GILLESPIE, M.D., President, in the Chair.

**Tracheotomy in Croup.**—Dr. BRUCE narrated a case where he had been suddenly called to see a little boy aged 5, who was supposed to be in a fit. He found him lying on his mother's knee *in articulo mortis* from croup, so that there was no time to send for a surgeon. He, therefore, put the boy on a table, and performed tracheotomy with his pen-knife, using a female catheter as a cannula. He then carried on artificial respiration, but without avail. As he was evidently dead, he opened the trachea further, and found the false membrane he now showed lying loose in it. The case had evidently been neglected, and was certainly one where an emetic administered in time would have done good. It threw light on the diagnosis between diphtheria and croup. The former began in the fauces or higher up, and spread down; the latter was confined to the trachea, as in this instance.—The PRESIDENT remarked that the case was evidently one of pure croup, a somewhat rare occurrence.

**Therapeutics of Aloin.**—Dr. WILLIAM CRAIG read a paper on this subject. He said that the chief constituents of Barbadoes aloes, so far as we know at present, are aloin, discovered in 1851 by Messrs. Smith, chemists, of Edinburgh: a volatile oil, very like oil of peppermint, but differing in its specific gravity and boiling point, discovered by the same gentlemen in 1872; and resin of aloes, which deposits from the decoction on coating. The resin of aloes was believed by some to be the cause of the griping caused by aloes. This he held not to be the case; but considered that, when pure, it had no effect at all. Aloin he regarded as the active principle. Its formula was  $C^{16}H^{13}O^7$ , with an amount of water of crystallisation, varying according to the species from which it was obtained. It had a tonic effect in small doses, and in large ones acted on the large intestine and uterus. It had been found effective in veterinary practice; and in the case of many of his own patients he prescribed it in pill, with most beneficial effect, as follows: aloin, one and a quarter grains; dried ferrous sulphate, one and a half grains; sulphate of quinine, one grain; extract of nuxvomica, one-half grain, made up with extract of gentian. He had never seen any bad effects follow its use; and, from its small dose, absence of griping, and certain action, he held it should always be used in preference to the crude drug.—The PRESIDENT thanked Dr. Craig for his paper. He thought that he had made out his case, and shown that the active principle was a more refined drug than the crude one, which required a larger dose. Until the paper was read, he had always believed that medical men had made up their minds that aloin was the active principle of aloes, and was not aware that some did not believe in it.—Dr. KEILLER asked Dr. Craig if he had used it for children. If he was not mistaken, Dr. G. W. Balfour had shown him lozenges containing aloin, which he used. They were tasteless.—The PRESIDENT asked if aloin was bitter.—Dr. CRAIG said it was so, but the taste could easily be covered.

**Diagnosis of the General Paralysis of the Insane.**—A paper on this subject was read by Dr. BATTY TUKE. During the last few years, several cases had come under his notice which led him to doubt whether the diagnosis of general paralysis was as easy a matter as is generally represented in our standard text-books. In one case motion was little affected, with the exception of a little stiffness of the upper lip and some slurring in speaking. There were frequent incoherent talking and

great complacency, followed by violent mania with great delusions. The patient was said to have been a steady man with no hereditary tendency; it was found out, however, afterwards that he had, on the contrary, been of intemperate habits, and had suffered from a previous similar attack seven years ago. In this instance, all the symptoms of general paralysis excepting the alterations of the pupil were present. A bad prognosis was accordingly given, and confirmed in another asylum, to which for family reasons he was removed; but he ultimately recovered. In another similar case, he gave a guarded prognosis, and the patient was now well. In both cases the attack was sudden, and alcoholism was not one of the *prodromata*, but a cause. He accordingly held that general paralysis might be simulated by acute alcoholic mania. In four cases of chronic alcoholic mania, he had seen all the symptoms of general paralysis. In a fifth case, the only point against general paralysis was that the man improved. What weighed with him most was a contracted irregular pupil with hyperæmic retina. This, however, was not an absolute diagnostic, as in chronic alcoholism there might be hyperæmia of the retina. This, however, improved as stimulants were withdrawn. After alluding to the importance of local colour-blindness as a symptom of general paralysis, Dr. Tuke concluded by giving a brief *résumé* of the chief points he had brought forward in his communication.—Dr. ARGYLL ROBERTSON, from his own experience of mental diseases, could corroborate what had been said by Dr. Tuke as to the liability to error in the diagnosis of the disease. He had known several cases where the subsequent history of recovery showed that there had been a fault in diagnosis. It was, therefore, important to have some definite and distinct means of diagnosis, by which they could separate more favourable diseases from this one. The cases most likely to be confounded with it were those of alcoholic poisoning. In his own department, he had occasion to examine cases where there was dimness of vision owing to poisoning of the optic nerve with alcohol. In general paralysis, alterations in the size, form, and mobility of pupils were not rare, but the pupil was never contracted nor immobile in alcoholic poisoning. Thus great stress should be laid on the ophthalmic appearances; in alcoholic poisoning there might be hyperæmia of the optic disc and retina as in general paralysis, but, as Dr. Tuke had pointed out, this passed off when stimulants were withdrawn. As to the test of colour-blindness in a certain part of the field of vision, he had only recently tried it in four cases. In all but one it succeeded. In this one instance he could get no distinct signs, but this might be due to patient's inability to give a proper account of what he saw. The cases were too few to enable them to say much: but he hoped they would soon have some means of distinguishing certain defects of sight due to alcoholic poisoning from those where the impairment was owing to some central cause. The two cases of Dr. Tuke were well worthy of record on their own account as being instances of symptoms misleading two men thoroughly well qualified to decide on them. Dr. Tuke deserved commendation for giving an account of his mistake, and it would be well if every physician and surgeon in like manner pointed out their own errors.—Mr. BELL had seen three years ago two cases of exceedingly advanced syphilis with *alcoholismus chronicus* in one of them. He had the advantage of consultation with other eminent authorities, psychological and medical, and in both cases the psychologists gave a grave prognosis as to general paralysis, and in one of them it was said to be very far advanced. Under antisymphilitic remedies, however, they progressed favourably, although one relapsed in four years. In both the retinæ were hyperæmic. He asked Dr. Tuke whether syphilis, apart from alcohol, ever complicated the diagnosis.—Dr. KEILLER referred to a case which Drs. Tuke and Argyll Robertson had seen along with him. As far as his judgment went, no mistake in diagnosis was made in this instance. The patient was a handsome well-built gentleman, who had a chancre which nearly ate off the whole of his glans penis. His health broke down, and two years ago Dr. A. Robertson was consulted about his eyesight, which had failed. His mind was also affected, and he imagined himself a much wealthier man than he really was. Previously to his illness, he had been engaged in building speculations. Mental disease from syphilis was suspected, and he was accordingly examined by Drs. Robertson and Tuke, who diagnosed it as a case of general paralysis. Since that time, he had become worse. Dr. Keiller had seen him only lately and found him, to his horror, trying to light the gas and shave, although his sight and hearing were much affected. Fortunately, however, he had no razor.—The PRESIDENT suggested that the first case narrated might be general paralysis after all, seeing that the patient had had a relapse.—Dr. BATTY TUKE replied that Mr. Bell in his remarks had anticipated the paper which he intended bringing before the Society on a future occasion. It was certainly extraordinary how insanity due to syphilis should simulate general paralysis; but the difficulty in diagnosing the former from the latter was not so great as in the case of general paralysis.



alcohol. In regard to the President's suggestion, he thought that the existence of general paralysis in that patient was doubtful. Such a case was never heard of, as general paralysis was generally fatal in about four years. In some cases, the symptoms disappeared for a few months, but always returned. Remittent general paralysis was quite incompatible with the present ideas of it. Further, in this case there was a history of alcoholism.

*Penetration of Orbit by a Knitting-needle.*—Mr. ANNANDALE read the case of A. K., a girl aged 14, who had a knitting-needle driven accidentally through her upper left eyelid into the orbital cavity, and thence probably into the brain through the optic foramen. How far it penetrated altogether was not known. The immediate effects were pain in the eye and head, followed in a few days by drowsiness. On her admission into the infirmary, there were ptosis of the left upper eyelid, dilatation of both pupils, and a tendency to go round in a circle. No external discoloration could be found, and no ecchymosis of the conjunctivæ. The treatment adopted was shaving the head, application of ice, and the internal use of bromide of potassium. Leeches were also used. The ultimate result was disappearance of the ptosis and dilatation of the left pupil, but loss of eyesight in the left eye. The patient was now in Glasgow, where Dr. Hector Cameron had kindly examined the eye, at Mr. Annandale's request, and found that the "optic disc was pale, atrophied, and had loss of substance". The case was interesting to the surgeon. Probably the optic nerve had been injured; but perhaps it was pressed on by a blood-clot in the cranial cavity. The smallness of the external wound, and the difficulty of its detection, had interest to the medical jurist. To the physiologist, the case would have been of more use had it terminated otherwise than it did. The rotation might have been due to the injury to the optic nerve, or the corpora quadrigemina might have been affected. He had seen an accident of a milder description, which showed how much injury could be done with little external sign of it. The patient was a gentleman's servant, who had gone to a *battue* to load his master's spare breech-loader. Suddenly, the master noticed that the provost of a town on the west coast was aiming point-blank at him. He accordingly dodged, and the result was that his servant was shot in the eye. The first surgeon who examined the man said there was nothing wrong. He himself, however, probed the orbit, and found pellets there which, by the aid of Mr. Joseph Bell, were extracted. Blindness resulted, due, as Dr. Walker found, to the retina, from the violence of the shock, being curled up. The patient, with the exception of his eye, recovered, but lost his place as butler from the miscalculations as to distance he made in helping dishes. He had now, however, regained this power, and was still engaged in his occupation as a waiter. He wished to know if Mr. Annandale could tell them how far the knitting-needle had penetrated in his case.—Mr. BELL remarked on the interest of the case, and narrated one which had recently come under his notice. On Friday, February 2nd, a respectable young man left a party, quite sober, but remembered nothing more until he found himself in a police-cell. He was brought to the infirmary, where one of the staff examined him, and found a bruise over the left eye. He was not, however, detained in hospital. Mr. Bell saw him on the next morning, and it was at once noticed that there was something serious the matter. There was no bruise and no swelling from the ear, but the patient was almost absolutely deaf. The natural idea was fracture of the base of the skull, but there was no external mark and no alteration of the pupils.—Dr. A. ROBERTSON remembered Mr. Annandale's case, which happened about a year ago. The wound was very light, and the patient could not bear examination, so that he could say nothing as to the state of the retina. The movements of the eyeball were perfect—a fact important in considering the nature of the lesion. From the formation of the orbit and the position of the foramina, one would imagine that a foreign body, sliding along its roof, would pass into the sphenoidal fissure and not through the optic foramen. Passage through the former would not cause instant blindness, but the other nerves there (the third nerve, etc.) would be injured. He, therefore, believed the knitting-needle had perforated the optic nerve. This would be rare, because the sheath of the optic nerve was very tough; and, as the foramen was accurately filled up, the needle may have gone between the nerve and the edge of the foramen. The after-occurrence of atrophy of the optic nerve did not go against this explanation. Mr. ANNANDALE explained, in answer to the President's question, that the depth to which the needle penetrated was not known. In the experiments he had performed, through Dr. Wyllie's kindness, he found that there was a tendency for the instrument to pass through the sphenoidal fissure. By varying the direction of the needle, however, it could be made to enter the optic foramen between the nerve and the foraminal edge. From the ptosis being only temporary, the third nerve was probably uninjured.

## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, JUNE 16TH, 1877.

### MATERNAL IMPRESSIONS.

THE impress of a signet bearing some device has ever been, from the earliest ages, the mark of authority, the *χαρακτήρ* whereby possession has been confirmed to the owner of such signet unalterable and inviolable. By analogy, the characteristics of parents in all instances of reproduction are impressed indelibly on their offspring. The infinite varieties of character are not the result of haphazard confusion of attributes determined by accident of birth, or circumstances of upbringing alone, but, could they be accurately traced, of the combination of the characteristics of the parents; such variety arising naturally out of the fusion of two often opposite natures, the preponderance of any one characteristic standing in relation to the dominant vigour, whether of body or mind, of the more powerful parent.

To take an instance: what more simple or uniform act could be imagined than that of walking; the action of progression by the alternate advance of each leg in the biped mammal? Yet the peculiar method of such act in any one is such a characteristic of the individual, that even at a considerable distance he can be recognised and distinguished from another progressing in a similar manner. Thus sons inheriting the characteristics of their fathers are observed to walk in a manner which may be distinctly traced to the parent. The characteristics of each parent, both of mind and body, are stamped upon the offspring, and the resultant is the character of the new individual, differing from each of its parents as a combined colour differs from either of any two by whose blending it is formed.

When we come to consider the minute germs that are the starting points of disease or of health, the minute shades that constitute points of differentiation, the minute cell that at one time constitutes the whole being of the future individual, it is not strange that the pent up energies of two souls in so small a particle of living matter should be subject to infinite varieties of change as the result of almost infinitesimal impressions. Thus, if the "fortuitous concurrence" of circumstances at the period of begetting may influence the resulting individual throughout its existence, no great stretch of argument is needed to establish a more than probability that subsequent impressions during the period of the maturation of the ovum may also influence the character of the new life.

To take a condition that is more easily traceable: a parent suffering from syphilis, even latent, impresses the character of that disease on his offspring, so that the germ once sown brings forth fruit more or less blighted in consequence. The evil seed thus engendered receives its evil through the nutrient material of the carrying cell, and the subsequent proliferation of cell-growth cannot take place without retaining the characteristics of the parent-cell. When, therefore, we come to apply this argument to the development of the fetus *in utero*, it is not necessary to prove the existence of nerve-communication for the propagation of impressions; for the nutrient pabulum of the mother influences her seed similarly as the conditions of the growth of a plant influence the cha-



acter of its life, as evidenced by the varieties of flower in variously cultivated specimens of the same species.

The human mind is ever seeking for cause and effect, and strives to account for results, not by remote probabilities, but by apparently evident possibilities. This tendency leads us to refer some abnormal deviation from the known type to an imagined connection with some circumstance that may have impressed us in relation to the condition of the new growth, to the exclusion of some more powerful but, apparently to us, more remote contingency. For instance, some colateral, it may be remote, hereditary tendency may be overlooked as a factor in some abnormal result, and the deviation is attributed to some circumstance that may have, at the time of its occurrence, made a definite though transient impression on the maternal mind.

Again, if permanent mental characteristics are sown in the new life, may not transient mental emotions produce variations of different intensity, in proportion to their power or duration on the seed in the process of development?

These considerations are brought to our mind by a report recently laid before the Obstetric Section of the Toledo Medical Association, by Dr. Thomas Waddell, in which certain general conclusions are given from a series of arguments that seem to us inconclusive, inasmuch as the faculty of the father to impress his characteristics on the foetus through the mother is ignored. The report deals with abnormalities of the foetus as seen in so-called "mother-marks", arrest of development, loss of limbs or parts of them, and double monsters or twins. We may exclude these latter from the category of maternal impressions, as they are the result of some inherent condition of the germ or of the egg or eggs. Intrauterine amputations, too, come more under the head of results of distinct morbid or accidental conditions of the egg itself; such as, rarely, ligature by the funis, or interference with the growth of limbs, or even their amputation by morbid adhesion of amniotic bands. There are thus left for our consideration the cases of arrest of development, and so-called "mother-marks". (Why not father-marks?)

If certain sudden emotions produce that nervous and therefore nutritive depression in women that they describe as "giving them a turn", would it not be more improbable that such disturbance of function should leave no trace in such an organism as the foetus, for the development of which the mother's whole being is constituted, rather than the reverse? Where, in the early weeks, structural development is proceeding at no tardy rate, an interference of nutrition of the mother cannot but impress the foetus detrimentally; and the organ interfered with would be that one in the condition of most active development, or that which could less easily bear any arrest, however transient, with impunity.

Then, too, although no nervous connection has been demonstrated to exist between the mother and foetus, yet the latter possesses nerves; and alterations of the nutrient power of the mother cannot but act on the nerves that may be governing, though it may be only to a slight extent, the growth of the foetus itself.

We now come to the consideration of impressions that, while not producing any deep structural deformity, are nevertheless held to have some weight in the production of superficial marks. These marks are often the result of hereditary transmission. Not only in man, but in animals, some characteristic of the father may be impressed on the mother through the foetus, yet such characteristic may not appear until the birth of a foetus after a subsequent impregnation; as if the impression had happened too late to mark a foetus already advanced in development, while the impress being retained by the system of the mother is stamped on her future offspring.

The power of nervous impressions is seen in cases of spurious pregnancy, and even of spurious labour, and in all the varieties of neuro-mimesis; we have even seen passion in a pregnant woman pro-

duce such action of the uterus as to result in fatal accidental hæmorrhage.

In ancient history, when Jacob wished to become possessed of cattle bearing some superficial mark, he placed before the pregnant females objects tending to impress their vision with a startling broadly contrasted variegation, and the result was a flock superficially streaked or marked.

From the consideration of abundant facts, we are brought to the conclusion that various maternal emotions can and do produce effects, the result of an alteration more or less severe, or of more or less duration, in the nutrition of the foetus, such alteration producing its effect by, as it were, an induced current of nervous impression.

The subject is one of such difficulty, and induction necessitates so large an accumulation of facts to obtain any probable truthful conclusion, that we can only impress upon our readers the importance of accurately collecting information on all supposed causes of maternal impressions during pregnancy, and verifying the results by personal observation in the resulting offspring.

### THE HOSPITAL SATURDAY COLLECTION.

It has lately been announced that the Hospital Saturday movement has undergone a change. Mr. Hamilton Hoare, the Honorary Treasurer of the Fund, has written to publicly explain that this statement is premature, and at the same time to mention that the Council propose to call a conference, under the presidency of Mr. Samuel Morley, M.P., at which the various ways in which working people can contribute to their own medical relief will be fully discussed. We are glad to receive this announcement. Our readers are aware that we have never entertained a very trustful feeling towards the Hospital Saturday collection. It has appeared to us to proceed throughout upon a mistaken principle; and it is gratifying to learn that the promoters are willing to reconsider their method of proceeding, and to hear what is to be said in favour of other arrangements.

This action is no doubt due to the able and statesmanlike paper upon Metropolitan Medical Relief which was read by Sir Charles Trevelyan at the meeting held under the auspices of the Charity Organisation Society on the 17th of last month, and to which we referred at the time. Certainly there is a great difference between the regular organisations advocated by the influential men who took part in the discussion at the Society of Arts and the haphazard collection of the Hospital Saturday Fund; and there is an ample field for conference in considering how far the interest which Hospital Saturday has created among working people, and the agencies which have been set on foot, can be employed to develop a wiser and sounder system.

What is needed is to encourage the industrial classes, throughout their various grades, to feel that the care of their own health and that of their families—at least in all ordinary sickness—is their own concern; that in this matter, as in the matter of food or clothing, they ought not to look to charity, but may fairly be expected to provide for themselves. This they might easily do on the principle of mutual assurance. If the system of co-operation were applied to the care of health, as it has been so successfully applied, more particularly in the north of England, to some industries and trade societies, the difficulties connected with out-patient medical relief would soon be solved. In this connection, the work which has been effected by the Manchester Provident Dispensaries' Association during the three or four years that it has been in existence ought to be carefully studied.

Sir Charles Trevelyan, in the paper to which we have alluded, says: "It is stated in the first Report of the Hospital Saturday Council that, on a moderate computation of the working population of London, a subscription of a halfpenny a week from the males and a halfpenny a month from the females would produce £1,000,000. These weekly and monthly charges might be met by the poor, and yet they would be a very trifling burden to the working classes. And, once secured,



carefully administered, a thorough system of medical relief might be arranged which would be within the reach of all, or almost all, who were above the level of pauperism; and, with the hospitals to fall back upon in case of accident or severe illness, the industrial classes would be well provided with the medical treatment they require.

If the Council of the Hospital Saturday Fund were to take as their text the sentence from their first Report, to which we have referred, and were to endeavour to give it practical effect, they would bring themselves into substantial harmony with Sir Charles Trevelyan and those who agree with him, and they would enter upon a course which would make the movement over which they preside much more influential as well as much more beneficial than it now is.

#### ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE prospects of the next election of councillors are now being discussed. There will be three vacancies to be filled on the 5th proximo: one caused by the lamented death of Sir William Fergusson, and the retirement by rotation of Mr. Erichsen and Mr. John Gay, who offer themselves for re-election. Three names are mentioned as those of intended new candidates: Mr. William Adams, Mr. Savory, and Mr. Holmes. Of the two retiring candidates, we may say that both appear to have very strong claims. Mr. Erichsen has all the claims which can be united in any one candidate for the highest honours which the College can bestow; and, moreover, throughout his recent tenure of office in the Council, he has shown himself thoroughly independent, liberal, and able. As a scientific surgeon, and as the representative of surgical literature, Mr. Erichsen early achieved a high reputation at home and abroad, which time has ripened without in any degree deteriorating. He is a thoroughly representative man, the representative of precisely all that is best, most honourable, and most deserves cultivation in the surgical profession. Of his re-election there should, we imagine, be very little doubt. Mr. John Gay has been a very active member of the Council, sincerely anxious to promote useful reforms, very attentive to his duties, very zealous to promote professional collegiate interests. If popularity, zeal, and activity are considered, Mr. Gay will be likely to find many friends at the forthcoming election. Of the three new candidates, it is unnecessary to say much. Mr. William Adams is one of the few surgeons who have made very distinct and very important additions to surgical methods, and who have enriched surgical practice with very valuable and original means of cure. He has done more than anyone since Stromeyer to establish subcutaneous surgery on a scientific basis. His most recent methods of the subcutaneous division of the femur in the ankylosis of the hip-joint and the treatment of cicatrices are proceedings which have made a tour of the world, and are everywhere recognised as ingenious and valuable contributions to surgical progress. Mr. Savory and Mr. Holmes, both Hunterian professors in the past, are in the very front rank of surgeons of their standing. They are universally esteemed and respected, and their scientific claims are so well known and thoroughly appreciated that it is unnecessary for us to refer to them. The choice this year will, therefore, only be untroubled by its riches.

THE Council of University College have elected Mr. G. D. Thane Professor of Anatomy for two years.

MEDICAL officers from nearly every station in Great Britain have arrived at Aldershot for the purpose of undergoing a course of training to attend upon the sick and wounded in time of war.

MR. HENRY SMITH has been appointed Professor of Systematic Surgery in King's College, in lieu of Mr. John Wood, who has resigned the office.

A MEETING for the purpose of discussing the proposed institution of a training College for the deaf will be held at the Mansion House on Monday next, the 18th inst., at 2 30 P.M.

THE Ingoldsby Lecture for 1877 will be delivered by Professor Berry in the Lecture Room, Queen's College, Birmingham.

Dr. FREDERICK T. ROBERTS and Dr. W. R. Gowers have been appointed Assistant-Professors of Clinical Medicine by the Council of University College, London.

WE hear from a trustworthy source that the Russian troops on the Danube are suffering extremely from dysenteric and typhoid diseases; and that a large part of the men not in hospital are showing signs of incipient malarial disease.

THE sixteenth annual meeting of the Plymouth Female Home was held lately. The report recommended an amalgamation of the Home with the Female Penitentiary. The Rev. J. Wood, in submitting a motion in favour of amalgamation, said that the only reason for the amalgamation was, that the operation of the Contagious Diseases Act had decreased the number of known prostitutes by over 75 per cent. Not only had the condition of the streets greatly improved since the administration of these Acts, but the reformatory influence of the Acts was very valuable.

AT the Cambridge Police-court on Saturday, David Fletcher, baker, was summoned for having adulterated bread, contrary to the Act. Mr. Apjohn, of Caius College, the public analyst, said that he found thirty-two grains of alum to the four pound loaf, which was injurious to health. The mayor fined the defendant £5 and costs. The defence was, that it had been customary to use alum ever since defendant had been in business.

WITH regard to the case of alleged starvation in the Isle of Wight Workhouse, about which a question was lately put in the House of Commons, the guardians have received a letter from the Local Government Board, stating that the evidence before them confirmed the effect of the verdict at the coroner's inquest, that deceased died from starvation. Two nurses are discharged, the master censured, the medical officer requested to resign, and his deputy debarred from future employment in any similar capacity.

SOME political alarm having been occasioned by the announcement that the medical men in Germany had been called upon to state whether they are prepared to accept military service in case of war, the *North German Gazette* says: "It is the rule that every year medical practitioners are officially requested to declare whether they are inclined in case of war to take service as military surgeons. It is scarcely necessary to state that the repetition of this notification at the present moment is not to be taken as an indication of an impending mobilisation any more than on previous occasions."

WE notice in the *United Service Gazette* that, at the dinner this week of the Navy Club, which includes a number of the most distinguished admirals and senior officers of the navy, Sir Alexander Armstrong, K.C.B., the Medical Director-General of the Navy, was the guest of the evening. On Tuesday last, Sir Alexander Armstrong was elected a member of the Athenæum Club. We notice and mention these facts with pleasure, because they afford evidence that, while the manly, impartial, and independent course which Sir Alexander Armstrong's evidence before the recent commission on scurvy shows that he pursued in this matter, brought upon him the illwill of a few persons who very noisily expressed it; on the other hand, as might have been expected, the strict and manly performance of his duty to his department, and the singular ability which he has displayed, has won for Sir Alexander Armstrong the confidence and respect of all branches of the service, and the esteem of the public.

#### COFFEE-TAVERNS.

UNDER this head the *Times* has the following. Cardinal Manning on Wednesday afternoon presided at the weekly meeting of the National



Health Society, held at the Society of Arts, Adelphi, when Mr. Ernest Hart read a paper upon coffee-taverns. The attendance was very large. Mr. Hart proceeded to give a history of the introduction of coffee-houses into this country, and spoke of their use by the upper class in a bygone age. Then entering upon the large questions connected with the consumption of alcoholic drinks, he read some weighty statistics gathered from lunatic asylum keepers, governors of prisons, and the masters of workhouses, showing that a very large amount of the pauperism, criminality, and lunacy of the country owes its source to our drinking customs. He traced out the endeavours to establish coffee-taverns in various country towns, and pointed out that in several towns, such as Glasgow and Liverpool, they had flourished, and afforded the means of men having sober drink with their meals. He urged that the basis upon which they should be founded should be a commercial and not a charitable one, as the working classes looked askance at the charitably founded places. Several speakers followed Mr. Hart in his interesting paper; and then the chairman, who was warmly received, said he entirely agreed with the views Mr. Hart had enforced as to the necessity of places which appealed to the working classes for support being founded entirely upon a commercial basis. There should be no admixture of charitable and commercial principles in these matters, for the working classes would not submit to patronage. These places could be made very pleasant for working men to breakfast and dine in, but he did not think they should be always there. The reason why he did not think so was the same which induced him to give an answer to a member on a House of Commons' Committee, who asked whether he did not think a working man should have a public-house to go to on Sunday in lieu of his own wretched home? His answer to the question was that, if the working man had the heart of a man in him, he ought to endure for one day out of seven what his wife and family endured all the seven days. The coffee-taverns would save working men from going into places where the chances were that they would lose their self-control. He enforced the point that alcohol was not necessary for daily life, and concluded by moving a vote of thanks to Mr. Hart.

#### HOSPITAL SUNDAY.

HOSPITAL Sunday in London will celebrate its fifth anniversary on Sunday next (to-morrow). It has always been felt that the collections from the churches and chapels of the metropolis were unworthy of the reputation which the Mansion House has always maintained for the splendid charitable collections which each year emanate from its hospitable centre. Many explanations have been alleged as the cause of the small amount relatively to the enormous population which the metropolitan Hospital Sunday collections have as yet produced. Want of individual interest and individual effort is believed to have much to do with this result, because in the provincial towns, where both these factors are largely present, the collections made are nearly fifty per cent. more than in London. To remedy this, the Council have adopted a new scheme which Mr. Henry Burdett of the Greenwich Hospital first suggested in our columns. London has been divided into twelve districts or large towns, and returns have been obtained from the majority of the hospitals and dispensaries which show the amount of relief received and the amount of subscriptions given by the inhabitants of each division or town. Thus we find, from the new forms on which the information thus obtained is printed, that the average proportion of benefits conferred by the charities of all the districts on the inhabitants to the amount of subscriptions obtained from the public is as five to one. Some of the districts, however, show their appreciation of the work done by the medical charities in their midst to a far greater extent than others. Thus, whereas the inhabitants of Hackney, Hornsey, Stoke Newington, Tottenham, and Edmonton, only subscribed one-fifteenth of the actual amount of benefit they received from the hospitals and dispensaries, the division comprised in the City and Liberties of Westminster subscribed one-third of its liabilities. Between the extreme of Hackney and the mean of Westminster, there are many gradations, more or less discreditable as the

inhabitants are comparatively wealthy or the reverse. We believe these returns will be the means of arousing many congregations to a sense of their position in this matter, and we sincerely hope that the total result will show a considerable increase in the amounts collected throughout the metropolis this year. A circular of some importance has been drawn up for the signature of the ministers of religion of all denominations, to enable them to appeal impersonally, but directly, to all the wealthier members of their congregation, whether they are in church or away on Hospital Sunday. The golden pheasants circulars in Birmingham have produced an increase of quite twelve per cent. in the amount collected, and we anticipate a like result in London. The returns called for by the Council have not been given by all the hospitals and dispensaries, for the reason that their books were not properly kept. It is to be hoped, however, that next year no hospital or dispensary will be in so lamentable a position as to be omitted from the list.

#### INCOMPETENT DOCTORS.

WE have received more than one copy of a paper which has been circulated under the signature of A. Trevelyan, J.P., Tyneholm, N.B., 1877, headed "Incompetent Doctors: Impure Vaccination", which alleges, amongst other things, that a large number of unskilful and ignorant men are in medical practice throughout the country, and by favour of the examiners have paid the fee and have obtained their diploma or licence to kill; that the General Medical Council is merely a trades-union of men quite capable of sacrificing the public health to the health of their pockets; that the majority of medical men who practise vaccination do so for the sake of the fees; and that there is no doubt that thousands of patients perish annually through vaccination and from the ignorance and mistakes of medical men, even when in their sober senses; with other matters to the same effect or worse. Of course, A. Trevelyan might circulate many ravings of this sort without attracting any serious notice, so long as he did so in his private capacity. When such an inflammatory and libellous statement is, however, circulated broadcast with a sort of semi-official indorsement implied by the addition of the letters J.P. to the name of the writer, it is, we think, right to attract the attention of the Home Secretary or the law officers of the Crown to the perversion of official position by a man who is capable of using it to give authority to libels of so gross and mischievous a character.

#### PLAYGROUNDS FOR LONDON CHILDREN.

WE trust that the London School Board will not fail to give serious consideration to the memorial presented by the deputation of the National Health Society at its last meeting, urging that steps be taken to utilise for the purpose of recreation the fifty-seven acres of open space attached to their school-houses as playgrounds. Most of these school-houses are situated in densely populated neighbourhoods, where the children may be seen sitting about the kerb-stones, playing in the gutters with their noses over the sewer-gratings, and running all sorts of risks to health and life in the vain attempt to get a little outdoor recreation. At present, very few of the playgrounds attached to the Board-schools are adequately used for recreation. They are not fitted with gymnastic apparatus of any sort; nor are they under supervision, such as is necessary for London children; and for the most part they are closed on holidays and shortly after school-hours. Even when they are nominally opened, no means are taken to render them attractive or really serviceable. This memorial, which was prepared at the instance of the Rev. Samuel Barnett, Vicar of St. Jude's, White-chapel, and has received the signatures of the Archbishop of Canterbury, Monsignor Capel, Earl Shaftesbury, Miss Octavia Hill, and a great number of thoughtful and thoroughly well informed persons, urges, first, that the grounds shall be open not only to the children of the schools, but, under such regulations as may seem fitting, to the children of the neighbourhood; second, that these playgrounds be provided with suitable apparatus for healthy recreation; and third,



that the Board provide such supervision of the playgrounds during play-hours as may encourage children to use and profit by the means of recreation provided. The main difficulty suggested by the members of the Board, in the course of their conference with the deputation, was that of expense for the care-takers. Mr. Ernest Hart, however, as Chairman of the Committee of the Society, states that, if that should prove to be an insurmountable difficulty so far as the School Board were concerned, the National Health Society would, if called upon, take steps with the view of raising funds adequate for the purpose, and would endeavour to assist the School Board in meeting the financial difficulty, if indeed the Board should feel itself unequal to fulfilling its obligations in the matter in that respect.

#### ABNORMAL APPETITE.

IN reporting the death of an imbecile at the workhouse, the Chairman of the Bristol Board of Guardians narrated an extraordinary incident. The deceased's idiosyncrasy was to put anything that he could get into his mouth. For years past he had a special appetite for the blankets and rugs supplied him as bed-covering. The deputy-chairman said the deceased had consumed upon the average a large woollen rug every three weeks, and, in consequence of this, the guardians had directed that a supply of bread should be always kept alongside of him, so that he might indulge his propensity for eating in a legitimate way; but, in the intervals between meal-times, he rejected the bread and persisted in eating blankets.

#### INACCURACY OF GLASS MEASURES.

DR. HOLGATE of New York writes to the *Medical Record* to point out the great inaccuracies of the measuring glasses commonly sold for medical purposes. As the same charge, we believe, holds good against those sold in this country, it will not be without interest to reproduce his experiments.

"Having occasion some time ago to visit a glass manufacturer's establishment, I observed, whilst there, a workman marking the lines on, or rather graduating glass measures, by holding them against a revolving wheel, and, to my surprise, without any method of adjusting the lines, excepting such as his own judgment would indicate. It appeared at the time so absurd that it elicited the question, 'Is it possible to mark them in that way so that they will measure correctly?' On which he replied, that he was so accustomed to that kind of work, that he could mark them near enough for all practical purposes. At that time I purchased a half-ounce graduated measure cut so as to measure half-drachms. Since the adoption of the metrical system by the New York County Medical Society, I have tested the measure with distilled water at the temperature of 60 deg., and find it to read by weight as follows:

The following are the weights the measure ought to give in grains.				The following are the weights the measure did give in grains.			
f 3 ss	..	..	23.43	..	..	..	38.57
f 3 i	..	..	56.96	..	..	..	66.34
f 3 jss	..	..	85.44	..	..	..	93.30
f 3 ij	..	..	114.33	..	..	..	123.44
f 3 jss	..	..	142.46	..	..	..	151.52

The remaining graduations were equally inaccurate."

#### FRENCH HOSPITAL AND DISPENSARY.

THE anniversary festival on behalf of the funds of the hospital took place on June 9th at Willis's Rooms, under the presidency of the Marquis d'Harcourt, the French Ambassador. There were about two hundred gentlemen present. The Chairman, in proposing the toast of the evening, "The Health of the Founders and Benefactors of the French Hospital," said that in an immense metropolis like London, wherein are constantly thrown people from all parts of the globe, frequently in the most miserable condition, it was a praiseworthy task to provide for those who were assailed at once by poverty and sickness, and who, from inability to speak the English language, or from want of recommendations, found great difficulty in being relieved in ordinary hospitals. This task the French Hospital had hitherto performed to the extent its resources permitted, and could, no doubt, accomplish it still better with an extension of patronage. Public assistance was required for such an institution. Their first appeal was

made to the French residents in London, and, after those, to the subjects of all foreign countries who took an interest in genuine works of charity.—M. Eugène Rimmel, honorary secretary, read a report of last year's operations, showing that 155 in-patients and 4,616 out patients had been relieved. He announced a list of subscriptions amounting to about £1,000.

#### THE ROYAL SOCIETY.

THE following gentlemen connected with medicine and the allied sciences were, on the 7th instant, elected Fellows of the Royal Society. Professor James Dewar, Jacksonian Professor of Natural Philosophy at Cambridge, proposed for election in consideration of his experimental work; Sir Joseph Fayrer, K.C.S.I., Honorary Physician to the Queen, President of the Indian Medical Board, late President of the Asiatic Society of Bengal; Thomas Richard Fraser, M.D., Examiner in Materia Medica in the University of Edinburgh, distinguished for his researches on the physiological action of drugs; W. Carmichael McIntosh, M.D., distinguished by his researches on the annelida; Robert McLachlan, distinguished as an entomologist; John William Mallet, distinguished as a chemical and physical experimenter, the first who succeeded in fusing into a solid mass metallic arsenic under pressure of its own vapour; Henry Nottidge Moseley, Fellow of Exeter College, Radcliffe Travelling Fellow, and one of the civilian staff of Her Majesty's ship *Challenger*; William Roberts, M.D., Physician to the Manchester Infirmary, distinguished for his researches in histology, physiology, and pathological chemistry; and Wm. Turner, M.B., Professor of Anatomy, University of Edinburgh.

#### HOMOEOPATHY.

THE not very wise correspondence initiated between Dr. Wyld and Dr. Richardson, to which so much ill-judged prominence has been given, has terminated appropriately enough in broad farce. The true end of Dr. Wyld's opinions and propositions is thus stated by him in a letter to the *Times*.

"The homoeopaths are gradually retiring from the use of infinitesimals, and are gradually incorporating with their practice many 'orthodox' remedies.

"If so, it is manifest that the time has arrived for a conference between the opposing schools.

"Permit me to illustrate 'eclectic medicine' by a few instances.

"I believe that inflammation of the lungs, Asiatic cholera, and dysentery can be best treated by medicines given according to the homoeopathic theory; but, had I a case of agony produced by the passing of a stone from the gall-bladder or the kidney, I should use anæsthetics or opium. Had I a case of paralysis, I should recommend skillful medical rubbing; or, had I a case of chronic congestion of the liver, I should prescribe Carlsbad waters."

So, too, there are some complaints for which Dr. Wyld would possibly employ spiritualistic guidance, and others for which he might use mesmeric divination. He has omitted from his list the use of galvanic tractors, electric baths, magneto-curative belts, Holloway's ointment, and Morison's pills, which, to make his system complete, he certainly ought to have included in his new character as an "eclectic physician".

#### ALLEGED NEGLECT IN THE BIRMINGHAM WORKHOUSE.

A CASE of alleged neglect, terminating in death, has just been the subject of a coroner's inquiry at the Alcester Union Workhouse, which merits, in the interest of the public and the incriminated officials, a searching investigation by the Local Government Board. It would appear that a male child aged three years was admitted into the Birmingham Workhouse on January 28th, and remained there until March 29th, when the child was taken out by the mother. At the time of the child's admission, it was asserted that he was in good health. A fortnight afterwards, the child suffered from chilblains, which broke. At the time of the discharge from the house, the father asserted that the child was in a very dirty and filthy condition, with ulcerated feet; and, on admission to the Alcester Workhouse two days afterwards, was found to be suffering from gangrene of the toes



and of one finger. Subsequently, the two great toes dropped off and the child sank. There was the customary conflict of evidence between the officials of the two establishments. Ultimately the jury brought in a verdict in which they stated "that the child died of gangrene, convulsions, and diarrhoea"; that he was not a strong child when admitted to the Birmingham Workhouse; and that he did not receive proper care and attention whilst in that workhouse.

#### WORKS BY MEDICAL ARTISTS.

THE art-works of medical men exhibiting at the Royal Academy have been already referred to in the BRITISH MEDICAL JOURNAL. There are two other exhibitions—viz., the Grosvenor Gallery and the Black and White at the Dudley—which remain to be noticed as containing other works by medical artists. The Grosvenor Gallery contains about fifty water-colour drawings. Amongst these are two by Mr. Prescott Hewett. No. 1, "On the Coast of Dorsetshire", is a tender and refined work, which we noticed last year, when it was exhibited in the Gallery of the Society of Painters in Water-Colours. No. 46, "A Surgeon's Holiday in Poole Harbour", is characterised by the same refinement of feeling and skilful arrangement whereby this accomplished artist succeeds in making a touching picture out of very slender material. The above are the only works by any member of our profession in this exhibition. The reason for this is, probably, that the gallery is a private property, and only those artists contribute who are invited to do so by the owner. At the Black and White, two of our members have works, and both are well-known etchers—Messrs. Evershed and Probert. The former has several charming etchings of the Thames and North Wales. Some are merely outlines; but they are drawn very carefully, and yet with freedom. The latter has an etching of a river-bed and foliage in South Wales, done with considerable power; also two small and pretty etchings of Venice.

#### THE TRANSFUSION OF BLOOD.

IN a lecture on Transfusion of Blood and its Practical Application, by Dr. Thomas G. Morton, Surgeon to the Pennsylvania Hospital (which is one of an excellent series of American clinical lectures edited by Dr. E. C. Seguin of New York), Dr. Morton, after giving a few historical details, says: "In one hundred and three instances of transfusion for what might be called *post partum* hæmorrhage, I find that over 56 per cent. recovered; while, in forty-one cases of hæmorrhage after wounds, operations, etc., over 58 per cent. recovered. If, however, the cases of transfusion for the treatment of disease are examined, the results are far less favourable." Dr. Morton has performed or assisted at the operation on ten occasions, the majority being for losses of blood in surgical cases: three were cases of chronic anæmia, and one hæmorrhage in the course of typhoid fever; the latter was attended with "purpuric spots", bleeding from mouth and kidneys, and great prostration. Two ounces and a half of defibrinated blood were injected, and a good recovery resulted. Four of the other cases of hæmorrhage recovered, and two died. The cases of anæmia were much benefited. Dr. Morton uses defibrinated blood, and, in speaking of its advantages and disadvantages, gives the opinion of Dr. Gibbons Hunt, an eminent microscopist, which, if correct, is of much interest. Dr. Hunt says—"In defibrinated blood, there is not any appreciable loss of red corpuscles, neither is there any actual disturbance of the normal relative proportion of white and red, viz., about one white to 330 red. In no way whatever is there any evidence that the blood after defibrination suffers any degradation in its nutritive or therapeutic properties." The details of some interesting experiments are given. Two ounces of clotted blood (broken) were injected into the femoral vein of a dog; at the end of a week, being then apparently as well as ever, the animal was killed; hæmorrhagic spots were found on the surface of the lungs, caused probably by *débris* of the clots. The question arose as to whether these small pieces would excite abscess or be absorbed. To determine this, another dog was served in the same way and killed at the end of two weeks, when similar morbid appearances were found. A third dog

was employed and killed at the end of three weeks, when nothing abnormal was discovered. Dr. Morton arrives at the conclusion that the injection of a small amount of clot in transfusion is not so dangerous as some suppose. He says the same of the injection of air, and relates experiments to support his position. Altogether, the main interest and novelty of the essay will be found in these experiments. When immediate transfusion is employed, Dr. Aveling's transfuser is spoken of with approval.

#### ARTISANS' AND LABOURERS' DWELLINGS.

THE annual meeting of the Metropolitan Artisans' and Labourers' Dwellings Association was held on Thursday week, at its offices, 9, Victoria Chambers. The Chair was occupied by Mr. Walter, M.P., the Chairman of the Executive Council. The report states that inconveniences having arisen from the similarity of the title of the association to that of another institution established for kindred objects, a change of name appeared desirable, and permission has been given to take the title of "Victoria Dwellings Association". The association has commenced its work by erecting at Battersea two blocks of labourers' dwellings and one for artisans. The Earl of Beaconsfield has kindly consented to open these on Saturday, the 23rd instant, at five o'clock, when the Home Secretary has expressed his intention of being present in order that he may inspect these buildings, which are some of the first results of the Artisans' and Labourers' Dwellings Act of 1875, introduced by him. The association is about to erect several blocks of labourers' dwellings at Stroud Vale, near King's Cross, on an elevated and healthy site, the erection of convenient homes for the lower grades of the working classes being the special object of the association. Its operations, therefore, will not clash with those of other societies which devote themselves to improving the dwelling accommodation of the comparatively highly paid artisan class. A very large capital will be required to keep pace with the want of dwellings for the poor which will be created by the condemnation (under the Artisans' and Labourers' Dwellings Act of 1875) of overcrowded and unhealthy sites; and the Council, having now ascertained by actual experience at Battersea the important fact that it is possible to erect tenements for the poorer class, as well as artisans' dwellings, at so moderate a cost as to insure a dividend of 5 per cent. to shareholders, confidently invite investors to contribute towards carrying out the objects of the association.

#### PROPOSED TESTIMONIAL TO MR. JOHN SIMON, F.R.S.

MR. ROBERT LOWE, M.P., presided on Wednesday afternoon at a meeting, held in the Social Science Rooms, Adelphi, of the committee formed for the purpose of organising a testimonial to Mr. John Simon, F.R.S., late medical officer to the Privy Council and Local Government Board, in recognition of the long and valuable labours he has rendered to the State, and of his eminent services to sanitary science. It is proposed that the testimonial shall assume the form of a bust in marble of Mr. Simon for presentation to the Royal College of Surgeons, agreeably to the wishes of the Council of that body. Mr. Haviland, the Secretary of the Committee, presented a report detailing the steps that had already been taken to promote the testimonial. The cost, together with the expenses, would probably amount to £500. Mr. Lowe said he had much pleasure in moving the adoption of the report. It had been his good fortune to be brought much into contact with Mr. Simon, and he was bound to say that he thought no man who had deserved so well of his country had met, on the whole, with such hearty acknowledgment of his efforts. After a high eulogium on Mr. Simon, the Chairman, in conclusion, said he sincerely hoped the medical profession would respond to the invitation put forward through the Committee, so as to enable them to erect a monument to Mr. Simon which would remain for all time, to prove that, though his services to the nation had not certainly met with full appreciation, there were some by whom they were recognised. Dr. Guy seconded the motion. The resolution having been carried, Sir Thomas Watson moved another resolution, affirming that Mr. Simon's services in the cause of sanitary



reform entitled him to the mark of high appreciation suggested by the Committee, and appealing to the public generally for support in aid of that object. Dr. Farr seconded the resolution, which was adopted, and also another pledging the meeting to support the testimonial, and the meeting separated.

#### POISONED MILK.

"A SUFFERER" writes to the *Times* from New Barnet: "The Medical Officer of Health to the East Barnet Valley Local Board has just sent in his report on the recent outbreak of scarlet fever in the district of New Barnet. It appears that, between April 29th and May 4th, there were 117 persons attacked. Of these, 109 obtained their milk from one dairyman, who is designated A, the eight remaining persons obtained their milk from three other dairymen, referred to as B, C, and D. In one family, some of the persons used the milk supplied by A, while others used condensed milk. The former were attacked by scarlet fever, and the latter escaped. Several other facts are mentioned tending to show the connexion between the outbreak of scarlet fever and the milk supplied by A to certain of his customers. As to the means whereby the milk became infected, the medical officer states that it was an 'accident', but he gives no clue as to its nature. I believe there can be no doubt that if a railway 'accident' either killed or injured 117 people there would be a Government inquiry into its cause; and I venture to think that this 'accident' to the milk of dairyman A ought to be as rigorously inquired into. It has not been officially stated how many deaths have occurred, nor is it known how many families have fled from the district to avoid the infection; but the number of those attacked in a limited area in four days is surely sufficient to call for some more thorough inquiry and some more satisfactory conclusion."

#### THE PUBLIC HEALTH.

DURING the week ending June 9th, 5,732 births and 3,583 deaths were registered in London and twenty-two other large towns of the United Kingdom. The natural increase of population was 2,149. The mortality from all causes was at the average rate of 23 deaths annually in every 1,000 persons living. Measles showed exceptional fatality. The annual rates of mortality per 1,000 last week in twenty English towns, ranged in order from the lowest, were as follow: Portsmouth, 16; Newcastle-upon-Tyne, 17; Norwich, 17; Leicester, 18; London, 21; Wolverhampton, 21; Plymouth, 21; Bristol, 22; Brighton, 22; Nottingham, 23; Salford, 23; Bradford, 23; Sunderland, 24; Birmingham, 25; Hull, 25; Liverpool, 26; Leeds, 26; Sheffield, 26; Manchester, 28; and Oldham, 31. The deaths referred to small-pox in the twenty towns, which had been 79 in each of the two preceding weeks, declined to 72 last week, of which 58 occurred in London, 8 in Liverpool, 5 in Manchester and Salford (exclusive of 2 municipal fatal cases in the Monsall Hospital), and 1 in Oldham; no death from this disease was recorded in any of the fifteen other of these twenty towns. In London, 2,348 births and 1,429 deaths were registered. Allowing for increase of population, the births exceeded by 111, and the deaths by 80, the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the two preceding weeks had been equal to 20.6 and 21.3 per 1,000, was last week 21.1. The 1,429 deaths included 58 from small-pox, 65 from measles, 19 from scarlet fever, 6 from diphtheria, 40 from whooping-cough, 16 from different forms of fever, and 16 from diarrhoea. Thus to the seven principal diseases of the zymotic class 220 deaths were referred, against 220 and 236 in the two preceding weeks. These 220 deaths were 17 below the corrected average number from the same diseases in the corresponding week of the last ten years, and were equal to an annual rate of 3.2 per 1,000. The 65 fatal cases of measles, although 4 less than those in the previous week, exceeded the corrected weekly average by 29. The disease was especially fatal in East London. Only 19 deaths were referred to scarlet fever. The fatal cases of small-pox, which in the four preceding weeks had slowly but steadily declined from 78 to 61,

were 58 last week, of which 29 were certified as unvaccinated and 12 as vaccinated; in the remaining 17 cases the medical certificates did not contain any information relating to vaccination. Of the 58 fatal cases, 26 belonged to the south group of districts, and 16 were of children under five years of age. The Metropolitan Asylum District Hospitals contained 850 small-pox patients on Saturday last, against 964 and 891 at the end of the two preceding weeks. The number of new cases admitted during the week was 167, showing a further decline from the numbers of admissions in the three preceding weeks, which were 254, 219, and 178. The deaths referred to diseases of the respiratory organs, which had steadily declined from 355 to 259 in the four preceding weeks, were 251 last week, and exceeded the corrected average weekly number by 53. In Greater London, 2,850 births and 1,656 deaths were registered, equal to annual rates of 34.1 and 19.8 per 1,000 of the population. At the Royal Observatory, Greenwich, the duration of registered sunshine in the week was 70.3 hours, out of the 114 6 hours that the sun was above the horizon.

#### HOUSE FOUNDATIONS AND DAIRIES IN LONDON.

MR. SCLATER-BOOTH'S Bill "to consolidate and amend the law relating to public health in the metropolis", has been printed. It consists of 106 clauses, and among its objects are, according to the preamble, the making better provision "for regulating the foundations of buildings, and the sanitary arrangements of dairies within the metropolis". The clauses on these subjects are as follows.

"68. The Commissioners of Sewers within the City of London, and the Metropolitan Board of Works within the rest of the metropolis may, with a view to the prevention of injury to health and of nuisance, make by-laws providing, with respect to dwelling houses to be erected after the passing of this Act, that all offensive or unwholesome waste or refuse, and all soil that has been rendered offensive or unwholesome by the deposit thereon of such waste or refuse, or of fecal matter, shall be removed from the sites of such dwelling-houses, or be rendered harmless before the foundations of any such dwelling-houses are commenced.

"69. The Commissioners of Sewers within the City of London, and the Metropolitan Board of Works within the rest of the metropolis may, with a view to prevent the spread of disease, make by-laws with respect to all or any of the following matters; that is to say: 1. With respect to the water-supply, drainage, and ventilation of dairies and cowsheds, in the occupation of cowkeepers and dairymen; 2. With respect to the cleanliness of milkshops and of any vessels used for receiving or containing milk for sale; and 3. With respect to precautions to be taken for protecting milk against infection or contamination; and 4. With respect to the situation and structure of dairies and cowsheds erected and intended to be occupied by cowkeepers or dairymen after the passing of this Act."

#### METROPOLITAN WATER-SUPPLY.

THE Registrar-General states that Dr. Frankland reports as the result of his analysis of the waters supplied to the metropolis and some of its suburbs during May, that, taking unity to represent the average amount of organic impurity in a given volume of the Kent Company's water during the last nine years, the proportional amount of such impurity in an equal volume of water supplied by each of the other companies, and by the Tottenham Local Board was: Tottenham 0.3, Kent 1.2, East London 1.8, New River 2.0, Colne Valley 2.2, Chelsea 2.2, Grand Junction 2.2, Lambeth 2.8, West Middlesex 2.9, and Southwark 3.1. The river-waters generally showed an improvement upon those delivered during April; they appear to have assumed their summer quality, and were all efficiently filtered before delivery. The artesian well waters, delivered by the Kent and Colne Valley Companies, and by the Tottenham Local Board, were of the usual excellent quality. The softened Colne Valley water was, however, slightly turbid from suspended particles of chalk. Dr. Hill reports that the water supplied to Birmingham was clear, and that its proportional organic impurity continues to decline. The Loch Katrine water supplied to Glasgow is reported by Dr. Mills to have been of a pale brown colour, and to have contained a "number of muddy and hairy particles", with traces of iron.



## SCOTLAND.

THE first sod of new drainage and water-works for the burgh of Inverlithen was cut on Friday last by the Hon. H. M. Stuart of Traquair. The works will be finished in about seven months, at a cost of about £6,000.

EDINBURGH has passed another week without any death from zymotic disease except whooping-cough, and only two fatal cases were registered from it, neither of them being in the Old Town. The rate of mortality was at 18 per 1,000 *per annum*, and would have been lower but for a large increase of chest-diseases due to recent severe weather.

AT the Police Court, Edinburgh, on Monday last, Andrew Howieson, residing in Cumberland Street, was fined £2, including expenses, for having refused to allow his child, aged nine months, to be vaccinated. The alternative was ten days' imprisonment. We notice this case, because it is of very rare occurrence in Scotland, and hitherto almost without parallel.

## A FATAL DRINKING BOUT.

ON Monday last, three young men employed at one of the Thurso pavement-works made a wager as to which of them could drink the greatest quantity of whiskey. After they had consumed three bottles amongst them, one of them drank off a fourth. He immediately became insensible, and, notwithstanding every medical effort, expired in two hours afterwards.

## GOOD HEALTH OF SCOTLAND.

THE Registrar-General's returns for May show that throughout Scotland there is still a remarkable absence of zymotic diseases, only 14.5 per cent. of the total mortality of the month being due to them. This is the lowest proportion of deaths from these diseases since May 1855. Whooping-cough was the most fatal of the epidemics, having caused 105 deaths, or 3.5 per cent. of deaths from all causes. Fever (typhus and typhoid) caused only 46 deaths. Thirty-nine per cent. of all the deaths were of children under five years of age. Ninety deaths resulted from violent causes, of which four were suicides. Two deaths were due to delirium tremens, and ten to intemperance. One of the deaths registered was that of a linen-weaver's widow aged 101 years. The month was characterised by low temperature, large barometric fluctuations, rather large rainfall, and much wind.

## THE ANTI-VIVISECTIONISTS IN GLASGOW.

IT may be satisfactory to our readers to learn that the late move of the Society for the Protection of Animals liable to Vivisection has received absolutely no support in Glasgow. It may be remembered that this society, through its eminently feminine secretary, endeavoured to influence the directors of the Royal Infirmary to prevent vivisection in their medical school by a threat that the Society would appeal to the subscribers to withdraw their contributions to the Infirmary. This proposal has, so far as we can learn, been met with the indignation which it deserved, and it is only to be wished that the Society may make a few more similar attacks. There was some suspicion that the Glasgow Society for the Prevention of Cruelty to Animals had allowed itself to be drawn into seconding the attempt of the London society. They have been able to clear themselves of this suspicion, but the circumstances connected with the affair show very strongly how the feelings of the community lie in this matter. We have even learnt that, had the Glasgow society come out less clearly, many of their subscriptions would have been transferred to the Royal Infirmary. Altogether, we feel sure that, so far as this part of the country is concerned, the feeling against vivisection has hardly any existence; and were it not for, we had almost said one, but at most one or two energetic persons, it would never have been heard of.

## THE ANTI-VIVISECTIONISTS.

A MEMORIAL, emanating from a meeting held recently in Edinburgh under the auspices of the Scottish Society for the Total Suppression of Vivisection, was read at the last meeting of the Edinburgh Town Council, calling upon them to show their horror and disapproval of vivisection practices by at once discountenancing them, and withdrawing their support from the University enlargement scheme until they had received an assurance that the premises would not be used for the purposes complained of. The reading of this memorial was greeted with cries of "No, no", and the letter was allowed to lie on the table.

## IRELAND.

WE have to announce with deep regret the death, on Thursday morning, of Dr. Henry Wilson, Professor of Ophthalmic Surgery in the Royal College of Surgeons of Ireland. He died of pleuropneumonia and pericarditis, after four days' illness.

## CLINICAL INSTRUCTION AT BELFAST.

IN consequence of a recommendation made at the instance of the Government through the Local Government Board, the Belfast Board of Guardians have unanimously resolved to admit the medical students of the Queen's College to the hospitals of the workhouse in accordance with such regulations as might be afterwards framed. The adoption of this course will be a great boon to the Belfast students, many of whom had to complete their clinical education at metropolitan schools. Experience, too, has also proved the benefits which result in many ways to both the professional staff and patients of an hospital when its wards are made the field of systematic clinical instruction.

## PHARMACEUTICAL SOCIETY OF IRELAND.

AT the monthly meeting of the Council of this Society, held last week, it was unanimously resolved that a letter be forwarded from the President and Council to the President of the Pharmaceutical Conference, expressing a wish that the Conference would hold its meeting as usual in connection with the British Association on its visit to Dublin next year.

## COLLAPSE OF THE LATEST JOINT SCHEME.

A COMMITTEE of delegates, appointed by the King and Queen's College of Physicians and by the Royal College of Surgeons in Ireland, met in March and April last to consider and report to their respective Colleges on the subject of a combined examination for the two licences granted by these bodies. The report of this Committee—which was dated April 12th, 1877, and which recommended that a combined examination should be held by the Colleges—only came before the College of Physicians at its monthly meeting last week. We are informed that, after a division, a resolution was adopted, that the consideration of the report be adjourned *sine die*.

## IRISH MEDICAL ASSOCIATION.

AT a special meeting of the Council of this Association held last week, the following members were elected on the Committee of Council for the ensuing year: Dr. T. W. Grimshaw (*Chairman*), Dr. Minchin (*Honorary Treasurer*), Dr. Chapman (*Honorary Secretary*), Dr. J. W. Moore (*Honorary Secretary to Council*), Dr. A. H. Jacob, Dr. Purcell, Dr. Pollock, Dr. Speedy, and Dr. Ussher.

## TRAFFIC IN DISEASED MEAT.

FURTHER cases of this abominable trade still keep cropping up. A butcher, living in the street which has already been rendered notorious by similar procedures, was summoned before one of the Dublin police magistrates last week, at the suit of the Public Health Committee of the Corporation, for having exposed for sale the diseased carcase of a cow. The police seized the carcase, and Dr. Cameron, City Medical



Officer of Health, declared it to be unfit for human food; the animal having suffered from pleuropneumonia, and its lungs being full of pus. The butcher was fined £2, and the purchaser of the beast, against whom a summons was issued for having the carcase in his possession, £5.

#### HEALTH OF DUBLIN.

THE total deaths registered in the Dublin Registration District during the week ending June 2nd, 1877, were 189—98 males and 91 females, which represents an annual mortality of 31.2 in every 1,000 of the population, by the census of 1871; omitting the deaths of persons admitted into public institutions from localities outside the district, the rate was 29.6 per 1,000. Thirty-four deaths were registered from zymotic diseases, including 10 from measles, and 1 from small-pox. Bronchitis caused 30 deaths (average number in the corresponding week of the previous ten years, 17.5); pneumonia or inflammation of the lungs, 7; and lung disease unspecified, 11. This may be read in connection with the fact that the mean temperature of the week (53.0 deg.) was 2.7 deg. under the average for the corresponding week of the previous ten years.

#### BELFAST ROYAL HOSPITAL.

A QUARTERLY meeting of the General Committee of this Hospital was held last week, when it was reported that the Board had received twenty costly engravings, as a donation to the Hospital, from Messrs. Graves and Co. of London, which had been framed and placed in the various wards, thus improving their general appearance and rendering them more cheerful to the patients. In consequence of the resignation of Mr. Anderson, junior resident surgeon, a vacancy occurred, which has been filled up by the selection of Dr. James Jefferson. During the quarter ending April 30th, 402 cases were treated as intern patients, and 34 operations were performed; 1,921 were under treatment in the extern department, with 702 minor operations. The Convalescent Home, on which £4,500 has already been expended, will require a couple of thousand pounds more outlay before being completed; and at present the want of funds has caused a delay, otherwise it might be finished in three months.

#### RICHMOND DISTRICT LUNATIC ASYLUM, DUBLIN.

THIS institution, one of the largest of its kind, contained, at the close of last year, 479 males and 594 females, or a total of 1,053 inmates. The recoveries in the past year have been for males about 43 per cent. on the admissions, and for females 46. On the total number in the Asylum, the recoveries have been 13 per cent. for males and 12 per cent. for females, being about 1 per cent. lower on the admissions for both sexes, and about the same percentage on the total number under treatment in 1876 as in 1875. There were 163 deaths during the year, 69 males and 94 females, the percentage of deaths on the daily average number of patients being 13 for males and 16 for females, or about 3 per cent. greater average mortality than the previous year. The principal causes of death arose from thoracic, cerebral, and abdominal affections. During the year, there were admitted 209 males and 219 females, or a total of 428; of whom 192 were discharged cured, 91 males and 101 females. Dr. Lalor, resident medical superintendent, very properly draws attention to the importance of early treatment in cases of insanity, when the chances of restoration to mental and bodily health are much greater. During the year, a patient, who was epileptic as well as suicidal, killed himself, and another patient nearly effected his death by cutting his throat. For male suicidal cases, who have not been proved by long experience to have lost their suicidal tendency, a special division is appropriated, with accommodation for eighty, which is considered to be sufficient for requirements of this class. There is one male day-room, in which school instruction is given to suicidal cases likely to profit thereby, for a portion of each day, by one of the attendants, a pensioner, who was formerly a teacher in a regimental school. He carries out elementary instruction and drill under the

general guidance of one of the school teachers, and thus brings the influences of education in its extended sense to bear on the development of habits of self-control and of rational modes of thought in many suicidal and melancholic patients. The gloomy broodings and discontent so frequent in this class are thus more or less dissipated by the pre-occupation of their thoughts on the subjects in which they are necessarily engaged whilst in school classes. The principal moral causes of the insanity among the patients in the Asylum were grief, fear, anxiety, and religious excitement; whilst to physical causes intemperance and irregularity of life, as might be expected, heads the list, followed closely by bodily injuries and disorders, one case being ascribed to "abuse of medicine". As regards the social condition of the patients, 232 were married, 36 were widowers or widows, 648 were single, and the condition of 137 was unascertained. From these numbers, it will be seen that the single are much more obnoxious to insanity than the married, a fact also exemplified by the inspectors of lunatic asylums in Ireland in their recent report for the past year.

#### THE IRISH MEDICAL ASSOCIATION AND THE PUBLIC MEDICAL SERVICE OF IRELAND.

THE following resolutions were adopted at the annual meeting of the Irish Medical Association on Monday, June 4th.

"That it would tend to the benefit of the public, and be an act of justice to the medical officers holding appointments in the Poor-law service, that they should be entitled to superannuation allowance, in amount not less than two-thirds of all their official emoluments; that the same should be claimable by those who have served twenty years, or have attained the age of sixty years; or by those who, through illness or infirmity, have become unfit to discharge their public duties."

"That this Association approves of the action taken by the Council concerning the Public Health (Ireland) Bill now before Parliament, which action seeks that proper supervision shall be provided, and that the positions and services of the medical officers of health shall be adequately recognised."

"That the Council be requested to promote the formation of a fund to provide annuities to the widows and orphans of Poor-law medical officers."

"That this Association approve of the action taken by the Council in drawing up draft Bills, with the view to consolidate and amend the vaccination laws, whereby it is sought to assimilate, as far as desirable, said laws to the Acts in force in England, and to obtain for the public vaccinators of Ireland remuneration equal to that given in England for similar services."

"That the present system of dispensary medical relief requires to be reformed, with a view to prevent the abuse of same by persons not entitled to it availing themselves of what is only provided for 'poor persons'. That the indiscriminate issue of tickets for such relief, which now prevails, not only unfairly occupies the time of the medical officers, but also greatly and unnecessarily increases the expenses of the poor-rate."

"That inasmuch as the Local Government Board have recognised the dispensary medical officers of Ireland as 'the medical officers of health', under the provisions of the Sale of Food and Drugs Act (1875), without their concurrence, and have thereby charged those officers with very important duties, for which no remuneration has as yet been provided, this Association protests against the imposition of extra duties upon any individual without his consent, and until equitable remuneration for same has been provided."

MEDIEVAL SURGERY.—At the capture of Rome by the Constable Bourbon in 1527, Benvenuto Cellini, the artist, relates that being engaged in the defence of the castle of St. Angelo, he was struck by a piece of stone that had been knocked off one of the battlements by a cannon-ball and was supposed to be killed.—"During the hubbub occasioned by this accident, one of my companions ran up, who was called Frank the Fifer, but who studied medicine rather than music. He made a brick hot, spread on this a good handful of wormwood, and again sprinkled Greek wine over this; and then laid the stone on my breast at the spot where the injury was apparent. Through the virtue of the wormwood, I immediately recovered my lost strength. I wished to speak, but could not, for some stupid soldiers had filled my mouth with earth, believing therewith to have given me the holy communion. Truly they had very nearly excommunicated me; for I could not get my breath again, and the earth caused me more trouble than the blow."—Goethe's *Trans.*, book 1, cap. 7.



## BRITISH MEDICAL ASSOCIATION: THE MANCHESTER MEETING.

AT the ensuing meeting at Manchester, the whole of the Owens College Medical School will be devoted to the exhibition of pathological specimens and surgical and medical appliances.

In order to facilitate the formation of a good catalogue, the Museum Subcommittee will be glad if gentlemen intending to exhibit will send, at their earliest convenience, a list of their specimens addressed to the Secretaries of the Museum Subcommittee, 78, Cross Street, Manchester.

## CONGRESS OF GERMAN SURGEONS.

## III.

THE third day of the Congress consisted, like the second, of a morning and an afternoon sitting. The former took place in Langenbeck's Clinic at 10 A.M., where the following were the most interesting of the subjects brought forward.

A number of cures of Spina Bifida, by means of iodine injections into the sac, were reported, and one was exhibited by Professor von Langenbeck. Immediately afterwards, the same surgeon showed a patient on whom he had performed Œsophagotomy for the removal of false teeth swallowed during an epileptic fit. From circulatory disturbances the thyroid gland swelled considerably, and was an impediment during the operation. Langenbeck advises that the Œsophageal conductor should always be used in the operation, as it facilitates it considerably, and the operation itself he considers almost devoid of danger. He next showed a case of Uranoplasty. He stated his opinion that artificial obturators can never supersede the operation in cleft of the hard palate; and certainly the result in his case was as nearly perfect as possible, every sound being pronounced perfectly save the *ch* (German), which was still a little deficient. Any nasal tone was scarcely detectable.

Professor König of Göttingen discussed the subject of Resection of the Knee-joint, especially the importance of radically removing with the knife every vestige of the synovial membrane above the patella. Scraping is insufficient, and he has lately employed transverse division of the quadriceps tendon above the patella, total resection of the synovial pocket and patella, with consecutive antiseptic compression of the flap, as practised by Volkmann; and by this proceeding he obtains primary union of the flap to the front of the femur. He advises the H incision, and a splint of his own, almost identical with that described by Mr. Barwell in a recent number of the BRITISH MEDICAL JOURNAL. Plaster of Paris splints he has abandoned in this operation. Volkmann of Halle followed him in the discussion. In a child, ten years old, with most extensive disease, he got complete cicatrization in three weeks. The disadvantages of the operation are chiefly two: early mortality and the length of time required for cure. The former is obviated by antiseptics (in twenty-one cases he has had only one death in the last three years, and that from meningeal tuberculosis, and two required secondary amputation), under which he has in one case had cicatrization in sixteen days. He uses the horse-shoe incision, dissects the flap up superficially to the patella, and fixes the bones by two catgut sutures. Billroth of Vienna, *à propos* of the question, has had to abandon a plan he formerly recommended of cutting through the soft bones with the amputating knife, as he found that the contusion of the bone thus produced did more harm than if a fine saw had been employed.

In the afternoon sitting, Schönborn of Königsberg showed a preparation from a case where he had performed Gastrotomy. He advised its early performance in malignant strictures of the Œsophagus, while the stricture is still passable to small bougies; and showed a contrivance of his own, a bougie with a child's India-rubber balloon on its tip, which is introduced by the gullet, blown up in the stomach, and so renders the operation easier.

On the next and last day, Saturday, April 7th, there was an immense mass of material at both forenoon and afternoon sittings. The forenoon sitting was held in the operating theatre of the Charité Hospital. Rose of Zürich gave a lecture on the Extirpation of Goitres. He referred to the numerous sudden deaths from goitre hitherto unexplained, and often occurring during operations; and he had come to the opinion that these arose from pressure on the trachea, which is more or less present in every case. Hardly a single goitrous patient has a straight trachea, although it is difficult to demonstrate this by the ordinary method of removing the windpipe in necropsies. If, however, it be

removed along with the thyroid gland and hardened, it will be seen on transverse section, to be in every case compressed; but, unless this precaution be taken, its elasticity allows it to resume its proper form and seem healthy. Hence the danger of chloroform in such cases. In a patient of his own, on whom he was operating for an atheromatous cyst of the scalp, and who had on his trachea one small goitrous knot, a few breaths only were administered when the patient was dead. The small knot was found to have caused partial absorption of one tracheal ring. Rose would exercise the utmost caution in chloroforming any one with goitre. He believes that the narrowing of their larynges makes the breathing always more strongly aspirating than in health, causing dilatation of the right heart, and hence one source of death. But, besides, the trachea in that disease is softened. If one be dissected out, it will be found not only narrowed, but so flexible that it will no longer stand up like a rigid tube, but will fall over and bend on itself by its own weight. Hence compression and torsion of it are easy and usual; and the patients have, as a rule, flat thoraces and breathe with the head thrown back. These conditions are so dangerous that, to avoid them, it is wise even to incur the danger of extirpating goitres; and in carrying out the operation, he urgently recommends: first, that, to avoid torsion or misplacement of the trachea, which might be fatal, one assistant be charged with the duty of watching the position last assumed by the patient as he sinks into sleep under chloroform, and of seeing that he is never once moved out of that position during the whole operation, as it is his only safe, because his most freely breathing, position. If vomiting set in, the patient must be turned *en masse* on his side. The danger of the operation is not the bleeding, but the condition of the trachea. Secondly, make a large incision (it can never be too large), and make cross cuts where required; and, thirdly, open the trachea below the goitre: this can always be done by teasing out the goitre if necessary and reaching the trachea below. In the discussion that followed, Langenbeck said that sometimes, where the thyroid had actually grown to the sternum, subthyroid tracheotomy was an impossibility.

In the afternoon, Inspector Mercke exhibited a Stretcher, with telescopic legs and springs inside them. Busch of Bonn drew attention to Incomplete Fractures of the Cervix Femoris with Impaction, and their bearing in explaining cases of fall followed by pain, slight rotation, and slight shortening. No mention was made of the diagnostic value of Bryant's line. He showed two specimens, a description of which, however, would be unintelligible without diagrams.

Professor Heine of Prague showed a plan of producing immobility after the operation for Ununited Fractures by ivory rods, and an ingenious toothed clamp for fixing together the two ends of the bones. He narrated also a most interesting case of ununited fracture of the patella, where he cut down on and removed the front part of the ligamentous band, turned a periosteal flap down from the upper fragment, and used Malgaigne's hooks, but without getting bony union. Volkmann gave another similar case, where the separation was to a finger's breadth. A second fracture through the ligamentous union took place. No means could be found to get the fragments approximated. He operated antiseptically, cut down on the fragments, and smoothed away the masses of callus on them, and yet they would not unite. A bit of the femur was removed; still they would not come together, and finally he had to saw off part of the tibia. König stated that about six cases are known where suture of the fragments has succeeded. Hüter had treated a pseudo-arthritis in a horse by three subcutaneous injections of lactic acid, which produces marked ossification, and in six or eight weeks the animal was going about. The injections were made into the tissues round the fracture.

Langenbeck exhibited a Skull and Lower Jaw, sent over by Wood of New York for demonstration. The lower jaw had been completely resected for phosphorus necrosis by the subperiosteal method. The patient died three years afterwards, and the reproduced jaw, although very small and slender, was wonderfully perfect. It looked just like a child's jaw without teeth. Langenbeck added that such resections for phosphorus necrosis are now very rarely required. If the whole lower jaw be removed at one sitting, the chin sinks back and causes deformity, so that an interval of four or five weeks between the removal of each half is advisable. He showed the jaw from a case where he had acted on this plan, and, in the photograph exhibited of the patient after cure, there was no observable retraction of the chin. Regarding the question as to the eventual disappearance of the reproduced bone, Wood's case showed that it lasted for at least three years; and in a case where he (Langenbeck) had resected the whole ulna, in the Schleswig-Holstein war, the bone remains sound and unabsorbed to this day. Von Adelmann said that, although the new bone remained, it disappeared when ill health set in from any cause. Hüter narrated a probably unique case, where all the maxillæ had been removed for phos-



phorus necrosis. His predecessor had removed the two upper maxillæ, and he himself the whole lower jaw. There was no reproduction of bone, and the retraction was very great.

Lücke of Strassburg gave an account of a case of Perineal Hypo-spadias, operated upon by a method which appeared to be precisely parallel to the proceeding recommended by Duplay in the *Archives Générales de Médecine* some time ago. He and Duplay had both been working in the same direction at the same time. Lücke's case was a complete success. Billroth found that, in his cases, the penis became bent again in a few months. Langenbeck said the corpora cavernosa were actually wanting in some of these cases.

After this discussion, Langenbeck, in a few words, closed the Congress.

The above gives but an imperfect idea of the amount and interesting nature of the work done at the Congress, and only a few of the many interesting topics and discussions have been selected for reproduction. In addition to the papers, there were many things to be seen and visited. The Empress Augusta Hospital and the Städtisches Krankenhaus were shown to visitors by Drs. Küster and Schede. The latter of these institutions is so perfect, and so far ahead of the general run of hospitals in all its details and arrangements, that there is positively nothing wanting in it, unless it be an arrangement for cremation. But to enter on a description of these and other topics would be impossible here. Next year, the Congress is to be held in Berlin again in the same month (April), and it would certainly richly repay any surgeon who may choose to pay it a visit.

### PLAYGROUNDS IN LONDON.

At the weekly meeting of the London School Board on Wednesday last, Mrs. WESTLAKE and Mr. PICTON introduced a deputation from the National Health Society, with a memorial asking the Board "to take steps for the opening of playgrounds attached to the School Board schools after school hours, both to the children of the schools and, under such regulations as may seem fit, to the other children of the neighbourhood; and, further, to provide such playgrounds with suitable apparatus for healthy recreation; and to arrange such supervision of the playgrounds during play-hours as may encourage children to use and to profit by the means of recreation provided". The memorial was signed by a very large number of eminent persons, including the Archbishop of Canterbury, the Duke of Westminster, Lord Shaftesbury, Lord Ebury, and the members of his lordship's family, the Hon. W. Cowper-Temple, M.P., Sir Harcourt Johnstone, M.P., Monsignor Capel, Canon Duckworth, Miss J. A. Chessar, and some hundreds of others. The memorialists stated, in the paper presented to the Board, that they entertained a strong sense of the importance to the health of the people of taking advantage, for the benefit of the children of the poorer classes, of all existing playgrounds and open spaces within the metropolitan limits. The playgrounds attached to the London Board schools occupied a total space of nearly sixty acres, and they are little—in some cases, not at all—used after school hours in the evening or during the Saturday holiday. It was pointed out, too, that the playgrounds are very rarely or very imperfectly fitted with gymnastic or other apparatus; and that the use of these open spaces for the purpose of recreation is not systematically encouraged by the guardians of the buildings and grounds. Among those present were Mr. Shaw Lefevre, M.P., Mr. John Holms, M.P., Mr. Ernest Hart (chairman of the Public Health Society's Committee), Sir R. Wilbraham, K.C.B., Mr. T. Hughes, Q.C., the Rev. Archdeacon Hessey, Miss Lancaster, the Rev. Samuel Barnett of St. Jude's, and Mr. C. E. Maurice.

The Board was addressed by Mr. Shaw Lefevre, M.P., Mr. Ernest Hart, and Mr. T. Hughes, and questions were asked by Miss H. Taylor, Mr. Danby Seymour, Mr. Lucraft, Mr. Murphy, Dr. Gladstone, and others. These were replied to by Mr. ERNEST HART, who said that the Society was not absolute upon the question of particular gymnastic apparatus, and that, while it was hoped the Board would pay for the "care-taking" during the opening of the grounds, the Society would be willing to raise special subscriptions to defray these costs, which the Society estimated would be ten shillings a week for each playground. As to whether the memorialists proposed to admit by ticket or indiscriminately, Mr. Hart said that it was expected the Board would be found doing its work so effectually as not to necessitate any lengthened system of discrimination by giving tickets, as a short experiment of the proposed opening would demonstrate that this use of the playgrounds was necessary.

Mrs. WESTLAKE then proposed that the memorial should be referred to the Works Committee for consideration and report.

Mr. F. PEEK said the question had been before the Works Committee on a previous occasion, and, as it was one of expense, because to open the playgrounds as asked would cost at least £5,000, he thought members of the Society ought to be requested to confer with the Committee.

Mr. FREEMAN suggested that the memorial should be sent to two committees—the School Management and Works Committee.

Mrs. WESTLAKE accepted the suggestion, and her motion thus amended was carried *nem. con.*

Mr. T. HUGHES, in thanking the Board for its reception of the deputation, pointed to the example offered by the Honourable Society of the Temple in opening the gardens to the poor children.

## HOSPITAL AND DISPENSARY MANAGEMENT.

### QUEEN'S HOSPITAL, BIRMINGHAM.

THE annual meeting of Governors of the Queen's Hospital, Birmingham, was held in the last week of March, Lord Leigh presiding; and it furnished an opportunity for judging of the success of the "free system", which was inaugurated about fifteen months ago, and also of the somewhat altered administration. There was a slight falling off in subscriptions, but this was more than counterbalanced by the proceeds of the shilling registration fee, which amounted to nearly £500. The actual increase of income from all sources amounted to £2,000, compared with last year, whilst expenditure was diminished by £1,000. There can be no doubt that the general arrangements, and the nursing and dietary, have been much improved; but the number of beds has been somewhat diminished, partly for sanitary, partly for economic reasons. The number of in-patients, however, is somewhat larger, whilst that of the out-patients is less. Concerning the free system, the Committee speak of its two great merits: it gives freedom to the medical staff in deciding on fitness of applicants, and it gives to the Board power of control over expenditure. They remark that the cases admitted have been of much more generally serious character than before, and that the labours and responsibility of the medical officers have been increased. The system of inquiry into circumstances is by no means strict; yet about one hundred and fifty applicants were rejected for pecuniary unfitness. The Medical Committee report that, in their opinion, the free system has proved in many respects a great success, and that they desire to give it a thorough and complete trial.

### THE MANCHESTER PROVIDENT DISPENSARIES ASSOCIATION.

WE have received the report of the Manchester and Salford Provident Dispensaries Association for the year 1876. The Council are satisfied with the progress they are making, and feel confident of ultimate success. They have every reason to believe that the dispensaries are growing in favour with the class for whose benefit they were established. When they were first opened, many persons entered them from motives of curiosity, or because they were in immediate need of medical advice, but in a short time withdrew. Now, on the contrary, the great proportion of new members are healthy, and enter because they have faith in the system. Their subscriptions are paid with regularity, and it is quite the exception for them to withdraw. There are six dispensaries in the Association. The total number of members on the books at the close of 1876 was 13,759; the amount subscribed by them was £2,880:16:3; and £1,491:11 were divided among the medical officers. One dispensary has been self-supporting for the last six months, and its Committee have undertaken to relieve the Council of all pecuniary liability in respect to it for the year 1877. As the other dispensaries are making fair progress, it is probable that in a few years they too will be self-supporting. The influence which the Association has had in checking the abuse of charity at those hospitals which co-operate with it is most remarkable. That portion of the report which deals with this subject deserves to be carefully weighed by everyone who is interested in hospital reform. We can here only indicate a few of the leading facts. During the year, the five charitable hospitals which are in alliance with the Association, referred 13,310 cases to it for inquiry. Of these, it was found that 1,210 had given incorrect or insufficient addresses; others, who lived outside the dispensary districts, were not investigated; of the balance of cases—9,231 in number—25 per cent. were ascertained to be in a position to join provident dispensaries, and were refused gratuitous assistance. The proportion of cases so refused in 1876 was little more than half what it was in 1875, showing that those who have no right to charity are ceasing to apply for it. And not only is this so, but the total number of persons resorting to the hospitals is steadily diminishing. The number in 1876 as compared with the number in 1872, shows a decrease



of 18,452, or 41 per cent. This large decrease is the more remarkable, as only 4,714 were refused relief and referred to provident dispensaries in 1875 and 1876. It would seem, therefore, that a great many persons abstained altogether from applying for charitable relief, either because they were unwilling to have their circumstances investigated, or because the sentiment is gaining ground amongst them that it is better to rely upon their own exertions than upon the help of the rich. Some of the hospitals, we are sorry to see, still hold aloof from the Association. As long as this is the case, the thorough efficiency of the movement is impeded. Were all the medical charities in the town to co-operate heartily with the Association, Manchester and Salford would be models for the rest of the country, and would be leading the way in solving a difficult social problem.

#### BOURTON-ON-THE-WATER COTTAGE HOSPITAL.

THE sixteenth report of this hospital shows that the institution is steadily increasing the sphere of its usefulness, and that the public and the patients fully appreciate the good work it is doing for the poor. It has always been conducted on provident principles, and we are glad to find that the amount received from patients' payments has increased from £21 in 1874 to £28 in 1876. The average receipts from Hospital Sunday during the past three years amount to £47, whilst the subscriptions and donations have increased during the same period from £101 to £127. The average number of beds occupied throughout the year has been four, the number of beds available being eight. The number of in-patients admitted to treatment was fifty-one, or sixteen more than in 1874. The proportion of surgical to medical cases was thirty to sixteen, or nearly double, the number of severe accidents being especially noteworthy. Thus we find there were five cases of extensive lacerated wounds, five of compound fracture, four simple fracture, three important operations, one of which was an amputation at the shoulder-joint. All these cases did well, and were discharged convalescent. It is a noteworthy feature in the management of this hospital, and highly creditable to the medical officers, that all the cases admitted to treatment were clearly entitled to hospital relief, nor is a single chronic case to be found amongst the admissions. There was only one death, in a patient suffering from acute atrophy of the liver. On the whole, we congratulate the medical officers and the managers upon the efficiency and economy which characterise the management of every department of this institution.

#### PROVIDENT DISPENSARIES.

SIR,—In a notice, in December last, on this subject in connection with the table compiled by the St. Giles's Committee of the Charity Organisation Society, attention is drawn to the fact that, though the St. John's Wood Provident Dispensary has the largest number of members, the payments by those members only amount to a comparatively small sum. We have lately received further information from the St. John's Wood Dispensary, from which it appears that the number of members given in the table is incorrect. The error arose from the manner in which the number of members was stated in the annual report of the dispensary. The report for 1876 places the number of "members enrolled" at 9,649, and, as that was the only statement of the number of members contained in the report, we naturally concluded that it expressed the number of persons then actually members, while it really was the number enrolled since the commencement of the institution. This ambiguity has been remedied in the report for the present year, from which it appears that the actual number of members on the books is now 1,143. Further, of the seven doctors forming the "medical staff", three are "honorary" and one is surgeon-dentist. All the numbers under this head, in our table, include the honorary staff and the dentists, if any. The object of the Committee in publishing the table referred to was, by directing public attention to the condition of the Provident Societies now existing, to aid in the further extension of these very useful institutions. In this district, no Provident Dispensary at present exists, while, within a very short radius of St. Giles's Church, hospitals and free dispensaries are thickly crowded. The injury inflicted on the working-classes by this state of things is very great; for, while the unscrupulous are enabled to obtain medical relief without any payment at all, those who, from a praiseworthy love of independence, are unwilling to become recipients of charity, cannot obtain medical aid, except at a cost which they are often ill able to afford. The natural effect of such a state of things is to greatly increase the number of those who depend entirely on charity for medical relief, thus directly tending to pauperise the poorer classes. Under these circumstances, it would appear very desirable to extend the Provident Dispensary system, even if at first the results shown by the Provident Dispensaries were not altogether satisfactory. As appears, however, from the table published by this Committee, the Provident Dispensaries

already established are progressing quite as favourably as could be expected, though none as yet are self-supporting; in all of them, the payments by members form an important part of the incomes, and the number of members in many cases is remarkably large, considering the amount of free medical relief given in the neighbourhood. It is, therefore, to be hoped that those who have at heart the interests of the working-classes will make further efforts in this very salutary direction. In conclusion, I beg to thank you for your notice of our table, and trust that you will find room in your columns for this explanation.

I may add that our table contained all Provident Dispensaries mentioned in the *List of London Charities, 1875*, except one which has subsided. We have since discovered there are two at Hampstead and one at Kilburn. We also hear that the Battersea Dispensary, scarcely a year old, numbers 3,600 members, and promises to be a great success.—I am, yours faithfully,

W. T. LAWRENCE, Hon. Sec. St. Giles's  
Charity Organisation Committee.  
7, Arthur Street, W.C.

## SPECIAL CORRESPONDENCE.

### PARIS.

[FROM OUR OWN CORRESPONDENT.]

*Training of Nurses.—Promiscuous Conglomeration of Patients in Hospitals.—Treatment of Tic Douloureux.—The Palais d'Industrie.—Suicides and Homicides.*

ONE of the greatest difficulties with which a medical man has to contend in the treatment of his patients in France, is the want of properly trained persons for carrying out his orders. An attempt is being made to supply this want through the initiative of Dr. Duchaussoy, who has founded in the Sixth Arrondissement of Paris an "école de garde-malades et d'ambulancières", where instruction will be given gratuitously to ladies and others desirous of learning how to nurse the sick and wounded. A committee of management is being organised under the patronage of influential ladies, who appeal to the public for their aid in his praiseworthy undertaking, and practical lectures will be delivered by twenty physicians and surgeons on the following subjects:—Care of lying-in women, care of new-born infants, general notions of medicine, preliminary dressings of the wounded, general notions on the art of nursing the sick, general principles of hygiene, elementary surgery, bandages, apparatus, pharmacy, hygiene of the aged, management of lunatics and paralytics, elements of anatomy and physiology, frictions, "massage" (shampooing), elements of hydrotherapy. The pupils are to be examined practically and otherwise after each lesson, and, after each course of lectures, diplomas will be delivered to the successful candidates. Further information may be obtained from Dr. Duchaussoy, director of the school, 8, Rue des Beaux-Arts; or from Dr. Duchesne, subdirector, 85, Rue des Saints-Pères, Paris.

Next to bad nursing or no nursing at all of the sick in the French hospitals, and what strikes visitors with horror and disgust, is the promiscuous conglomeration in the same ward of patients suffering from contagious and non-contagious diseases. The members of the academies, and particularly that of Medicine, might with great advantage devote a little of their time and knowledge to studying the all-important questions of contagion and its natural remedy isolation. Dr. Henri Gueneau de Mussy, whose long residence in England, where the subject has been more fully entered into than perhaps any other country in the world, entitles him to speak with some authority on the matter, lately read a paper before the Academy of Medicine on the views held by himself and British authorities on the subject; but the French academicians seem to prefer clinging to their own views, which enable them to question the benefits of isolation even in cases where the malady has been distinctly traced to contagion. I have often been struck with the inconsistency of the conduct of French physicians in the matter of contagious diseases; for, even when they admit the contagious nature of a malady, they take no measure whatever to prevent its spreading. This applies to the graver or zymotic diseases; and yet, if the malady happen to be "the itch" or scabies, every possible measure is taken to isolate the patient. In his paper on Contagious Diseases and their Hygienic Treatment, Dr. Gueneau de Mussy pointed out how far the English were in advance of his own countrymen in the matter, and the judicious laws that have been passed in England to confine the malady within the narrowest limits. In conclusion, he added that, for more than a hundred years, London has possessed a hospital for variolous patients; the city of Paris has, after long and repeated remonstrance on the part of the medical men, been endowed with a few wooden huts for the accommodation of only a limited num-



ber of patients so affected, while the others are as usual treated in the ordinary wards of the hospitals, thereby showing an utter disregard on the part of the all-powerful Administration of Public Assistance to the dictates of common sense, and the ignoring of measures which every-day experience has proved to be of some avail in the prevention of the propagation of diseases known to be transmissible by contagion or infection.

We all know what an intractable disease is neuralgia in all its forms, and particularly that known by the name of "tic douloureux" or facial neuralgia. In a case of the latter affection under the care of Professor Peter, which had lasted more than twenty-five years, the patient having latterly as many as two hundred paroxysms a day, this physician has obtained rapid and marked success by the internal administration of the bromide of potassium. The patient, who is a workman, had gone the round of the hospitals of Paris, where he derived but temporary relief from the various forms of treatment to which he had been subjected. Professor Peter, looking upon tic douloureux as a neuralgia of the epileptiform type, in which he has simply followed the teaching of his respected master Trousseau, resolved upon trying the effects of the above-named drug, which is considered almost a specific against epileptic fits. On the first day of the patient in hospital, he administered six *grammes* of the salt, and, at the visit the following morning, the patient declared that he slept throughout the night—a thing he had not done for at least ten days previously. The medicine was continued daily at the same strength, and, on the fourth day, the fits had entirely disappeared. Pushing the analogy between the two affections still further, M. Peter advised the patient to continue the medicine for a certain length of time, as follows:—during the first month, six *grammes* a day; during the second month, four *grammes* a day; and during the third month, two *grammes* a day. The patient has already taken the bromide of potassium for a month, without any return of the tic douloureux.

Professor Gubler lately brought to the notice of the Société de Thérapeutique a case of facial neuralgia that he had successfully treated with aconitine. The patient had been under the care of several physicians, but, not being able to obtain more than temporary relief, resolved to place himself in the hands of a surgeon. This surgeon was the late M. Nélaton, who carefully divided all the nervous filaments concerned in the disease, but with only temporary relief, as, after a time, the patient's sufferings were as great as ever. M. Gubler prescribed five *milligrammes* of aconitine *per diem*, and, in a few days, the patient was to all appearances cured, as he was entirely free from pain. M. Gubler, however, does not consider the patient completely cured; he does not believe in the curability of long-standing neuralgia, as in such a case the malady is evidently the result of structural alterations in the nerve itself. It is in simple neuralgia, and particularly in the congestive form, that M. Gubler has found the preparations of aconite produce something like a permanent cure.

In a case at the Hôtel Dieu, Professor Sée is trying the effects of salicylate of soda. The patient is about 60, and, ever since the age of 30, he had been suffering more or less continuously from tic douloureux. After the first day of the administration of the salt, of which he had taken eight *grammes*, the patient was relieved of all pain. It is now about a week since he began the medicine, of which he has taken the same quantity daily, and up till now he has no return of the paroxysms to which he had been so long subject; but M. Sée thinks it would be as yet premature to consider the case a permanent cure.

By a curious coincidence, on a visit to the Lariboisière Hospital in the same week, I was shown a patient in M. Tillaux's ward on whom he had performed resection of the superior maxillary nerve, just at its exit at the infra-orbital foramen. He removed nearly half an inch of the nerve, and the reason he assigned for this was that, by this method, the chances of a radical cure would be greater than simple division of the nerve or filaments affected; but what if the diseased condition of the nerve extended beyond the parts visible? For my part, I doubt the rationality of this treatment, as I have met with cases of signal failure. In the present instance, the patient is a woman of about 40, and the malady about nine years' standing. She certainly feels great relief from the operation, but time alone will decide whether the cure is permanent or not.

Fine weather has at last set in in Paris, and holiday-seekers, both native and foreign, seem to enjoy themselves in right earnest. The exhibition of paintings and sculpture at the Palais de l'Industrie is just now the great centre of attraction, and, in one of my visits lately, I witnessed some experiments with an electric light in one of the largest halls of the building. The effects seemed to be all that could be desired; but it was found to have a prejudicial effect on the colours, particularly the red, which was rendered pale and black, intensified by its rays.

The inventor of this system of lighting (M. Gramme) is a simple cabinet-maker, and he hopes, by further experiments, to be able to correct this defect, which is a most serious one for coloured objects, but still it may be utilised for other purposes, such as lighting the streets and for out-door work in fine weather.

There seems to be a regular epidemic of suicides and homicides in Paris; for there is scarcely a day passes without our hearing of one or other of these criminal acts. It is difficult to assign any particular cause for this tendency to shorten life; but the police-reports would seem to point to intemperance and immorality, and the great thirst for luxury and pleasure that pervades all classes. It is remarkable also that the tendency to suicide is not confined to any particular age or sex; for a boy aged 8 lately hanged himself, owing to maltreatment from his parents; a girl aged 16 threw herself out of her window on the fourth floor from disappointed love; and an octogenarian cut his throat from failure in business.

## THE MEDICAL PROFESSION IN INDIA.

[FROM OUR OWN CORRESPONDENT.]

*Journey Inland.—Allahabad.—The Climate.—Diversity of Races.*

My last letter gave a short account of the dépôt at Deolalee, and brought us to the eve of departure for Allahabad. On the evening of the day fixed for the start, about 5 P.M., when it begins to get cool, a special troop-train is brought up to the siding near the barracks, and the soldiers, women, and children are stowed away into their allotted carriages. After travelling all night, the train arrives next morning at Khundwa, where there are stone-barracks, as at Deolalee. The men and married families find breakfast for them ready on arrival. They have their dinners in the early afternoon, about one o'clock, and having refreshed themselves with a sound sleep before and after their meal, and made use of the water that is plentifully supplied for ablution, they are ready to start again in the evening. Sohagpore is reached next morning. Here there are no barracks; and large double-poled tents, each holding sixteen men, are provided. One now begins to feel that Indian camp-life has really begun. There is plenty of tropical vegetation all round; and hills, with game of all sorts, are within a few miles. Partridges, peacock, and several varieties of deer can be shot in the vicinity, and every young officer feels inclined to turn sportsman on hearing that a tiger killed a bullock the preceding night only five miles off! Leopards are numerous on the hills. The sanitarium of Puchmuree is only twenty-four miles distant. The next night's journey brings us to Jubbulpore, a large cantonment on the river Nerbudda. A few miles from the station, this river flows past the celebrated Marble rocks. These beautiful rocks of white marble, of great extent, are well worth a visit. One more night's travelling, and we find ourselves in tents in the standing camp at Allahabad, a large military station, the capital of the north-west provinces. Here the rivers Jumna and Ganges meet, and the place is considered by natives very sacred. The name signifies the "city of Allah" or God. There is a strong fort, though small, at the junction of the two streams, which was of great service to us during the mutiny. Allahabad is eight hundred and forty-four miles from Bombay, which we have traversed in five stages. Great cold is experienced while sleeping in the tents during the night, and many a laugh is raised at the expense of the new comers, who say "We thought we were coming to a hot climate, but we feel the cold more than we did in England." Being in tents is practically living in the open air; and as ice is made during the cold season by exposing water in small shallow earthenware saucers on the ground all night, and collecting the pellicles that have formed on the surface next morning, (about one-eighth to one-fourth of an inch thick, which are compressed into large lumps and stored in an ice-house), it is no wonder that very warm clothing is required. The temperature of the sun's rays in this part of India during January is from about 110 deg. to 120 deg. Fahr., and this strikes down on the unsheltered tents during the afternoons, and makes them hot. Thus the range of temperature during the twenty-four hours is considerable, and, unless care be taken to dress according to circumstances and to prevent chill at night, serious illness may supervene. There is a Deputy Surgeon-General, British forces, at this station, and all medical officers call on him to report their arrival and receive orders where they are to proceed. A halt of four or five days is generally made here, and while we have breathing-time to look around us, it may be interesting to readers in England to make a sketch, from a naturalist's point of view, of the land where we exiles hope to pass a few years of our existence.

A person, on opening a map of India, can easily see marked the degrees of latitude and longitude between Cape Comorin and Peshawur, and between the western boundary of Sindh and the eastern portion of



Assam. Let him now turn to a map of Europe. It may not strike him at first sight that, leaving out Russia, Norway, and Sweden, the whole of the remainder of Europe does not cover a superficial area much larger than Hindustan. Dr. Hunter, in his interesting work, entitled the *Annals of Rural Bengal*, writes: "We are too much accustomed to speak of India as a single country, and of its inhabitants as a single nation, but the truth is, that as regards its history, its extent, and its population, India displays the diversities of a continent rather than of a single state." "The popular English mind, accustomed to regard the Indian Empire as a political unit among British dependencies, has come to look upon the component parts of that unit as historically and socially one." The natives of the north of India are quite as different from those of the south as the Dutch are from the Spaniards. The former are tall, and of a light-brown or olive complexion; the latter are small, and very dark. The religions, customs, and languages of different parts of this continent are totally dissimilar. To give an idea of the differences of language, I will just note the various words used among the many people to signify fire. Beginning in the south, the Tamil dialect (met with in the Madras Presidency) gives *nirappu*; the Mahanata word (used in Bombay) is *bisu*; the Bengalee calls it *agun*; the Hindu *ag*. (This is the usual word used by the English to their servants in Upper India.) In Orissa (a large district below Calcutta) it is called *nian*; among the Santhals (an aboriginal tribe to the west of Bengal) fire is called *sengel*; among the Gonds, another aboriginal tribe, it is *chik*; in the Pushtoo dialect (spoken in the far north of the Punjab, about Peshawar) it is *or*; if a traveller in Thibet wants fire he has to ask for *ma*; and in Cashmere, where several of our officers go shooting, he will not get it unless he tell his servant to bring him *nar*. There are many more dialects, but these will suffice. Then the characters used in writing are very diverse. The Tamil is very peculiar. The Hindu letters are nearly the same as the old Sanscrit (which is a dead language, but the classical one), and are read from left to right. The Oordoo (which is used by the higher classes) is the same as the Persian and Arabic, and is read from right to left. Under the head of religion, besides the different sects of Hindus (who are mostly idolators) we have the Buddhists (comparatively few) and the Jains. Then there is the Mahomedan, which has been brought into the country at a comparatively late period, by the northern conquerors. In the Bengal Presidency there are three Lieutenant-Governors, viz., of the Punjab, North-west Provinces, and Bengal proper. The latter rules over a territory and a population more than double that of the whole United Kingdom. In round numbers, there are in the whole of India about one hundred and sixty million Hindus, forty million Mahomedans, and a few millions of aborigines. I have thought it well to jot down these few statistics, to give to those readers who have not had occasion to feel interested hitherto about India a slight insight into the matter. It is hoped that they will not be considered out of place, but without going into needless details I wish to give a comprehensive account of this interesting land from a standpoint which, I believe, has not been taken before. I intend, in my next, to touch upon physical geography, and afterwards to consider some of the peculiarities of the different tribes, which I trust will be thought worth reading by those who have not studied the ethnology of the East.

## ASSOCIATION INTELLIGENCE.

### NORTH OF ENGLAND BRANCH.

THE annual meeting of this Branch will be held in Bishop Cosin's Library, Durham, on Thursday, July 26th, at 2 P.M.

G. H. PHILIPSON, M.D., *Honorary Secretary*.  
Newcastle-upon-Tyne, June 12th, 1877.

### BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE annual meeting of this Branch will be held at the Midland Hotel, New Street, Birmingham, on Tuesday, June 26th, at 3 P.M. An Address will be delivered by the President, SAMPSON GAMGEE, Esq., F.R.S. Edin.

The annual dinner will also take place at the Midland Hotel, at 5 P.M. precisely, for the convenience of country members. Dinner tickets, exclusive of wine, 7s. 6d. each. Members intending to be present are requested to communicate with the Honorary Secretaries on or before June 23rd, in order that suitable arrangements may be made.

JAMES SAWYER, M.D.,  
EDWARD MALINS, M.D., *Hon. Secretaries*.

Birmingham, May 29th, 1877.

### SOUTHERN BRANCH.

THE fourth annual meeting of the Southern Branch will be held at the Royal Hotel, Winchester, on Wednesday, June 20th, 1877, at 1 P.M.

An Address will be delivered by the President-elect, F. J. BUTLER, Esq., M.D.

During the afternoon, the members will have an opportunity of visiting the various places of interest in the locality.

The dinner will take place punctually at Five P.M. Tickets, 14s. each, including wine.

The Committee particularly request that those gentlemen who intend to be present at the dinner will send in their names to Mr. T. C. LANGDON, Winchester, on or before Monday, the 18th instant.

J. WARD COUSINS, M.D., *Honorary Secretary and Treasurer*.  
Southsea, June 6th, 1877.

### CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.

THE annual meeting of the above Branch will be held in the Board Room of the Saffron Walden Hospital, on Tuesday, June 26th, at 2.15 P.M.: HENRY STEAR, Esq., President, in the Chair.

Gentlemen intending to read papers, or be present at the dinner, are requested to inform the Secretary on or before June 19th.

Dinner will take place at the Rose and Crown Hotel, at 6.15 P.M. Tickets (including wine), 12s. 6d. each.

J. B. BRADBURY, M.D., *Honorary Secretary*.  
Corpus Buildings, Cambridge, May 28th, 1877.

### GLASGOW AND WEST OF SCOTLAND BRANCH.

THE annual meeting of this Branch will be held on Tuesday, the 26th instant, in the Faculty Hall, 242, St. Vincent Street, at 2 P.M. The President, Dr. ALLEN THOMSON, will resign the Chair to the President-elect, Dr. G. H. B. MACLEOD, who will give an address on Surgery.

It is also expected that Dr. Allen Thomson will make some statements as to the work done at the recent meeting of the General Medical Council.

Glasgow, June 14th, 1876.

### YORKSHIRE BRANCH.

THE annual meeting of this Branch will be held at the Museum, York, on Wednesday, June 27th, at 2.45 P.M.

The members will dine at the Black Swan Hotel at 5 P.M. Tickets, 6s. 6d. each.

Gentlemen intending to bring forward communications, or to join the dinner, are requested at once to communicate with the Local Secretary.

W. PROCTER, M.D., *Honorary Secretary*.  
24, Petergate, York, June 6th, 1877.

### EAST ANGLIAN BRANCH.

THE annual meeting of the above Branch will be held at the Magistrates' Room, Diss, on Thursday, June 28th, at 2.30 P.M.: T. E. AMYOT, Esq., President, in the Chair.

Dinner at the King's Arms Hotel at 5 P.M. Tickets, 12s. 6d. each.

The President kindly invites members to luncheon at his residence at One o'clock.

Members intending to read papers and cases, or to exhibit pathological specimens, or to join the dinner, are particularly requested to communicate as early as possible with one of the Honorary Secretaries, in order that proper notices may be given.

B. CHEVALLIER, M.D., Ipswich.  
J. B. PITT, M.D., Norwich. *Honorary Secretaries*.  
Norwich, June 1st, 1877.

### LANCASHIRE AND CHESHIRE BRANCH.

THE annual meeting of this Branch will be held at the Medical School, Dover Street, Liverpool, on Wednesday, June 27th, at 1 P.M.: President, GEORGE WOODS, F.R.C.S.; President-elect, Dr. STEELE.

The dinner will take place at the Adelphi Hotel, at 5 P.M. Tickets (exclusive of wine), 7s. 6d. each. Gentlemen intending to be present are requested to send their names to the Secretary at once.

The following communications will be read:—1. A Note on the Extraction of Foreign Bodies from the Bladder: Mr. Reginald Harrison. 2. Muscular Pseudo-hypertrophy in a case of Hemiplegia: Dr. Ross. 3. On the Extirpation of Cancerous Glands: Mr. W. Mitchell Banks. 4. Mr. R. Parker will show a patient from whom



half the tongue and upper jaw have been removed. He will also exhibit a series of Microscopic Specimens illustrative of Surgical Tumours. 5. Dr. Glynn will show Roussel's New Transfusion Instrument.

Notice of papers (which must not exceed fifteen minutes) should be forwarded at once to the Honorary Secretary.

D. J. LEECH, *Honorary Secretary*.

96, Mosley Street, Manchester, June 11th, 1877.

#### BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE sixth ordinary meeting of the session was held at the York House, Bath, on Thursday evening, May 24th: Dr. GOODRIDGE, President, in the Chair. There were also present forty-four members and one visitor.

*New Members.*—The following gentlemen were duly elected members of the Association and of the Branch: G. F. GILES, M.D., Cotham; Surgeon-Major C. M. JESSOP, Clifton; G. J. PARKER, Esq., Clifton; and J. LUDFORD WHITE, M.A., F.R.C.S., Bath.

*Restraint of Hæmorrhage.*—Mr. N. C. DOBSON introduced a discussion on the restraint of hæmorrhage during and subsequently to operations on the limbs. A very animated debate ensued, in which Messrs. Stockwell, Prichard, Tibbits, Michell Clarke, Hopkins, Lansdown, J. H. Crisp, and Dr. Marshall took part, after which Mr. Dobson replied.

*The Annual Meeting.*—On the motion of Mr. BARTRUM, seconded by Mr. TIBBITS, it was unanimously resolved, that the annual meeting of the Branch should be held at Bristol, on Wednesday, June 27th, instead of on the day previously named on the cards.

#### EAST YORK AND NORTH LINCOLN BRANCH: ANNUAL MEETING.

THE twenty-first annual meeting of the above Branch was held at the Hull Infirmary, on Wednesday, May 23rd, at 1 P.M.: President, R. H. B. NICHOLSON, Esq.

*Cases, etc.*—The following cases and papers were read.

1. Address by the PRESIDENT.
2. A Case of Innominate Aneurism, with specimen. By Dr. KING.
3. A Case of Cheloid Tumour, with photograph. By Mr. KEETLEY.
4. Parotid Tumours. By Dr. LUNN.
5. A Case of Empyema, treated by the Aspirator. By Dr. DALY.
6. Pathological Specimens: Aneurism. By Mr. DIX.

*Dinner.*—The members dined together at the Vittoria Hotel. After the dinner, a marble time-piece was presented to Mr. Nicholson, as a recognition of his services as Secretary for a period of eight years.

#### SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEETINGS.

THE annual meeting was held in the County Hospital, Canterbury, on Thursday, May 24th, at 3 o'clock: Mr. SHEPPARD in the Chair. Owing to the unavoidable absence of the honorary secretary, Mr. Tyson kindly undertook to discharge his duties.

*Secretary.*—Mr. Edward Thurston was re-elected for the ensuing year as the Honorary Secretary for the district.

*The Places of Meeting* were fixed for Ramsgate in September; Hythe (special) in October; Canterbury in November; Dover in March; Canterbury in May. Mr. Samuel Woodman, of Ramsgate, was chosen as Chairman of the Ramsgate meeting.

*The Ethical Committee*, consisting of Drs. Bowles, Parsons, Wilks, Messrs. Hicks, Reid, Rigden, and Thornton, were re-elected.

*Communications.*—1. Mr. WACHER read notes of Two Cases of Post Partum Hæmorrhage treated with the Perchloride of Iron.

2. Mr. RAVEN read a paper on a Recent Epidemic of Variola.

*Dinner.*—The members afterwards dined together at the Fleur-de-lis Hotel.

#### SOUTH MIDLAND BRANCH: ANNUAL MEETING.

THE twenty-first annual meeting of the South Midland Branch of the British Medical Association was held in the Council Chamber of the Town Hall, Northampton, on Thursday, May 31st, at 2.30 P.M.: W. MOXON, Esq., President, in the Chair. About twenty gentlemen were previously entertained to luncheon at the President's house at 1.30 P.M.

The President was introduced to the Chair by Dr. Bryan, in the absence of H. W. Sharpin, Esq. (Bedford), ex-President.

*New Members.*—The following gentlemen were proposed in due form as new members: J. Bailey, Esq., General Lunatic Asylum, Northampton; Dr. O'Farrell, The Barracks, Northampton; and S. W. Morris, Esq., Thrapstone.

*The Secretaryship.*—The Secretary's report was then read, at the conclusion of which the members present learned with deep regret that Dr. Bryan had made up his mind to relinquish the office of Honorary Secretary, a post which he had held for eighteen years.

It was proposed by Mr. WATKINS, seconded by Dr. WALKER, and carried unanimously: "That Dr. Bryan be requested to act as Treasurer; and that Mr. G. Kirby Smith be requested to act as Honorary Secretary, either with or without the aid of a co-Secretary at Bedford, as may be determined at the autumnal meeting." Mr. K. Smith agreed to accept the office, and to commence the duties forthwith.

*Communications.*—The PRESIDENT then read a very able address, referring to the Medical Defence Association and other medical topics.

Dr. T. J. WALKER read a paper, illustrating the value of Salicylate of Ammonia in Acute Rheumatism, Gout, and other allied affections.

Dr. FRANCIS read some observations on a singular case of Priapism of six weeks' duration.

Dr. NEWMAN of Stamford furnished some Notes on a Case of Biliary Calculus, which were read by Mr. HAVILAND, as Dr. Newman was compelled to leave early.

Dr. BUSZARD read some cases of Tic Douloureux.

Time would not permit the reading of some valuable papers by Dr. BRYAN and Dr. PRIOR.

*Votes of Thanks.*—A vote of thanks to the readers of papers was proposed by Mr. MACDONALD and carried. A vote of thanks, proposed by Mr. MASH to the President, for his conduct in the Chair; also a vote of thanks, proposed by Mr. H. TERRY, to the Officers of the Branch and Committee of Management for past services; and, on the motion of Dr. FRANCIS, a vote of thanks was given to the Honorary Secretaries.

*Dinner.*—At the close of the proceedings, some of the gentlemen adjourned to an excellent dinner at the George Hotel, where the usual loyal and other toasts were duly honoured.

*The Next Meeting* will be held at Aylesbury in September or October.

## CORRESPONDENCE.

### EXAMINERS AT ABERDEEN UNIVERSITY.

SIR,—I wish to draw attention to the fact that, out of six examiners recently appointed in the Faculty of Medicine at Aberdeen, only two are non-resident in that city. It seems to me that the examiners appointed to act with the professors should come from outside Aberdeen. Such is the case at Cambridge and other Universities. Could not the University of Aberdeen secure the services of some of its graduates in London and elsewhere? Now-a-days, the regulation of examinations depends to a great extent upon the eminence of the examiners: it is therefore incumbent on all examining bodies to make use of the best available material. The professors at Aberdeen are distinguished men; the examiners should approach their standard as nearly as possible.—Yours faithfully,

London, June 1877.

AN ABERDEEN GRADUATE.

### THE HOMŒOPATHIC SCHISM.

SIR,—I confess that I read with some surprise Mr. Bradley's letter on this subject in your last issue. He broaches the proposal that the members of what he calls the "moderate" party of homœopathic practitioners may, perhaps, be included in the invitation to the forthcoming annual meeting of the Association. It does not appear very clear through whom he would propose that such invitations be issued; but I venture to think that, if the local Committee or other officials took it upon themselves to perform this act of kindness, they would be wise to keep the matter a profound secret until the meeting shall be over.

It is a very curious circumstance, that every now and again we meet with men who can scarce understand why this old-standing homœopathic feud should exist, and who appear extremely solicitous that matters should be made up. But we all know that the tenets of homœopathy are the most arrant nonsense that ever was uttered; and, if a man deliberately announce himself to be a professor of this nonsense, one of two conclusions must be drawn concerning him. The profession did well to protest against this folly, and to protect itself



from any association with it. It becomes a hundred times worse, however, if, as we hear now, there is a party among the ranks of homœopathy who profess what they do not practise. Why do these still style themselves homœopaths? Evidently it suits their purpose to do so; but then —. Again the profession does right to say No.

To my mind, sir, the position we have taken up is unassailable. There is, besides, not the slightest call for the shilly-shally mode of dealing with this pretence which we hear too much of at the present time. We profess to treat diseases by whatever means experience tells us we may best succeed; knowing sadly too little of physiological and pathological processes to care one jot about that old woman's foible similars and dissimilars. Let those who practise them say so; but let them not tell the public something else, and we shall receive them with open arms.—Yours, etc.,  
JAMES HARDIE.

Manchester, June 11th, 1877.

SIR,—I have been so frequently asked the meaning of the letter with the above heading which appeared in your last week's issue, that I am constrained to ask for the insertion of the following brief explanations.

Although it is difficult to understand the logic of the process, there can be no doubt that many homœopaths of the present day believe both in the law of similars and in the law of contraries; there can be equally little doubt that the practice of such believers will differ little, if at all, from the practice of the genuine Hippocratic disciples; and it seems irrational to exclude such men from our consultations and discussions for simply having a little more faith than some others. Indeed, this conduct seems even ridiculous when we reflect that to many of us the term "allopath" is as unsavoury as that of "homœopath". Many quite orthodox practitioners disbelieve in the law of contraries as strongly as in the law of similars, and are of opinion that, if there be a law underlying the one or other, or both, we have yet to discover it; that, in both cases, there are nothing but superficial likenesses or contraries on which the so-called laws are based, yet it is never suggested that such men should not themselves be met, on account of their scepticism, or that they should refuse to meet any strictly credulous allopathist. Homœopathy has probably as much to recommend it as allopathy on the ground of ratiocination; neither the one nor the other is anything but a meaningless term; and, this being so, should not we, the followers of rational medicine, rejoice to note a return to reason on the part of one section of those who have gone astray? It is those who either abandon the doctrine of the law of similars, or, like Dr. Wyld, who, while clinging to it, embrace at the same time the allopathic dogma of contraries, that I felt we might approach, and perhaps invite to our annual gathering, indifferent whether they retained the name of homœopath or not. I cannot but feel that, if we refuse to accept the effort at reconciliation now afforded, we are ourselves in some danger of changing places with the homœopaths, and ourselves becoming the stupid party who pin their faith to old cranks, like *causâ sublatâ tollitur effectus* or *contraria contrariis curantur*, and, by so doing, make way for the more rational members of homœopathy, who by and by will, doubtless, abandon all belief in such pseudo-medical laws, along with their own silly crotchets, and trust alone to the light of reason and experience, waiting for a riper time to enunciate a truer law.—I am, sir, yours, etc.,

Manchester, June 12th, 1877.

S. M. BRADLEY.

#### REMOVAL OF TRACHEOTOMY-TUBES.

SIR,—If Mr. R. Clement Lucas refer to the JOURNAL (July 8th, 1876), he will find that the idea of fishing up a tracheotomy-tube from the windpipe by means of a hooked wire originated in the Westminster, and not in the Middlesex Hospital.

Your obedient servant,  
RICHARD DAVY,  
Surgeon to the Westminster Hospital.

### MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following members of the College, having undergone the necessary examinations, were admitted Fellows at a meeting of the Council on the 14th instant.

Alexander, William, M.D. Q. U. Ireland, Liverpool (not a member)  
Benner, William H., L.R.C.S. Lond., James Street, Buckingham Gate  
Birch, Edward A., L.R.C.S. Lond., Manchester  
Colgate, Henry, M.D. Lond., Finsbury  
Duncan, Andrew, M.D. Lond., Henrietta Street, Covent Garden  
Edmunds, Walter, M.B. Cantab., Fairfax Road, Hampstead  
Gould, Alfred P., M.B. Lond., Gower Street  
Harries, T. Davies, L.R.C.S. Lond., Aberystwyth

Hobson, Lewis John, M.D. Lond., Bedford  
Ottley, Walter, M.B. Lond., Nottingham Place, W.  
Pratt, William, M.D. Liege, Newtown, Montgomeryshire  
Ransohoff, Joseph, M.D., Ohio, Cincinnati  
Rendall, John, L.R.C.S. Lond., Southampton  
Southam, Frederick A., L.S.A., Manchester

Six candidates having failed to acquit themselves, to the satisfaction of the Court of Examiners, were referred to their professional studies for twelve months.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 7th, 1877.

Burgess, William Milner, Harlesden  
Giles, Bernard Faraday, Canbury

The following gentlemen also on the same day passed their primary professional examination.

Macdonald, Henry Murray W., St. Thomas's Hospital  
Patterson, George Henry, St. Bartholomew's Hospital

#### MEDICAL VACANCIES.

The following vacancies are announced:—

BATH UNION—Medical Officer for the Workhouse and First District.  
BRIGHTON and HOVE DISPENSARY—Resident House-Surgeon. Salary, £130 per annum, with furnished apartments, coals, gas, and attendance. Applications to be sent in on or before July 2nd.  
CITY OF LONDON LYING-IN HOSPITAL—Consulting Surgeon. Applications to be sent in on or before the 19th instant.  
EAST RIDING ASYLUM, Beverley—Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, and attendance. Applications to be sent in on or before the 23rd instant.  
HAVERSTOCK HILL and MALDEN ROAD PROVIDENT DISPENSARY—Dispenser and Assistant-Secretary. Salary, £80 per annum, with lodgings, coals, and gas. Applications to be sent in on or before the 18th inst.  
ISLE OF WIGHT INFIRMARY, Ryde—House-Surgeon and Secretary. Salary, £50 per annum, with board, lodging, and washing. Applications to be made on or before the 19th instant.  
MACCLESFIELD GENERAL INFIRMARY—Junior House-Surgeon. Salary, £70 per annum, with board and lodging. Applications to be sent in on or before the 23rd instant.  
NEW HOSPITAL FOR WOMEN, Marylebone Road—Junior Physician; also, Resident Medical Officer. Women only eligible. Salary, £50 per annum, with board, lodging, washing, and attendance.  
RADCLIFFE INFIRMARY, Oxford—House-Physician. Salary, £105 per annum, with board and lodging. Applications to be sent in on or before the 25th instant.  
RIPON DISPENSARY and HOUSE OF RECOVERY—Resident House-Surgeon and Dispenser. Salary, £100 per annum, with furnished apartments, coals, and attendance. Applications to be made on or before the 16th instant.  
ROYSTON UNION—Medical Officer for No. 5 District. Salary, £80 per annum, and extra fees. Applications to be made on or before the 19th instant.  
WEST SUSSEX, EAST HANTS, and CHICHESTER INFIRMARY—Surgeon-Dentist. Applications to be made on or before the 18th instant.  
WEST LONDON HOSPITAL—Assistant-Physician, and Assistant-Surgeon. Applications to be sent in on or before the 22nd instant.

#### BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

##### BIRTH.

LYSTER.—On June 2nd, at 72, Devonshire Road, Prince's Park, Liverpool, the wife of C. E. Lyster, M.D., F.R.C.S.L., of a daughter.

##### MARRIAGES.

ALLIOTT-BEVINGTON.—On June 7th, at the Parish Church, Croydon, by the Rev. J. D. Hawksley, Chaplain to the Three Counties' Asylum, Bedford, \*Alexander John Allott, M.B. Cantab., of Sevenoaks, to Florence, sixth daughter of the late Alexander Bevington, of Palace Road, Streatham Hill.

NAPER-MELLIS.—At Seagew House, Fraserburgh, on June 6th, by the Rev. Wm. Paterson, Alexander Disney Leith Napier, M.B., C.M., second son of the late Thomas Napier, of Montrose, to Jessie, eldest daughter of John Mellis, M.R.C.S. Eng.—No cards.

POLLARD-HUG.—On June 12th, at St. George's Church, Liverpool, \*Frederick Pollard, M.D. Lond., of Richmond Terrace, Liverpool, to Katharine, only daughter of the late Robert Hug, Esq., of Edinburgh.

MACDONALD-FLETCHER.—At St. George's Episcopal Church, York Place, Edinburgh, on June 12th, by the Rev. A. E. Watson, Alexander Dall Macdonald, M.D., Dumfries, to Janet, eldest daughter of the late Joseph Fletcher of Keltie House, Dumfries-shire, and Whitehaven, Cumberland.

SAUNDERS-PHILLIPS.—On May 23rd, at the Parish Church, Kingston, Jamaica, Arthur Rich Saunders, to Emma Louise, daughter of J. Cecil Phillips, M.D.

THE GREAT ORMOND STREET CHILDREN'S HOSPITAL.—Her Royal Highness Princess Christian, upon her last birthday, sent a valuable present of clothing and toys for distribution to the children in the "Helena" Ward at this hospital. The "Helena" Ward is occupied entirely by little girls of from two to ten years of age, and bears the name of the Princess by special permission. The patients have on several previous occasions been honoured with gifts sent by Her Royal Highness. A new wing forming the second portion of the enlarged hospital is nearly completed, and will shortly be opened for public inspection.



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.
THURSDAY...	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—Charing Cross, 2 P.M.
FRIDAY.....	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

FRIDAY.—Quekett Microscopical Club (University College, Gower Street), 8 P.M. Ordinary Meeting.

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the BRITISH MEDICAL JOURNAL, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with Duplicate Copies.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the JOURNAL, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## TREATMENT OF PRURITUS ANI.

SIR,—Can any of your readers suggest anything likely to prove of benefit in the following case of obstinate pruritus? My patient, a gentleman long a resident in a hot climate, now aged 45, since his return to England, more than a year ago, has suffered uninterruptedly from an itching of the skin at, and four inches around, the anus. The irritation is at all times annoying him, but is worse when warm in bed, or after horse exercise. Formerly a free-liver, to which he perhaps irrationally attributes his present affection, the gentleman is now an abstainer from alcohol in every form; and latterly, by my advice, has dieted himself most carefully, giving up coffee and tobacco altogether. When abroad, he had dysentery several times, but now enjoys robust health. His liver is slightly enlarged, but otherwise apparently sound: not a trace of sugar or other abnormality in the urine. The pruritus commenced soon after reaching England; but his father he declares to have been at one time, to his certain knowledge, a sufferer from the same trouble in India. I have failed, after most careful and repeated examination, to detect either animal or vegetable parasites, or to trace the presence of oxyurides; and no syphilitic history is to be elicited. He has been treated by others, before myself, without obtaining relief; and I am, therefore, constrained to lay the matter before such of my confrères as may have had more experience than I have in these cases.

Externally, I have given a fair trial to almost everything I could think of, on all sorts of tacks. Soothing applications, borax, prussic acid, bran- and oatmeal-baths, lead-lotion, and belladonna extract, with more irritating ones, such as glycerine, mercurial lotion, fullers' earth, bromide of potassium, acetic and sulphurous acids, have all proved useless; the only relief he has had, and that failing on the third application, being from the solution of chloral-hydrate with camphor. Bitter and soothing injections, and sedative suppositories, have had no effect upon the extra-anal irritation.

Internally, bromide of potassium, arsenic and iodide of iron, taraxacum, with hepatic alteratives and aperients, santonine, and, as a *dernier resort*, tar-capsules, have been successively administered with absolutely no effect; and I begin to feel somewhat ashamed of such shifty and unsuccessful drugging. That my patient has not ere this tired of being experimented upon—nay, is even wishful I should try again—is some proof how very real the torment is to him. Can any one help me?—Yours truly,

F. ARNOLD LEE.

## OCCLUSION OF THE VAGINA.

REGARDING a case of occlusion of the vagina, extending from the urethra downwards, but not interfering with the meatus urethrae, "W. D." asks: Would any member kindly give his experience (1. as to whether it is best to operate now in a child of three years of age, or to leave it until menstruation comes on? (2) as to the best mode of operation and treatment.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## UNPROFESSIONAL ADVERTISING.

In the *Western Gazette* of June 4th, a misunderstanding between two medical men is set forth, as an advertisement, in most unbecoming terms. It appears that Mr. Garland of Yeovil was summoned to attend a child with a broken leg. As he was not at home, the messenger was referred to his assistant. When the latter called at the patient's house, he found that Mr. Ptolemy Colmer had attended and applied splints to the child's leg. Seeing that the parents were very poor, he said that the hospital would be the best place for the little patient. To this the mother agreed; and the child was accordingly sent there, still wearing Mr. Colmer's splints.

Thereupon Mr. Colmer wrote to Mr. Garland, asking for an explanation, and requesting that his splints might be returned. In reply, Mr. Garland said that he had heard nothing about the matter till he received Mr. Colmer's letter, that it was his pupil who had visited the case, and who, observing the poverty of the child's home, had suggested that it should be sent to the hospital. When admitted, the child was not Mr. Garland's patient. Of course, the splints were returned in due time.

No doubt, Mr. Colmer's consent ought to have been obtained before the child was taken to the hospital. But this mistake on the assistant's part might easily have been set right by a few words of explanation. Both Mr. Colmer's letter and the manner in which he has inserted the correspondence in the advertising columns of a local newspaper are quite at variance with the dignity, and even the respectability, of the profession. Could not the College of Physicians of Edinburgh, of which he is a Licentiate, take notice of such unprofessional advertising?

As there is a "Madame Colmer, M.D. (U.S.)", also of Yeovil, who advertises "Herbal Purifying Life Pills", an "Universal Ointment", and an "Infallible Worm Medicine", Mr. Ptolemy Colmer ought to be particularly careful to avoid the advertising columns of the local newspapers, lest ignorant persons should confound him with Madame Colmer, M.D., whose "eclectic remedies" are, we are told, "the marvel of the world, and the greatest wonder of the age".

## THE COLLEGE OF SURGEONS' LIBRARY.

SIR,—I am glad to see your remarks on the opening of this library in the evening in a recent number of the JOURNAL. I believe it would be found a great convenience to many if the library were open on two or three evenings during the week.—I am, etc.,

B. H. S.

## PRACTICE IN THE MIDDLE AGES.

BENVENUTO CELLINI relates (Goethe's translation, book 1, ch. 5 and 11; and book 4, ch. 5:—"There arrived a great surgeon in Rome named Master Jacob da Carpi; this celebrated man cured among others, especially desperate cases of the French evil. . . . He was very learned and spoke surprisingly concerning medicine. The Pope (Clement VII) desired that he should enter into his service, but he replied, that he would enter into the service of no man, but those who had need of him must find him out. He was a crafty man, and it was well for him that he left Rome; for a few months afterwards all those whom he had cured found themselves in a worse plight than before. He would certainly have been murdered had he remained." The author himself suffered from the same complaint, with apparently syphilitic ophthalmitis, so that he was unable to see, and thereby got into trouble with the pope from being unable to proceed with his holiness's work. Being summoned to the palace, after having excused himself, a nobleman who was present informed his name:—"Benvenuto I am called, answered I. He replied, This time I am for you benvenuto (welcome). Take lilies, with stalks and flowers, and distil with a slow fire, and with the liquid thus obtained bathe the eyes several times a day, and by this means you will certainly be cured. The pope spoke thereupon a few friendly words, and I went half consoled away. But without doubt I must owe my disease of the eyes to the beautiful maiden I had by me when I was robbed. More than four months the disease was latent, and then showed itself with force all at once. It did not appear as usual, but rather I was covered with red pimples as large as a penny (Roman money). The doctors did not understand the disease, notwithstanding I had told them the cause and my opinion of it. For a time I allowed myself to be dealt with after their manner, but no good came of it. At last, I determined to take the [holy] wood, in opposition to those whom we must hold for the physicians of Rome. After I had taken this medicine with much care and regularity, I felt great mitigation, so that in the course of a fortnight I was cured, and felt as sound as a fish. After this, as winter approached, wishing to amuse myself, I took my gun and went shooting, but the rain and the wind kept me in the low grounds, so that in a few days a tenfold greater evil befel me than the first. Now I placed myself again in the hands of the physicians, and was by their medicines constantly made worse. I had taken a fever and determined to use the wood again. The physicians opposed this, and asserted that if I commenced the remedy during the course of the fever I should be dead in a week; but I acted with the same order and foresight as previously. After I had drunk of the holy water of the wood for four days, the fever entirely left me, and I felt the greatest improvement." Years subsequently to this, when in the service of the Medici family at Florence, the author being very diligently engaged on his Perseus, it happened that "a splinter of the finest steel entered my right eyeball so deep that it could not be withdrawn, and I thought for certain that I must lose the sight of my eye. After several days, I called in Master Raphael Pili, the surgeon, who took two live doves, and when he had laid me on my back on a table, pierced a vein that these creatures have under the wing, so that the blood flew into my eye, from which I quickly felt myself strengthened. In two days time, the splinter came out and my sight was better. As now the feast of Sta. Lucia approached—it was three days hence—I made a golden eye out of French money, and caused it to be made an offering to the saint by one of my six nieces, and through her I thanked God and Sta. Lucia."



**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the *BRITISH MEDICAL JOURNAL*, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

#### PEACOCKS.

MR. VAUGHAN has advised a gentleman residing near Russell Square, who complained of the intolerable screeching of a peacock, to inflict the owner if the bird was a serious nuisance. We shall be rather curious to see the result of such an indictment, for we have had more than one complaint made to us that the peacocks in Buckingham Palace Gardens are a most serious nuisance to the inhabitants of that neighbourhood, and especially to the residents of a neighbouring hotel.

#### CORONER'S INQUESTS.

It would be difficult to define what are the rules which guide coroners in considering inquests to be necessary or unnecessary. We have heard a good deal from time to time of unnecessary inquests being held; and we should like to know, on the other hand, what chance there is of crime being discovered if inquests are not held in such cases as the following, of which we find the notice in the *Sussex Express*.

"A Dead Baby in Knowle Park.—On Thursday evening, about five o'clock, Jesse Montin, a shepherd, discovered the dead body of a newly-born infant in a brown paper parcel, in a sillage-hole at the bottom of the Duchess's Walk in Knowle Park. He at once gave information to the police, and the body was removed to the police-station. In consequence of decomposition having set in to such an extent, it was found impossible to make a *post mortem* examination; and the coroner, who was communicated with, did not consider an inquest necessary."

#### SMOKING IN SMALL ROOMS.

SIR,—Now that so much is being done in sanitary matters, may I be permitted to inquire whether anything has been done to lessen the injurious practice of numbers of men smoking in very small rooms for hours together in public-houses without any plan of ventilation, in consequence of which such an amount of nicotine must be inhaled as to be extremely prejudicial to health, and in proportion to which the harm done by the stimulants is very probably small. Robust men seem to be able to use tobacco freely in the open air without much apparent harm. But I think the circumstances to which I allude are widely different, and that attention should be directed to them.—Yours truly,

WALTER JATTEY.

#### CASE OF DEATH FROM INANITION ON THE TENTH DAY.

SIR,—I will offer no apology for asking you to insert the following, as I read in some of the journals comments on the period of abstinence endured by the Welsh miners without fatal result.

The subject was John Chard, aged 60, of Hereford. Early on the morning of Sunday, August 20th, 1854, his wife and daughter sent for me to see him, saying that something strange had happened to him; that he was the day before in his usual health for a man of his age, who was rarely sober; that when he appeared at breakfast they observed nothing amiss with him; that, as was his wont, he was sullen and silent at his first appearance. They as usual poured out his tea and presented it to him, but they remarked that, on putting the cup to his lips and holding it there for a time, he replaced it on the table without having taken any, and without having made any visible effort to drink. This led them to ask if he was ill, but they had no answer, and he evidently made no effort to reply; yet, they did not feel sure of his inability owing to his frequent habit of showing ill-humour and his habitual reticence. The messenger further observed that, whatever ailed the old man, he was sure to permit of nothing being done for him.

Till now, Chard was a stranger to me. I found him seated in his chair, and he received me with apparent civility. He did not appear in the least ill; and, to my inquiries about headache, vertigo, and premonitory symptoms, he gave no indications of attempting to reply; nor did he by look or gesture imply anything. He was a spare man, but tolerably muscular, and was in the habit of sharing in the daily work of the inn where he lived, and of assisting at the weekly brewing.

On my explaining his condition to him and the means I proposed to adopt, and that nourishment could be administered artificially until his powers (as I hoped) to take it returned, he very soon made it clear to us all that he "would have none of it." The expression of his countenance and his gestures left us in no doubt that he intended to resist any treatment, or any attempt to aid him by food or physic. He finished by kneeling on one knee, and with his finger marking out on the floor the outlines of a coffin, to which he pointed very significantly; and with an energy that showed his determination was a firm and fixed one, and that he would carry it out. His wife and daughter also assured me that the exhibition I had witnessed was just what they expected, and that he was just the man to stick to his resistance of all means of relief; also that a dogged wilfulness and obstinacy had ever been the leading characteristic of his life. For all practical purposes, my mission seemed to be ended; so, after advising his friends after an interval to send for the clergyman, I took my leave. I was sorry afterwards to learn that Chard's reception of the vicar was on a par with that of the doctor; and that, though he endured his visits, the poor man exhibited no signs that were satisfactory or encouraging to his pastor. I continued my attendance to the 29th, on which day (the tenth) the patient died.

It is now twenty three years ago. I have no notes of this case; but the leading facts I well remember. For the first three or four days, Chard, was up and about, directed and assisted at the Monday's brewing, sat in his chair when weary, began to exhibit greater prostration, and lay mostly on his bed, which he did not leave at all during the last four days of his life; but showed no other signs of illness, and slept fairly. He took absolutely nothing—it was impossible; and not only did he never speak, but could not utter the faintest sound: in short, he could not perform two sins to which he was perpetually addicted—he could neither drink nor swear. Every entreaty on the part of his friends to allow nourishment to be administered was rejected with stern refusal.

A necropsy, which I pressed even to entreaty, was also refused by the widow. The seat of lesion admits of no doubt; yet, as cases are very rare where the phenomena are so closely defined as in this, the refusal was vexatious. As bearing on the experiences of the rescued colliers and their long abstinence, this case is especially interesting, inasmuch as the surroundings of my patient precluded the possibility of his getting either food or water, though they retained to him his ordinary quantum of air, of light, and of freedom.—Your obedient servant,

Hereford, May 7th, 1877.

CHARLES LINGEN, F.R.C.S.E.

**NOTICES of Births, Deaths, Marriages, and Appointments,** intended for insertion in the *BRITISH MEDICAL JOURNAL*, should arrive at the Office not later than 10 A.M. on Thursday.

#### INTUSSUSCEPTION TREATED BY INFLATION.

SIR,—Thinking that the treatment of intussusception by inflation is as yet sufficiently rare to be of interest to some, I send you for insertion, if space can be afforded, the following notes of a case that recently occurred in my practice.

On February 9th, I was sent for to see a fine healthy male child, eight months old; but, being from home when the message arrived, I did not see the child till six hours after it had taken ill. On my arrival, the mother told me that in the morning, while changing the child's clothes (it being apparently quite well), it suddenly cried out and seemed to be in great pain, and became pale. The mother, not knowing what to do, went to a druggist, who gave her a powder containing three grains of calomel, and also ordered the child to get a warm bath. When I saw the child, he was crying very much, and suffering severe paroxysms of pain and bathed in a cold perspiration. There was no tenderness or fulness of the abdomen. He had vomited the powder ordered by the druggist. I ordered hot fomentations to the abdomen, and a drop and a half of tincture of opium every four hours.

On the 10th, the child had passed a very restless night, crying very much at intervals, and vomited three or four times. As the bowels had not been moved since the attack, a dose of castor-oil was given.

On the 11th, the child was much worse. He passed a quantity of bloody mucus in the night, and three times since; he had also vomited blood twice. His abdomen was slightly distended, but there was no particular tenderness. The rectum was examined and found empty. An enema of thin gruel was now given, but it returned almost immediately, tinged with blood. Another was ordered to be given in four hours.

On the 12th, the child appeared moribund; the eyes were sunk and glazed; extremities cold. He lay on his back, with the legs drawn up, and refused the breast. The right hypogastric region was fuller than the left. Having procured a pair of small bellows, and placed the child on his back with the pelvis raised, I practised inflation very gently for about five minutes. I could see the descending transverse and ascending colon become gradually distended; and, on passing my hand gently over the ascending colon, I could feel distinct gurgling, and even hear it. Immediately, on the nozzle of the bellows being withdrawn, there was a rush, first of a little bloody mucus, followed by a large and most offensive semi-fluid motion, apparently giving great relief to the child. Fomentations were ordered to be applied as before, and milk-and-water, with a few drops of brandy, to be given.

On the 13th, the child had slept nearly all the night. He had had another most offensive motion. He took the breast, and looked markedly improved.

On the 14th, he had a little castor-oil, and passed another offensive motion. He looked cheerful and happy.

On the 15th, he had had a natural motion, and was apparently nearly well, though a little weak.

I think there can be little doubt as to the diagnosis, from the sudden attack in a previously healthy child, the sudden and total obstruction of the bowels, with vomiting, paroxysmal pain, and passage of mucus, tinged with blood. What strikes me as most peculiar is, the vomiting of blood, which, I think, must be an accident, and not a property of the disease, as I believe that neither West nor Bristowe mentions a case where this occurred. In the treatment there is nothing new; still, I was struck with the simplicity and success of it in this case.—I am, yours truly,

A. CAMPBELL, L.R.C.P.Ed.

PROFESSOR VOIT'S description of his method and apparatus is contained in a paper, of which the following is the reference:—"Beschreibung eines Apparates zur Untersuchung der gasförmigen Ausscheidungen des Thierkörpers, von C. Voit. 'Abhandlungen der Münchener Academie', Band xii, Abth. 1." The physiological results are, for the most part, recorded in the *Zeitschrift für Biologie* in a series of papers to be found in successive volumes.

#### MEDICAL ETIQUETTE.

SIR,—I have seen the letter from "Query" in this week's *JOURNAL*. An exactly similar case has just occurred here. A gentleman left home for a holiday. A patient was taken in labour, and did not wish to have the partner. I was requested to attend; and, the case being over, I directed the husband to pay the medical man engaged when he returned home. He agreed to do this, upon condition that I would now become their doctor. I have considered it my duty to decline to do so, as I think it would be taking an unfair advantage of a professional brother.—I am, sir, yours faithfully,

M. or N.

Tunbridge Wells, June 11th, 1877.

We think Dr. Lewis John Richardson's pamphlet on *Health and Disease* ought to be brought under the notice of the Medical Corporation to which he belongs. If it were so, we imagine they would take steps in the matter.

#### GASTRO-INTESTINAL IRRITATION.

SIR,—I would be glad if, through your correspondence page, I could receive some advice in the following puzzling case.

Mrs. D., aged 35, four months anterior to last confinement, which was five years ago, was troubled for the first time with gastro-intestinal irritation, the tongue being at the same time sore, denuded of its epithelium in patches, and with cracks on its surface and edges, and small ulcers about the frænum and undersurface. The vagina was also inflamed and highly irritable; and she suffered from chronic diarrhoea, accompanied by great nervous depression and melancholy. She was delivered at the full time of a healthy boy, and has since had one, if not two, miscarriages.

During the last five years, Mrs. D. has had a return, more or less severe, of these symptoms a few days before each catamenial period, continuing until the discharge ceases, when she has relief. Mrs. D. has been known to me for only a few months, and during that short time she has been much tormented by her malady. She suffers from slight retroversion of the uterus, and the os uteri looks glazed and inflamed, a gelatinous clear discharge oozing from the orifice. Her mother died at the age of fifty-eight, having suffered from similar symptoms for two years before her death. There is no trace of any specific taint in the family history on either side that I can elicit.

My treatment has been iodide of iron in various forms, Easton's syrup, and cod-liver oil. I have also given arsenic in the form of Fowler's and Donovan's solution, with apparently aggravation of the symptoms. Applications of bismuth and lead seem to relieve the irritation of the vagina, and borax gives a little temporary relief to the tongue.—Yours truly,

R. HARVEY HILLIARD, M.D.



## ETHER-INHALERS.

SIR,—Ormsby's ether-inhaler was used last week by Mr. Robinson of Sheffield on two patients of mine for scirrhus.

The first, a highly nervous woman of sixty-five years of age, dreaded the idea of being "chloroformed," and succeeded twice in pulling the inhaler from her face for some seconds; but still became quite ready for operation in about four minutes. A large portion of breast was removed, which made the operation of some duration; at intervals, the inhaler was lifted completely away from the face—in all, perhaps, for five minutes—yet two ounces of ether, specific gravity 717, proved sufficient for the completion of the operation, and allowed her three or four minutes after the last withdrawal of the inhaler to recover her senses.

The second case was that of a single woman, aged 45, who exhibited no fear of the anæsthetic; and, as a smaller portion of breast in her case required removal, only three-quarters of an ounce of the ether was poured into the inhaler, which was placed firmly upon the face, the aperture being gradually closed in a few seconds. In less than two minutes, I commenced the incision, and finished putting in the last suture (just as the patient became sensitive to pain) without the addition of more ether. The usual precautions were taken as to diet, etc.; but in both cases vomiting of a clear greenish fluid occurred. Large mucous *râles* were heard in the latter patient, a sufferer from severe asthma, but the face remained unaltered throughout.—Believe me, sir, your obedient servant, FRED. ELSOM.

Whitwell, Derbyshire, June 11th, 1877.

PRACTITIONER.—There would be no advantage in the delay.

## HOSPITAL MANAGEMENT.

SIR,—Comparisons may sometimes be invidious, but they are frequently necessary and useful. The Northampton and Bradford Friendly Societies are advertising for medical officers at remuneration not superior—all told—to that of railway drivers. The Bradford Society also wants a dispenser able to prescribe at less than the wages of a stoker; but, if a dispenser be competent to prescribe, why seek medical officers at three times the cost? For their own sakes, I would advise those members of the profession whom it may concern to have nothing to do with these medical club unions, as they will certainly lose caste in the profession by so doing, and the prospective advantages as regards private practice of such employment are more apparent than real. If the clubs are foolish enough to suppose they can get competent medical aid at less than its market value, that is their look-out. As a rule, they get young and inexperienced, or elderly but unsuccessful men—the waifs and strays of the profession.—Yours faithfully, June 9th, 1877. "LOOK BEFORE YOU LEAP."

## FUNCTIONAL HEART-DISTURBANCE.

SIR,—With reference to the case of "A. B.," functional heart-disturbance, page 736 of your JOURNAL, allow me to mention the case of a gentleman aged 77, two years under my treatment, who suffers from occasional attacks of palpitation of the heart; his pulse, which is usually 60 p.m., rising suddenly to 110 or 120. There is no organic disease of any organ. After various medicines proved to be without the least effect, I tried compression of both carotid arteries ten months ago, and the palpitations immediately ceased to a normal pulse, only a little quicker (70) after the attack than before.

I succeeded since in at least thirty attacks on the same patient, and never failed to stop the palpitations. Sometimes they did not cease immediately, but I then had to repeat the compression several times and then succeeded. I never make the compression longer than a few seconds, thus avoiding deeper anæmia of the brain and fainting.

I cannot quite account for the physiological mechanism, as there are different explanations possible: 1. Repercussion of the blood-wave to the heart; 2. Action on the medulla oblongata; 3. Action on the pneumogastric nerve.

I should be very glad to hear of other cases.—I am, sir, your obedient servant, Baden-Baden, June 10th, 1877. DR. SCHLIEP.

## HOME HOSPITALS.

SIR,—By the praiseworthy exertions of Mr. Henry C. Burdett, of the Seamen's Hospital, Greenwich, there is every probability the idea of establishing hospitals in the metropolis for pay-patients will be carried into effect. Although such hospitals would be of great value for the reception of certain surgical cases, yet their chief use would be for the isolation of infectious diseases. In my paper on a New Mode of Hospital Construction, which I had the honour of reading at the annual general meeting of the British Medical Association in 1871, I made a similar suggestion, as will be seen in the following paragraph, which I quote from the BRITISH MEDICAL JOURNAL, May 11th, 1872.

"Although the building just described is intended for the reception of all kinds of cases, I would venture to suggest the advisability of making additions of this character to existing hospitals, for the reception of infectious cases from the general wards, thus locating without intensifying infection—a condition which does not obtain in our fever hospitals. I would also advise the erection of such buildings for the upper and middle classes of society, so that infectious cases may be removed thither from private residences, and thus probably prevent the spread of infection in families—the patients to be treated by their own private medical attendants, and to be charged moderately for board and lodging, nurse, etc."

As it is not in the power of many of your readers to refer to the JOURNAL of the above date, and there may be those who would wish to be acquainted with the nature of my hospital plans, I here supply a short description from the Catalogue of the British Section of the International Exhibition, Philadelphia, 1876.

"This plan consists of a substantial building containing a smaller one, the side and end spaces between the two forming corridors. The inner building is made of glass (toughened, if procurable), or enamelled sheet-iron and glass, fixed in iron framework, and is subdivided so as to form two rows of compartments, each compartment having an entrance from the corridor. Efficient means are provided for the inlet of fresh air and the extraction of foul air, and for warming the building. By this plan, each patient is surrounded with air uncontaminated by himself, by his fellow-patients, or by the building, the materials of which the compartments are made being non-absorbent, and the ventilation constant and complete. Although each patient would be isolated, he would not feel lonely, as he could see and converse with his neighbour through the glass partition. The nature of the partitions also enables the nurse to see the patients through either row of compartments. This plan is especially adapted for the reception of wounded patients, for a fever hospital, and a lying-in hospital. (See BRITISH MEDICAL JOURNAL, May 11th, 1872; November 15th, 1873; September 26th, 1874; January 30th, 1875; June 10th, 1875)."

With this method of hospital construction, the in-coming air can be purified and the out-going air disinfected, if necessary, as in cases of scarlatina, etc. The

friends of the patients could pay visits with very little chance of receiving infection, as they could remain in the corridors and yet see and converse with the patients through the fronts of the glass compartments. The arrangement of the corridors would not only prevent the compartments being exposed to extremes of temperature, but would also prevent external sounds injuriously affecting the patients.

If the proposed "home hospitals" are to find favour with the public, they must be constructed in a manner that shall afford greater safety to the patients than any of our existing public hospitals; for if the various forms of blood-poisoning, consequent on the vitiated atmosphere of a hospital, should manifest themselves in these new establishments, medical men will be very wary in sending patients there to undergo surgical operations, and that would lead to anything but a financial success.

Trusting the forthcoming meeting at the Mansion House (on the 27th instant), under the presidency of the Right Honourable the Lord Mayor, may come to a practical decision in favour of the above undertaking.—I have the honour to be, sir, yours obediently, HENRY GREENWAY.

Plymouth, June 9th, 1877.

WE are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The York Herald; The Bridlington Quay Gazette; The Scarborough Daily Post; The Blyth Weekly News; The Glasgow Herald; The Malvern News; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; The Manchester Free Lance; The Belfast News Letter; The Manchester Courier; The Macclesfield Courier; The North Wales Chronicle; The Sunderland Daily Post; The Western Daily Mercury; etc.

\* \* \* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

## COMMUNICATIONS, LETTERS, etc., have been received from:—

Mr. Jonathan Hutchinson, London; Dr. W. Rutherford, Edinburgh; Dr. Edis, London; Dr. George Johnson, London; Dr. J. B. Bradbury, Cambridge; Mr. Balmanno Squire, London; Mr. Daniel Jacob, Derby; Dr. J. Milner Fothergill, London; Mr. S. M. Bradley, Manchester; Dr. G. F. Elliott, Hull; Look before you Leap; Ex Tenebris Lux; Mr. Greenway, Plymouth; Dr. Bailey, Stourbridge; Dr. Madge, London; Dr. MacLaren, Edinburgh; Dr. McKendrick, Glasgow; Dr. Goodhart, London; Dr. D. J. Leech, Manchester; Mr. Richard Davy, London; Mr. J. B. Williams, Hull; Dr. A. E. Aust Lawrence, Bristol; Dr. J. Hughlings Jackson, London; Mr. Carsten Holthouse, Balham; Dr. E. Symes Thompson, London; Dr. J. W. Moore, Dublin; Mr. N. A. Humphreys, London; Dr. Joseph Bell, Edinburgh; The Secretary of Apothecaries' Hall; Dr. W. Fairlie Clarke, Southborough; W.; The Registrar-General of England; Mr. Wanklyn, London; M.D.; Dr. Tripe, Hackney; The Registrar-General of Ireland; Mr. T. M. Stone, London; Mr. Howard Marsh, London; Dr. G. H. Philipson, Newcastle-upon-Tyne; The Secretary of the Obstetrical Society; Mr. Lord Hampstead; Mr. W. J. Phillips, Rothesay; Mr. Elson, Whitwell; Dr. Fairbank, Windsor; Mr. F. Mason, London; Dr. Brown, Rochester; Mr. William Pratt, Newtown; Mr. Monckton, Tunbridge Wells; Dr. J. Brown, Coventry; Dr. James Ross, Manchester; Dr. G. Scott, Southampton; Mr. W. E. Grayson, Sheffield; Dr. Schliep, Baden-Baden; Dr. A. Macaldowie, Hartshill; Dr. Banham, Sheffield; Mr. Jones, Manchester; Dr. Scott, London; Our Dublin Correspondent; Dr. Hardie, Manchester; the Secretary of the Statistical Society; Dr. Parsons, Dover; Our Edinburgh Correspondent; Mr. S. M. Bradley, Manchester; Dr. Hilliard, London; Our Glasgow Correspondent; Mr. H. F. Eagle, London; Dr. W. R. Smith, Sheffield; Mr. Walter Lattey, Southam; Dr. Philipson, Newcastle-upon-Tyne; Mr. J. H. Wathen, Fishguard; Mr. Eastes, London; Dr. Joseph Rogers, London; etc.

## BOOKS, etc., RECEIVED.

The Treatment of Spina Bifida by a New Method. By James Morton, M.D. Glasgow: James Maclehose.

Clinical Lectures on Diseases of the Liver, Jaundice, and Abdominal Dropsy. By Charles Murchison, M.D., LL.D., F.R.S. Second Edition. London: Longmans, Green, and Co.

The History, Products, and Processes of the Alkali Trade. By Charles Thomas Kingzett. Twenty-three Illustrations. London: Longmans, Green, and Co.

A Guide to Therapeutics. By Robert Farquharson, M.D. Edin. London: Smith, Elder, and Co. 1876.

Purification of Water-Carried Sewage. By Henry Robinson and C. Mellor. London: Smith, Elder, and Co. 1877.

Sea-Air and Sea-Bathing: their Influences on Health. By Chas. Parsons, M.D. London: J. and A. Churchill. 1877.

Thomas De Quincy: his Life and Writings, with unpublished Correspondence. By H. A. Page. London: J. Hogg and Co. 1877.

General Index to the New York Medical Journal, from April 1865 to June 1876. By James B. Hunter, M.D. New York: D. Appleton and Co.

Tonic Treatment of Syphilis. By E. L. Keyes, A.M., M.B. New York: D. Appleton and Co.

Sanitas Sanitatum, et omnia Sanitas. By Richard Metcalf, F.S.S. Vol. i. London: Co-operative Printing Company: 1877.

Cyclopædia of the Practice of Medicine. By Dr. H. Von Ziemssen. Vol. xii. 1877.

Diseases of the Brain and its Membranes. By Professors H. Nothnagel, E. Hitzig, and F. Obernier. London: Sampson Low, and Co. 1877.

The Student's Hand-Book of Forensic Medicine and Medical Police. By H. Aubrey Husband, M.B. Edinburgh: E. and S. Livingstone. 1877.

Mesmerism, Spiritualism, etc., Historically and Scientifically Considered. By Wm. B. Carpenter. London: Longmans, Green, and Co. 1877.

Aids to Chemistry. By C. E. Armand Semple, B.A., M.B. London: Baillière, Tindall, and Cox. 1877.



ing on itself cannot fulfil the transition from slack to vibrating tightness which takes place in a heart propelling a body of blood. The muscular sound, if heard at all, would be muffled and obscure, and to any but an expert observer would appear null, as compared to the clear rhythmical sounds which are heard when the blood restores to the walls and valves of the heart their natural freedom of action. "The argument that, because the heart without blood gives no sound, the blood or the valves must be the seat of the sound, is about as logical as that the bridge of a violin is the source of its notes because the strings yield no sound without the bridge. In either case, the bridge, the blood, and the valves respectively are necessary to complete the instrument which yields the sound, but the chief seat of the sound is in the vibrating strings in one case and in the vibrating walls in the other."

## ABSTRACT OF CLINICAL LECTURE

### SOME CASES OF DISEASED KNEE-JOINT, WITH SPECIAL REFERENCE TO THE QUESTION OF EXCISION.

By S. MESSENGER BRADLEY, F.R.C.S.,

Surgeon to the Manchester Royal Infirmary; Lecturer on Practical Surgery at Owens College: etc.

THE cases before you are examples of some of the most common, but important, diseases of the knee-joint, viz.: simple synovitis, suppuration within the joint, abscess in the immediate neighbourhood of the articulation, ulceration of cartilage, articular osteitis, and pulpy degeneration of the synovial membrane and adjacent structures. That is to say, we have instances of disease affecting each, and in some cases all, the structures which enter into the formation of the joint; and, in forming an opinion upon any case of diseased knee, this question of site is a very important one. Indeed, *situation and diathesis* are the two most important matters to be decided; thus, *e.g.*, in this case of simple synovitis, the *situation* of the disease, revealed by the shape of the affected joint, at once establishes the fact that there is effusion *into* the joint; a little further examination shows that the bones, and cartilages, and ligaments are unaffected, and that the synovial membrane is the sole seat of disease. Then, regarding his general appearance of health, his strong even teeth, his healthy skin, we rapidly decide that here is a man free from any special *diathesis*; and, these two points decided, we at once conclude that this case of simple synovitis in a healthy subject will, with proper treatment, shortly be cured, and the joint be perfectly restored to its *status quo ante*. How different would the prognosis be if the same disease, caused in the same way, occurred in this strumous lad. It is highly important, indeed, that you understand that all, or almost all, the diseases here illustrated may occur in an otherwise healthy subject; or, on the other hand, may be associated with a rheumatic, gouty, syphilitic, or strumous habit—when it becomes a much more important matter to treat the general diathesis than the local manifestation thereof. In the rheumatic, or gouty, or syphilitic habit, after such general treatment, you may hopefully proceed to any operation upon the joint itself deemed necessary; but, in the strumous, you must proceed more cautiously, and in regard to one operation, I mean excision, you are, in my opinion, not justified in resorting to it at all.

Let us now examine these cases a little in detail.

This little humpbacked man is evidently of strumous habit, and has suffered at some time or other from caries of the dorsal spine. He was admitted into the infirmary with a large and painful right knee, the leg bent at right angles, but not ankylosed. There is manifest effusion into the joint, and some of the fluid removed with the aspirator we found to be purulent; yet, although we have here suppuration into this great joint, and the man is of so unfortunate a habit, there is wonderfully little constitutional mischief; the temperature is normal, the pulse is quiet, and the tongue is clean. What is to be done? Constitutional treatment, of course, "goes without saying"; but locally what must we do? I believe the best treatment here is to make an incision four lines in length along the inner border of the patella, and then, by means of a Higginson's syringe, to distend the joint with a solution of carbolic acid in water (1 to 30), according to the plan suggested by Callender for the treatment of abscesses. Having done this, seal up the small wound with collodion (no drain-tube being inserted), and put the limb on a back splint. I have found this plan succeed in such cases, and it is certainly always well worth trying; for the alternative of freely laying open the joint, with the hope of securing

ankylosis in the straight position, is not only a much more formidable procedure, but also not in the least more likely to succeed than the simple method of distension. If either or both these plans fail, and fail they often do, then, in my opinion—reasons for which I will give you more fully by-and-bye—you have only one alternative, and that is amputation; excision being an unjustifiable operation in such cases.

The next case to which I draw your attention is one of abscess in the cellular tissue about the joint, and was sent into hospital as one of disease of the joint itself; but that such is not the case, I will proceed to show you. First, you perceive there is no *effusion* within the joint, by the absence of the characteristic swelling beneath the subcrureus or by the sides of the patella; next, the movements of the joint being quite normal and painless, you infer that the ligaments are unaffected; the bones do not in any way differ from those of the opposite side, nor is there any pain on squeezing the femoral condyles or tibial tuberosities, or on forcing the patella backwards, nor does the patient suffer nocturnal exacerbations, whence we conclude that the articular ends of the bones are sound; on pressing the articular surfaces together, no grating sensation is produced, by which we know the cartilages are intact. In a word, all the main joint-structures are healthy; and this fluctuating swelling is external to the articulation. Being quite out of the way of important vessels or nerves, without more ado I open it with this bistoury, and, as you see, give exit to a quantity of pus. I now distend the sac in the usual way, introduce a small vulcanite drain-tube, which I prefer to the ordinary India-rubber ones, because, unlike the latter, they do not collapse on pressure by the bandage; and now, I think, we shall be justified in predicting a rapid restoration to perfect health.

Here we have a typical example of ulceration of the encrusting cartilage. This man has no pain in his knee, no *effusion* into the joint; but, when you press the patella back and move it from side to side, you feel a distinct bony grating, owing to destruction of the layer of cartilage. Too much, I think, is made of diseased articular cartilage. Certainly, in regard to treatment, this is true. It may ossify, it may atrophy, it may disappear, and unless the contiguous bone become affected, very few, if any, symptoms appear, and very little damage is done. As matter of fact, however, this implication of the bones is the rule and not the exception; such, *e.g.*, was the case with Helen T., whose knee-joint I excised about eighteen months ago. For a long time, she had no symptoms beyond bony grating, then pain manifested itself, especially at night; and this proving quite intractable, in spite of active and long-continued treatment, the joint was resected, when we found much diseased bone beneath the eroded cartilage. I may for a moment dwell upon this case to say that, by some, it would be regarded as a successful example of excision of the knee, inasmuch as the bones united, the pains ceased, and the woman got about again; but, to my mind, it is not satisfactory; the limb is shortened, she is soon tired, and, after walking a short distance, has pain; she would be better off with a good stump and a wooden leg.

This little boy and girl are illustrations of another very common disease of the knee: I refer to articular osteitis. You can see at a glance that there is no *effusion* into the joint, and may also note that in both the leg is flexed at a right angle with the femur, and that subluxation backwards of the tibia exists, caused by the continued pull of the hamstring muscles. No sinuses have yet formed, and the enlargement of the bones, though manifest enough, is not extreme. Subjectively, we have pain on pressure and nocturnal exacerbation, with muscular spasm. Both little patients, too, have a pained and wearied look, very sad to see in young children, and both are losing flesh. The osteitis, in such cases as these, is generally set up by some unlucky blow or fall; and if this blow chance to alight upon a strumous soil, the osteitis will probably proceed to general arthritis; yet, if we see cases like this at an early date, we may hope for a happy issue out of the trouble by long-continued rest. Gentleness and quiet are, indeed, our most potent aids in treatment; and after a time, when all inflammatory action is at an end, we may endeavour to restore the limb to a straight line, and overcome the subluxation by very gradual extension. If, by long-continued flexion, the hamstring tendons hamper us in their contraction, there is no objection to dividing any such constricting band with a tenotome.

And now, gentlemen, in the last place, I call your attention to this strumous lad, who has been in the infirmary for the last month with white swelling, *tumor albus* of the knee. He tells me that, before he felt pain, he noticed a difference in the shape of his two knees; on the affected side, the furrows on each side of the patella filled up, and soon after he began to feel pain at times and limped in his gait. Seeing this, his mother, wiser than most, brought him to the hospital, where he was at once admitted. The joint is generally enlarged, and,



in the joint, and the cavity encroached upon as much as the tissues outside, owing to a villous thickening of the synovial membrane. Pressure gives little pain, and there is no increase of pain at night. Now, if this lad had been allowed to run wild a little longer, he would have limped more and more as the joint became more and more painful. The leg would have become flexed, and by-and-bye abscesses would have formed and opened around the joint. These would, perhaps, dry up after a time, leaving sinuses, with a temporary improvement of the health; then fresh abscesses would form, and the lad, emaciated and reduced by constant pain and discharge, would at length die, death being possibly preceded by an amyloid degeneration of the viscera, a condition not unfrequently superinduced by long-continued suppuration. By treatment, however, we may rationally hope to avert so calamitous a termination. The limb is placed upon a splint, both ankle and knee being immobilised, and after all inflammatory symptoms are reduced by rest and ice-bags, counterirritation will be employed under chloroform in the shape of the actual cautery. Under this treatment, the pain will probably disappear and the swelling subside; in the later stages, pressure will be employed by strapping over Scott's dressing. In the meanwhile, we give cod-liver oil and plenty of milk, two quarts daily, and, above all, exercise much patience; for these cases require a long time, a year perhaps, to effect a perfect cure. It may be indeed that, despite all our efforts, the destructive action progresses. Pyrexia announces the constitutional sympathy; the joint becomes larger, softer, and more tender; abscesses repeatedly form; and the joint becomes filled with pus and broken-down tissue. If such a fate await this poor boy, I shall open the joint on one side of the patella, and hyperdistend the synovial cavity with a one in thirty solution of carbolic acid. Should this plan fail to arrest the mischief, I should at once proceed to amputate the thigh, when, in all probability, you would find that, in a few weeks, the lad would be up and about in a vastly improved condition of general health.

I cannot but warn you against excision in such cases, although the operation is advocated by some surgeons even in the young. I confess to a strong impression that excision of the knee is, under nearly all circumstances, a bad operation, and one which will sooner or later fall into a deserved desuetude; for, after all, what is the end and object of every operation? Surely this: to cure your patient with as little risk as possible, as soon as possible, and with the best results as to utility of parts as possible. Now, how does excision of the knee fulfil these requirements? It seems to fulfil none of them. It is a more risky operation than amputation; it is an infinitely more tedious operation than amputation in the after treatment; and as to results, however pleasant it may sound to save a leg, I would very confidently back the first casual dozen one-legged men against any picked twelve men with excised knee-joints in a walking, or a jumping, or a climbing match. Look at our recent experience of this operation—at least, take my own. Within the last eighteen months, I have excised the knee-joint five times; in two cases, after a long and tedious effort at repair, I was compelled to amputate; the other three have still their legs on, but what are they worth? The best of them cannot walk, and are a constant trouble; and the worst of them, this poor fellow before you, has been lying convalescing (!) here for the last six months, with the grand result of just being able to lift his leg in one piece off the bed. If things go as merrily as hitherto, he may hope in another six months to make the tour of the infirmary flags, when, if he have the good luck to fall down and break his stiff leg, I shall not hesitate to advise him to allow me to substitute a wooden-peg for his own very indifferent member. Whatever be the ultimate fate of this much bepraised operation of excision of the knee, on it that, in cases of strumous arthritis, the game is at no

HOLBORN.—Dr. Gibbon commences his report by stating that he had not received from the Registrar-General the usual copies of death-returns, and cannot supply the usual tables. There were in 1875 only 1,165 births registered in the district, and as many as 1,263 deaths: a return which would be the greatest possible censure on Dr. Gibbon if it were not obvious that the returns are erroneous, partly from reasons referred to by Dr. Gibbon himself. He gives the corrected death-rate as being 22.02 per 1,000 population, and the corrected number of deaths as 949, which are too few. Dr. Gibbon refers with satisfaction to the new mortuary. The sanitary work is said to be satisfactory, with which we do not agree, as out of this district, which contains the unhealthy sites reported under the Artisans' Dwellings Act, only 145 houses are reported to have been repaired, cleansed, and whitewashed; 35 accumulations of refuse removed, 89 water-closets cleansed and repaired, and small numbers of different kinds of nuisances abated.

## ON THE RELATION BETWEEN ANGINA PECTORIS AND PERIPHERAL ARTERIAL CONTRACTION; AND ON THE *MODUS OPERANDI* OF NITRITE OF AMYL AS A REMEDY FOR THE DISEASE.

By GEORGE JOHNSON, M.D., F.R.S.,

Fellow of the Royal College of Physicians; Professor of Clinical Medicine and Senior Physician to King's College Hospital; etc.

WE are indebted to Dr. Lauder Brunton for a knowledge of the fact that, in some of the most severe and alarming attacks of angina pectoris, the pain and the distress are speedily removed by inhaling the vapour of nitrite of amyl. Dr. Brunton was induced to employ this remedy by a process of reasoning based upon some previously ascertained data. He made repeated sphygmographic observations on a case of angina pectoris, and he noticed that, during the paroxysms of pain, there was evidence of high arterial pressure, the result of excessive contraction of the arterioles. The pain and the high arterial pressure coincided, and the pressure fell with the cessation of the pain. He, therefore, inferred that the increased arterial pressure was the cause of the pain. He says (Goulstonian Lectures, BRITISH MEDICAL JOURNAL, March 31st, 1877, p. 380. See also his paper in the Clinical Society's *Transactions*, vol. iii, p. 191), "The pathology of the disease thus seemed clear; and the next question was, how to treat it. The remedy wanted was one which would dilate the vessels, and this the researches of Richardson and Gamgee supplied. Nitrite of amyl they had shown to possess the very power which I desired, and thus their experiments on the pharmacology of the drug, and my observations on the pathology of the disease united, led to successful therapeutics. I administered the remedy, and the pain disappeared".

The influence of nitrite of amyl in subduing the pain and shortening the paroxysm of angina has been confirmed by a considerable number of observers. In two cases under my own care it has been remarkably successful; but, notwithstanding the success of Dr. Brunton's therapeutics, I doubt the accuracy of his pathology, and I believe that the *modus operandi* of the remedy is different from that which he assumes it to be.

I will first state, as briefly as possible, my objections to his theory, and I will then suggest a different explanation of the phenomena.

There is no proof that arterial contraction is present in all cases of angina pectoris. So far as I know, Dr. Brunton's case is the only one in which the results of sphygmographic observations during the paroxysm have been recorded. Even if it were shown that contraction of the arterioles and high arterial tension are constant phenomena, proof would still be wanting that they are the cause of the angina.

If high arterial tension, with resulting backward pressure of blood upon the heart, were the sole or the main cause of angina pectoris, such symptoms might be expected to occur during the early stage of nitrous oxide inhalation, when before the period of anaesthesia there is unquestionable evidence of high arterial tension. (See my first Lumlum Lecture, BRITISH MEDICAL JOURNAL, April 14th, p. 446.)

In most cases of true angina pectoris, there is organic disease of the walls, or of the valves, or of the coronary vessels of the heart. (See, as to this, Dr. Gairdner's able and exhaustive essay on Angina Pectoris in the fourth volume of Reynolds's *System of Medicine*.) Dr. Brunton's theory suggests no explanation of the arterial contraction, or of the relationship between the central structural changes and the peripheral vascular contraction. It seems more probable that the pain is in some way directly due to these organic changes in the heart itself, than that it is a secondary result of a peripheral arterial contraction occurring without obvious exciting cause.

Dr. Gairdner in his essay (p. 375) refers to a paper by Nothnagel, who had in part anticipated Dr. Brunton by giving particulars of five cases of so-called "angina pectoris vaso-motoria". Dr. Gairdner points out that Nothnagel's cases differ from cases of true angina in some important particulars, especially in the absence of severe pain; in the transient, trivial, and curable character of the attacks; and, in the fact that, the sensations in the extremities supposed to result from vaso-motor spasm (deadness, coldness, formication and pain) were usually present in all the extremities indifferently, and preceded the palpitations and cardiac uneasiness by some minutes. And Dr. Gairdner remarks that, "the lesson taught by Nothnagel's cases is not, properly speaking, that typical, still less that fatal, angina pectoris, is always to be regarded as due to vaso-motor spasm, but rather that, under certain peculiar conditions of the system, a sudden check to the circulation in the extremities determined by vaso-motor spasm may become the cause of an increased action of the heart, palpi-



tation, and pseudo-angina; the disease so induced, however, being devoid of the characteristic pains, and the more aggravated phenomena of fatal angina."

I now pass on to my own explanation of the relationship between the pain of true angina pectoris and the arterial contraction; also of the *modus operandi* of the nitrite of amyl in these cases.

I believe that we have as yet no data which will enable us to give a complete explanation of the pain of angina pectoris, whether it be a pure neuralgia with consequent inhibition of the cardiac contractions, or a result of cardiac muscular cramp, or of overdistension of one or more of the heart's cavities, or a combination, in some cases at least, of two or more of these conditions, must remain at present a matter of doubt. It is agreed on all hands, that the pain is often agonising, and that it often radiates into neighbouring sensitive nerves, more especially those of one or both arms. It is a fact ascertained by experiment, that electrical irritation of the central end of a mixed or a sensitive nerve, such as, for instance, the sciatic or the trigeminal, not only causes severe pain, but also excites by a reflex influence through the vaso-motor centre, a general contraction of the arterioles, with resulting high arterial tension. (See Vulpian, *Leçons sur l'Appareil Vaso-Moteur*, tome i, p. 237, etc.) I, therefore, venture to suggest that the high arterial tension, when associated with angina pectoris, is a secondary reflex result, and not the primary cause of the cardiac agony; and, further, that the remedial efficacy of the nitrite of amyl is due to its remarkable influence over some forms of neuralgia, and not to its relaxing effect upon the arterioles, except in so far as its antineuralgic power may depend upon its influence on the arterioles. My contention is that, in addition to the centripetal nervous influence which causes the pain of angina, there is an influence reflected from the nervous centre through the vaso-motor nerves, and thus exciting a more or less general contraction of the arterioles. It is probable that the peripheral arterial resistance, although not the primary or the main cause of the pain, yet adds to the distress and the danger of the paroxysm. We have no evidence to prove that in any case of angina there is a general arterial contraction. It may be that the arterial contraction, like the pain, is limited to one or both arms.

A true theory of the relationship between angina and arterial contraction, and of the manner in which the nitrite of amyl affords the remarkable relief which it often does, is not without practical utility, more especially as a guide in the selection of cases which are suitable for the employment of the drug. One of the most striking examples of great and permanent relief by the use of nitrite of amyl is afforded by the case of Dr. Herries Madden of Torquay, as recorded by himself. (*Practitioner*, 1872, vol. ix, p. 331; quoted also in Dr. Gairdner's essay, before referred to.) Dr. Madden states, that for a considerable time he had hesitated and neglected to employ the nitrite of amyl, in consequence of his belief that it was suitable only in those cases in which the face is pallid during the paroxysms. "As mine was flushed," he says, "I dismissed from my mind all thoughts of trying it, and paid the penalty of hasty conclusions in the shape of a large amount of acute suffering." The result of a first trial of five drops inhaled during a severe paroxysm "was truly wonderful. The spasm was, as it were, strangled in its birth; it certainly did not last two minutes instead of the old weary twenty, and so it continued. The frequency of the paroxysms was not diminished for some time; but then they were mere bagatelles as compared with their predecessors. Under these improved circumstances, strength gradually returned, the attacks became less and less frequent, and finally ceased." Now, in this case, although the relief from pain was associated with the usual evidence of the physiological action of the drug in relaxing the arterioles, the flushing of the face during the paroxysm forbids the conclusion that a general contraction of the arterioles was the cause of the cardiac distress, and that the relief was due to relaxation of the arterioles.

Dr. Talfourd Jones has given some good illustrations of the therapeutic value of the nitrite of amyl, not only in relaxing spasm, but also in rapidly relieving neuralgic pains. (*Practitioner*, 1871, vol. vii, p. 213.) Dr. Jones's experience has been confirmed by other clinical observers.

A few weeks since, I was consulted by a lady who for a fortnight had been suffering from severe facial neuralgia, which had resisted various remedies that had been employed before she came under my care. I advised her to drop five minims of nitrite of amyl on blotting-paper and to inhale the vapour. The pain was rapidly and completely subdued. In a few hours it returned in a milder degree, and it was again promptly removed by the amyl vapour, and, after three or four repetitions of the dose, the cure was complete. It would be interesting, and it might be instructive, to observe, whether during a severe attack of facial neuralgia or sciatica, there is any evidence of contraction of the arterioles, with resulting tension of the arteries.

In conclusion, I repeat the expression of my belief that the relief which is often afforded by nitrite of amyl during a paroxysm of angina pectoris, is due to its antineuralgic power, and not directly to its relaxing influence on the muscular arterioles.

## OPHTHALMOLOGY IN ITS RELATION TO PRACTICAL MEDICINE.

By H. MACNAUGHTON JONES, M.D., M.Ch., F.R.C.S.I. & E.,  
Surgeon to the Cork Ophthalmic and Aural Hospital, etc.

WHILE I was perusing the valuable and lucid exposition of Dr. Hughlings Jackson, on the relationship which at times exists between ocular motor disturbance and megrim, or it may be certain psychological phenomena, the following case presented itself to my notice. The man came to the extern department of the Cork South Infirmary and County Hospital. He is a very intelligent man, and the annexed description of his case is principally reported from his own statement of his past history and present symptoms. The interest which just now is taken in such cases, and the bearing of this one on the subject dealt with by Dr. Jackson, must be my excuse for here detailing the particulars.

W. A., smith by trade, aged 48, twenty-four years since, when living in London, fell into the hold of a vessel. He was removed to St. Thomas's Hospital. Mr. Solly, he says, pronounced his case to be one of "concussion of the spinal cord", with "displacement of the vertebræ" in the cervical region. He was insensible for some time after the injury; he had difficulty of feeding and inability to open the mouth; there was apparently no aphasia; he was salivated at the time; he remained in the hospital about eleven weeks. The right side was paralysed, with absence of sensation; the right extremities were useless. He was subsequently subjected to treatment by electricity, and became paraplegic; and both arms and legs were completely paralysed for the space of one year. He then recovered gradually, with a halting in the right leg, which remained ever since, and a difficulty in raising the right arm. He got a rheumatic attack about two years since, when the right eye became affected. At present, he has almost complete ptosis of the right eyelid; the pupil of the right eye is dilated; he has divergent strabismus of the same eye, pointing to paralysis of the third nerve. He can count fingers at any distance with the right eye. Vision  $\frac{20}{20}$  (Snellen), with + 60 =  $\frac{20}{20}$  nearly; I have not examined with prisms. When he walks with both eyes open, there is a peculiar halting gait and staggering of the right limb; with the sound eyelid closed with adhesive plaster, he gets complete megrim, and cannot walk (would fall); with the affected eyelid closed, he can walk much more steadily. There is ankylosis of the spinous processes of the third and fourth cervical vertebræ, with considerable enlargement of this region at the seat of the old injury.

*Ophthalmoscopic Examination.*—The fundus of the left eye is in every respect normal. The optic disc of the right eye is hyperæmic; the arteries are small and attenuated; the retina is otherwise normal.

*Psychological Phenomena.*—When "alone for any time, or violent", he sees visions of "men, women, and children, and animals of all sorts"; these gradually go on multiplying, and, when they "are at their height", he "fancies he sees the devil". He cannot describe all the shapes and forms he sees; they are so numerous. When this state has lasted for some time, he must lie or sit down. A feeling of nausea sometimes comes on, and he gets a sense of faintness; he never has had a fit. When he rubs the right side of the face with his hands, he says he gets a sensation as if he were subjected to an electric shock. The urine is of specific gravity 1015; no cloudiness, no deposit, no albumen.

## EXAMINATION OF THE POSTERIOR NARES.

By ALEXANDER HODGKINSON, M.B., B.Sc.

Honorary Physician to the Hospital for Consumption and Diseases of the Throat, Manchester.

SINCE the invention, or at least discovery, by Czermak of the art of examining the nasal portion of the pharynx and the nasal fossæ by means of a mirror placed at the back of the throat, the art of rhinoscopy has established for itself a reputation not merely as an aid to diagnosis, but also as a means of facilitating treatment, which its daily employment only serves to enhance.

Experience brings the rhinoscopist into contact with a class of cases in which the relations of the velum palati to the pharynx and tongue necessitate artificial displacement of the former, whilst excessive irritability of the parts with which the "palate-hook" comes into contact



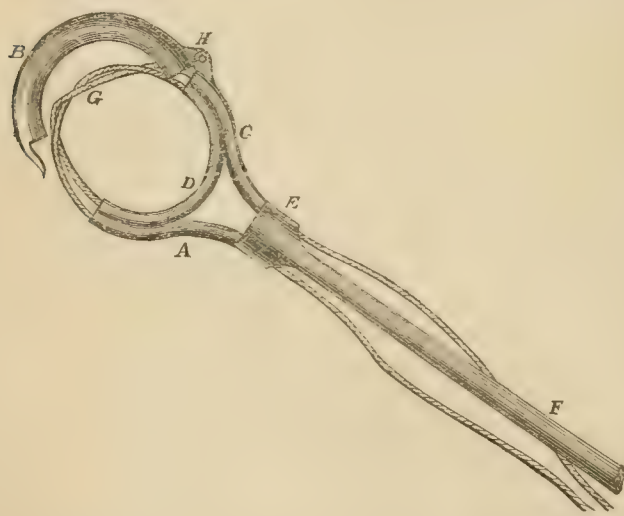
renders this instrument inadmissible. This circumstance, coupled with the fact that it monopolises the hand necessary for operating, or for the application of remedies, undoubtedly accounts for the disparaging terms in which its employment is spoken of by most writers on the subject.

As a substitute for the palate-hook, possessing all its advantages with few of its drawbacks, and as a means admissible in numbers of cases where the use of this instrument is excluded, I am in the habit of adopting a plan, the simplicity of which would certainly lead one to infer its previous employment, whilst perhaps, at the same time, explaining its want of notoriety.

A glance at the chief obstacles to a successful rhinoscopic examination shows them to consist either in (a) insufficiency of the distance between the soft palate and the posterior wall of the pharynx, or (b) in an extension in a downward direction of the attachments of the lateral margins of the soft palate to the pharynx, thus unduly limiting the space between the free margin of the velum and the dorsum of the tongue necessary for the adequate illumination of the rhinal mirror; and, lastly, (c) excessive irritability, which may complicate one or both the previous conditions.

Bearing in mind the precise nature of these obstacles, and recognising the desirability of a hand at liberty for operating, application of remedies, etc., the following directions become intelligible.

Placing the patient in the usual position and illuminating in the ordinary manner, having depressed the tongue with a rectangular tongue-depressor, I instruct him to hold it in position. Taking advantage of the insensibility of the uvula as compared with the neighbouring structures, I pass around it a ligature, tying sufficiently tightly to hold and yet to allow removal (practice soon determines this tension). Since this ligaturing of the uvula is not always unattended with difficulty, I have had constructed the following "uvula-snare", which, as its use obviates any difficulty in this respect, I will shortly describe.



It consists, as seen from the woodcut, of an outer hollow ring, A B C, the upper half being movable on the hinge H, and open along its internal margin; the lower half consists of the two tubes, A and C, united to the stem at the shoulder E, and communicating with corresponding perforations in it. The portion D consists of a semicircular tube open along its internal margin. The instrument is represented with the upper segment partially open, to show the position of the ligature when ready for use.

In preparing the instrument for use, the upper portion B being widely opened, an end of the ligature is inserted in one of the apertures in E, and drawn through the corresponding tube to the extent of about fourteen inches; an ordinary undrawn knot is now tied, and the same end of the ligature inserted into the distal opening of the other tube, and drawn out through the corresponding aperture in E. The lower portion of the loop having been arranged so as to lie in D, the upper portion is protected by closing B, when the instrument is ready for use.

The instrument being introduced, so as to allow the uvula to hang within the ring A B C, the free ends of the ligature are drawn tight, allowed to hang free, and the instrument withdrawn. If the proper tension have been exercised, the uvula and soft palate may now, by means of the ligature, be drawn forwards and to either side, whilst the examination is conducted by means of the rhinal mirror. This completed, and

the most favourable position of the palate for the attainment of the object in view having been thus determined, the free ends of the ligature are secured by the attachment of a small weight, and both passed over either ear, or one end over each ear, according as a lateral or median traction is found the most suitable. The operating hand is thus set at liberty, and may be employed under more favourable conditions than by any other method with which I am acquainted.

The ligature is usually easily removed by passing a bent blunt probe between the loop and the uvula whilst employing gentle traction by the free ends. In some specially unfavourable cases, where a satisfactory examination is not attainable on the first attempt, the object may be gained by a daily ligaturing of the uvula *high up* and stretching of the parts, thus occasioning their temporary relaxation, and, at the same time, familiarising the patient with the procedure; a circumstance tending materially to facilitate operations in these sensitive regions.

## HODGEN'S SPLINT, AS USED IN GUY'S HOSPITAL.

By J. FARRANT FRY, L.R.C.P. (late House Surgeon).

FOR some time past, fractures of the femur (whether of the neck or shaft) have been treated in Guy's Hospital with the Hodgen's splint. The results have been so uniformly satisfactory, that an account of the splint cannot but be of service, and will, in all probability, lead to its more frequent use.

A pole, about seven feet in length, is fastened to the foot of the bedstead, not at a right angle to it, but forming, with it, an angle of about 115 deg.; and, to make it more secure, it is better that the end of the pole should be fixed in the ground by a spike. To the upper end of this pole a pulley is attached. A piece of strapping (of which Leslie's brown holland is perhaps the best) is placed along each side of the limb, leaving a stirrup projecting beyond the foot, in which a piece of wood is placed, having some cord fastened to it. Thus vertically placed, strapping is now securely bound to the leg by horizontal pieces, extending from the ankle to as near the seat of fracture as possible, but, of course, omitting the knee.

The splint itself consists of an iron rod, extending on each side of the leg, from the groin on the inner and rather higher on the outer side, to a few inches beyond the foot, where the two rods are united by a transverse one; the two pieces are further fastened together by two or three rods arching across the limb. The cord fastened to the stirrup is now tied securely to the transverse piece, bringing these two almost close together.

To support the leg in the splint, something must pass between the two rods and beneath the limb. For this purpose, strips of bandage may be sewn to the rod on one side, and each separately carried beneath the limb and fastened to the rod on the other side, after being drawn sufficiently tight to fit the inequalities of the leg. A cord is now fastened by its ends to the outer and inner rods, rather above the knee, leaving a large loop, at the centre of which is a double-block pulley, round the lower wheel of which the cord runs. Another cord is fastened in a similar manner midway between the knee and ankle, and leaving, like the first, a large loop passing through another double pulley. The splint containing the limb has now to be raised from the bed by a third cord, which passes through the upper wheel of the two double-block pulleys, and thence round the pulley attached to the pole at the foot of the bed.

By this means, the limb can be raised to any height, the most convenient being an angle of about 135 deg. with the recumbent body. The lower end of the bed should be raised on blocks, to prevent the patient from being dragged down by the extension which is exerted.

Until this splint was introduced, the long outside-splint with weights was generally employed; but whether this plan, the perineal band, or double inclined plane, was adopted, the results were so bad that Mr. Cooper Forster, in the *Guy's Hospital Report* for 1875, says: "If an adult fractures his thigh, it is all but certain that there will be shortening of an inch; and that the method adopted to keep up extension does not matter, provided always that, whatever the plan may be, it is overlooked with care, the result will be about the same."

The advantages claimed for the Hodgen's splint over others are: 1. Less shortening of the limb; 2. Greater comfort to the patient, who is able to sit up in bed, to turn on either side, and conveniently to use the bed-pan; 3. Less liability to bed-sores in aged people. In fact, there is no one point in which (for an adult) any other treatment is to be preferred.

The results, as regards shortening of the limb, may best be shown by giving statistics of an equal number of cases. Out of seventeen unselected cases of fracture of the shaft of the femur, treated in 1874 by



the long outside splint and weights, varying from ten pounds to fourteen pounds, the average amount of shortening was more than an inch; in one case, it was two inches; in five, it was one and a half; in five, it was one; and in two only, was it less than an inch. No case is recorded in which there was no shortening. This exactly accords with eleven cases reported by Mr. Cooper Forster in the *Guy's Hospital Report* for 1875. Out of seventeen also unselected cases, treated with the Hodgen's splint, the average amount of shortening was considerably less than half an inch. In two cases, it was one inch, and in all the rest it was less than an inch; six cases being returned without any shortening.

### HYDROBROMIC ACID.

By EDWARD WOAKES, M.D.,

Surgeon to the Throat Hospital.

THIS drug having established its claim to antagonise the ear-symptoms occasioned by large doses of quinine, there appears to be but one step between this fact and the inference that it should be equally efficacious in analogous states of the ear arising from other causes. Viewing certain forms of tinnitus as possessing marked analogy to the condition induced by quinine—one, that is, of congested labyrinthine circulation—I have prescribed certain remedies with a view to the relief of this most distressing symptom; amongst these codeia, with some advantage, but not in any degree comparable to the results attending the hydrobromic acid. It may be needless to remark that the cases should be selected with a view to their appositeness to the presumed physiological action of the drug; and the indication which should be regarded as most distinctly pointing in this direction is that the noises have more or less of a pulsating, or, as the patient will describe it, a "knocking" character. The existence of vertigo, if present, will rather confirm the indication for the exhibition of the acid. The subjoined cases are intended to illustrate these remarks, and are taken from a number of others under recent observation.

F. C., aged 24, was the subject of otorrhœa media, associated with tinnitus of a very distressing character. This latter symptom persisted long after the others had yielded to treatment. The patient, a fairly intelligent mechanic, described the noises as increased on lying down, when they became "like the knocking of his heart". He was ordered fifteen minims of hydrobromic acid in water every four hours. At his next visit, he stated that, after taking three doses, the noises had much diminished, an improvement which steadily continued, so that at the end of a week he considered himself well.

J. T., a chorister, aged 33, presented an acutely inflamed condition of the lining membrane of the middle ear, which projected through a large central perforation of the drum-head. The external meatus was red and tender in its deepest portion, and near the membrane were two granular polypoid growths. There was abundant otorrhœa of a very foetid description. After removal of the growths from the external canal, the subsidence of the inflammatory state of the tympanic cavity, together with the discharge, he still complained of pulsating noises in the head, increased by walking or stooping, headache and occasional giddiness. The hydrobromic acid was given, as in the previous case, with an equally rapid disappearance of all the symptoms associated with the tinnitus.

Two points appear important to secure the success of the drug. 1. The auditory apparatus must be clear of any well marked objective morbid process. 2. The tinnitus should present the characters of congested blood-supply, already alluded to. In mentioning the foregoing facts at a recent discussion at the Harveian Society, owing to the lateness of the hour, the distinctive indications for the successful administration of the drug were not insisted upon, an omission which, I trust, this communication will sufficiently rectify.

MARYLEBONE.—Dr. Whitmore states that in the quarter ending March 31st there were registered 1,240 births and 920 deaths, which give an annual death-rate of 23.10 per 1,000, being 3.74 per 1,000 more than in the previous quarter. This excess was chiefly caused by an unusual mortality from pneumonia and bronchitis. There were four deaths of young children from small-pox, one of whom was successfully vaccinated seven days before the disease appeared. There were also nine deaths from this disease in the Metropolitan Asylum Hospitals. A meteorological summary is also given for the quarter, showing that the highest and lowest temperatures were observed in March, and that as much as 5.06 inches of rain were registered in January. The sanitary works carried out show reasonable activity for the time of year.

## OBSTETRIC MEMORANDA.

### PUERPERAL ERYSIPELAS.

MR. FORD'S Case of Erysipelas in connection with the Puerperal State reported in the *JOURNAL* of June 2nd, reminds me of a similar one which came under my care about a month ago. In my case, however, an attack of facial erysipelas came on three or four days after labour, and readily yielded in a few days to treatment by the internal use of tincture of sesquichloride of iron and the external application of thin gruel; nor was there any interference with either lochial or lacteal secretion. Unlike Mr. Ford's patient, mine was in very indigent circumstances.

J. B. WILLIAMS, M.R.C.S., L.S.A., Hull.

### MIDWIFERY-FORCEPS.

THERE is no instrument used by the medical profession of which there are so many varieties as midwifery forceps. In the lists published by Maw, Son, and Thompson, and by Arnold and Son, there are forty-five. Each, no doubt, in the opinion of the inventor, has its peculiar advantages; but in all the long forceps there is a very serious defect: *i. e.*, it is impossible to use traction with them in the axis of the inlet of the pelvis, without using undue pressure on the perinæum or os pubis of the mother. To illustrate what I mean, let us bear in mind the direction of the pelvic axis. A line, carried from the umbilicus to the middle of the coccyx, gives the axis of the inlet; a line, drawn from the upper part of the sacrum to the centre of the outlet, gives its axis. Let us take it for granted that the child's head is at the inlet, and we want to deliver; if we attempt it with straight forceps, we find the thing impossible (unless the sacrum be very slightly curved and the perinæum short), because the instrument will occupy the axis of the outlet. With curved forceps, we may deliver—but how? The blades are in the axis of the inlet, the handles in the axis of the outlet, and, consequently, nearly all the force must be exerted against the os pubis. With these mechanical disadvantages, the pressure unavoidably employed is often sufficient to sacrifice the life of the child. It is said that, with "Tarnier's new forceps", or rather two forceps, the operator can *always* use traction in the axis of the pelvis, and I believe this to be the case; but the instrument is too complicated, and requires the use of both hands, one to each forceps. A far simpler instrument, about which I have been thinking for some time past, will do all that it is said to do. Let us take, for example, Knight's forceps (there is a picture of it in Maw and Son's illustrated list); it locks by a screw, the handles are of steel, with a blunt hook at the end of each. Now, let us bend the handles as much backwards as the blades are curved forwards, and let us fancy that this instrument is applied on the child's head, and that it is at the brim of the pelvis; we find that the blades are in the axis of the inlet, the perinæum resting on the depression at the lock, and the ends of the handles on a line with the axis of the inlet of the pelvis; consequently, traction made by them must be in that line. As the labour advances, by letting the handles of the instrument go forward, one must be in the axis of the pelvis all the time. This instrument is very simple, and will require very little force, because it can always be used in the right direction; the lock will act as free as straight forceps, because the curve of the handle corrects the curve of the blade.

DAVID CHRISTIE, L.R.C.P.E., Carrigart, Co. Donegal.

### GLASS SPECULA.

IT may not be known to all the readers of the *JOURNAL* that glass specula, not quite of the same kind as those mentioned by Dr. Murphy, have been used for many years in Germany. In 1866, I purchased, in Berlin, a case containing four specula of various sizes packed inside each other, and made of opalescent glass, which is very tough, and bears boiling water without cracking. I have used these constantly in my practice, and prefer them to any of the others in common use.

THOMAS FAIRBANK, M.D., Windsor.

I FULLY agree with Dr. Murphy as to the superiority of plain glass specula. I have tried them, and have proved them to possess all the advantages which he claims for them.

My reason for writing, however, is to point out that the toughened glass of which he and other correspondents are desirous of having them made has been known to "explode" suddenly and without any apparent cause. Should this occur during their introduction, or while *in situ*, it would be extremely awkward, if not absolutely dangerous.

H. F. C. EAGLE.



## REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN  
THE HOSPITALS AND ASYLUMS  
OF GREAT BRITAIN.

## GUY'S HOSPITAL.

A CASE OF INJURY TO THE ELBOW-JOINT: SECONDARY EXCISION:  
NEW FORM OF SPLINT.

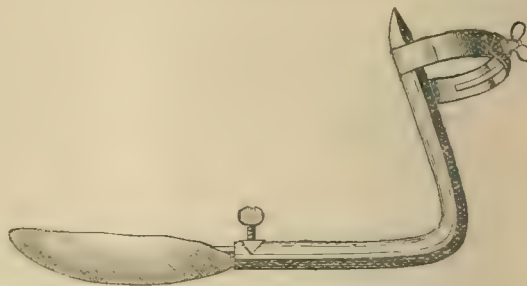
(Under the care of Mr. JACOBSON, Assistant-Surgeon.)

\*J. H., AGED 16, on September 15th, 1876, received a lacerated wound just below the external condyle of the right humerus from a broken glass bottle which was flung at him. He was treated at Guy's Hospital as an out-patient at first; but, it becoming clear that the joint itself was becoming involved, he was made an in-patient on September 28th. Mr. Davies-Colley saw the patient in Mr. Jacobson's absence, and made incisions into the elbow-joint, giving free exit to pus. On October 5th, the discharge being offensive and the temperature varying from 103 to 105 deg., Mr. Jacobson passed a drainage-tube through the joint; the wounds being now syringed out daily with a solution of carbolic acid (1-20), and dressed antiseptically. By October 10th, the temperature had fallen to 99.8 deg. Shortly after this date, examination under chloroform showed that ankylosis of the elbow-joint was rapidly taking place, and excision was accordingly performed on October 28th. The only noteworthy point about the operation was the extent to which the ulna was diseased. This bone, on account of the extensive necrosis which had befallen it, was sawn through two inches below the coronoid process. It having been necessary to remove so much of the ulna, and it being doubtful how far its periosteum (which was found separated and as it were in tatters) would recover itself, some pains were taken to preserve the periosteum on the lower part of the humerus before this bone was sawn through above the condyles. The operation was done throughout antiseptically. The limb was immediately afterwards put up on the splint which is figured below. It consisted of three parts.



One is an angular bar of thin tinned sheet-iron fitting over the front of the arm, the elbow-joint, and the forearm. This bar was hollow, quite smooth, so that any padding might be dispensed with: a point of importance in this case, where the wound was dressed with carbolic spray, etc.† In a socket in the lower end of the angular bar fitted a movable hand-piece padded with wash-leather. This hand-piece could be turned completely round and fixed by means of a screw in any desired position. The object of this hand-piece—and it answered admirably—was to secure the easy and early carrying out of passive movements of pronation and supination. Thus, the forearm after the operation having been put up in a position of complete supination (the splint is thus shown in one of the woodcuts), after the first fortnight, when the wound was becoming superficial and it was no longer necessary to bandage the arm so tightly to the splint, the movable hand-piece (and the hand with it) was readily turned to and secured in varying positions. Thus for two or three days it was turned more and more into the position of pronation; on the ensuing days, in the opposite direc-

tion, and so on, and this with a minimum of disturbance to the elbow-joint itself. The dresser, Mr. Ross, who, together with Mr. Bates, took the utmost pains to secure a good result, added the armlet. Three weeks after the operation, the arm was taken off the splint daily, and flexed and extended. Early in December, the parts were completely healed. To secure constant movement of the part, the patient was kept in the hospital till February 1877.



In April), the following was the state and usefulness of the joint. Flexion and extension were as good on the right as on the left side. Pronation and supination were almost completely restored. With his elbow-joint flexed, so as not to avail himself of any rotation of the humerus, he could pronate and supinate his right hand completely, but not as yet sufficiently quickly to justify one's speaking of this movement as being completely restored. The upper third of the ulna was restored, but was somewhat irregular and bulky. Both condyles were reproduced, the internal one being again larger and more prominent. The intervening bone (olecranon-fossa, etc.) was probably not so completely reproduced, as the forearm could be superextended upon the arm.

As far as one case can do so, this case shows clearly that, as a rule, in all cases of undoubted disease of the elbow-joint which have originated in an injury, early resort to excision will be found to give a far better result than any form of expectant treatment, in which the patient must run the risk of ultimate ankylosis even with his limb in a good position. And this rule should apply especially to young subjects, and for two reasons. On the one hand, early ankylosis is here especially to be dreaded, on account of the rapidity with which at this time of life, as soon as a joint is once involved, its component structures disappear; while, on the other hand, a good result may now be confidently expected to follow an excision.

This case also shows that, though at the time of the operation one or more of the bones be found extensively involved, a good prognosis may still be given in these cases where there is no constitutional mischief. Furthermore, in any case of excision of the elbow-joint where, for any reason, much of the periosteum has been retained, it is imperative that passive movements should be begun early; chloroform being given, if necessary, to render the carrying out of the step the easier.

It will be noticed that this case was treated almost throughout antiseptically. A surgeon who, though he may find the minutiae of this method somewhat troublesome, and almost amounting to a nuisance (from the fluid of the spray) in certain operations, such as the extirpation of deep-seated tumours, operations on deep-lying herniæ, ligature of large vessels, or division of nerves, still perseveres with this method, convinced of its value in practice, though he may not be able to make up his mind as to the correctness of the theory on which it is based, will find his trouble repaid when he makes use of it in excisions of joints. He knows that he is almost certain to have no erysipelas, and that the suppuration will be limited in quantity and unirritative in quality. As a result of this, in a case like the above, the deep parts soon consolidate, while fibrous tissue or fibro-cartilage forms early on the cut extremities of the bones; for, the surgeon being enabled to begin passive movements early, the fashioning of the new joint goes on rapidly.

## ROYAL SOUTHERN HOSPITAL, LIVERPOOL.

## ADDISON'S DISEASE WITHOUT BRONZING.

(Under the care of WILLIAM CARTER, M.B., LL.B., M.R.C.P. Lond., Physician to the Hospital.)

THE following case of Addison's disease, in which there was no staining whatever either of skin or mucous membrane, may be of interest.

Joseph S., said to be 14, but looking younger, a slightly made fair lad with light hair, was admitted into the Royal Southern Hos-

\* This patient was shown to the Hunterian Society, March 28th, 1877.

† A somewhat similar angular splint, but considerably heavier and with no armlet or any kind of hand-piece, has for some time past been very successfully used by Mr. Howse in cases of excision of the elbow in his wards at Guy's Hospital. From this splint of Mr. Howse, the angular part of the splint used in the above case was, as to its shape and angle, copied.



pital, Liverpool, under Dr. Carter's care, on February 6th, 1877, from a neighbouring industrial school. His parents had been dead for some years, the cause of the mother's death having been consumption. He did not know of what disease his father died. His own illness began a week before admission with severe pain in the head, accompanied by vomiting and intermittent pain in the left side. Before the coming on of this illness, he had suffered much from feeling cold. His chief complaint when admitted was of very severe headache, mainly frontal. He felt giddy on sitting up, and was troubled with nausea and vomiting. He had never had a fit of any kind. Before being placed in bed, it was observed by the house-surgeon that he had great difficulty in walking. Sensation was perfect everywhere. The pupils were normal; conjunctivæ congested. He suffered from slight cough, and said that he had spat thick phlegm, but no blood. The pulmonary and cardiac sounds were weak, but otherwise normal. Pulse 108, very feeble. The urine passed during the first twenty-four hours was clear, of a sherry colour, acid, specific gravity 1020, contained no albumen, but chlorides in abundance. He lay in bed and appeared to take very little notice of what was going on around him. A dose of bromide of potassium was given to him, and a sinapism ordered to the nape of the neck.

When seen for the first time on the following day, his chief complaint was of very severe pain in the head, to relieve which a small blister was ordered to be applied to the nape of the neck. Between eight and nine in the evening he vomited, but the sickness soon passed off.

On the 10th, he felt much better, and wished to get up. He had slept well after his draught. The bowels were acting regularly.

The headache was much worse on the 12th. The next day he was again a little better, after which there was not much change in his condition until the morning of the 18th, when he accidentally fell and struck his head. Shortly after this he vomited. He was unable to take any breakfast, and said his headache was worse than ever it had been.

March 7th. He was drowsy, but had no headache. Pulse 96, weak. On the 8th, it being necessary to make some change in the arrangement of the wards, he was carried in his bed upstairs. Immediately after the removal he vomited, and on the following morning had epistaxis.

After this he continued to be worse. On the morning of the 13th he was drowsy and sick, all food and liquid being vomited. The pulse was scarcely perceptible. He complained still of the extreme severity of the headache. He sank into a comatose state at 3 P.M. on this day, and died quietly an hour and a half afterwards.

*Necropsy twenty-two hours after death.*—The body was thin. The most careful examination of every part failed to detect the slightest discoloration of skin. Even the areolæ and axillæ were perfectly free from stain. There was no purple spotting on the mucous membrane of the cheeks or lips, or on any part of the tongue, which was now removed from the body that its entire surface might be examined. There was no decided difference of colour between the blistered and non-blistered surface at the back of the neck. The skin was unusually fair, and its fairness was unbroken anywhere by mole or dark spot of any kind. The penis was not discoloured. The skin over one areola was removed for microscopic examination.

*Brain.*—There were signs of inflammation at the vertex, greenish-yellow lymph being effused beneath the arachnoid over a space some four inches in length and two inches in breadth. All else appeared healthy.

*Chest.*—At the extreme apex of the left lung was a tuberculous mass as large as a filbert undergoing caseation. A few small hard tubercles were also scattered through each lung. The heart was very small; when quite freed from all trace of blood or clot, weighing only four ounces. Its valves were normal. The liver was healthy; it weighed 2 lbs. 14 oz. The spleen was healthy; its weight was 4½ oz. The omentum contained but little fat. The intestines were healthy; their coats thin. There was no apparent enlargement of any of the glands; nor was there any ulceration. The mesenteric glands were enlarged and hard. The kidneys were normal; the weight of each was four ounces.

*Adrenals.*—Both of these were converted into tuberculous masses. The right one was adherent to the kidney, and could not be dissected away from it; otherwise, there were no adhesions to surrounding parts. The organs were enlarged, hard, and nodulated. They assumed a reddish hue on exposure; and, on section, were gritty in patches, the knife cutting through calcareous masses, and in other parts were undergoing caseation. The dimensions and weight, after they had been cleared of all extraneous matter, were as follows: Right—Length, 1¾ in.; breadth, ¾ in.; weight, 2 drachms 24 grains: Left—Length, 1¾ in.; breadth, ¾ in.; weight, 2 drachms. The bladder was full of clear

limpid acid urine, which gave no trace of albumen. Taking for examination five cubic centimètres of this urine, the total weight of which was 5.085 grammes, there was found, after careful evaporation and drying at 200 deg. Fahr. until weight ceased to be lost, .155 gramme of total solids, of which .095 gramme consisted of organic, and .060 gramme of inorganic constituents. The proportion of organic to inorganic constituents was therefore greater rather than less than is found in most normal urines. The percentage of urea, as estimated by the method of Russell and West, was 1.5.

The unusual features in this case (independently of the extreme headache, which was accounted for by the meningeal inflammation) were the fairness and complete freedom from staining of the skin or any internal organ; the rather high specific gravity of the urine; and the small quantity of deposited fat; for, though the emaciation was not extreme, the boy was very thin, and there was very little fat in any of its usual sites.

## TOWN'S HOSPITAL AND ASYLUM, GLASGOW.

### UNILATERAL HALLUCINATIONS OF HEARING.

(Under the care of Dr. ALEXANDER ROBERTSON.)

THE following case illustrates in the sphere of mind a class of phenomena which, in motor and sensory disorders of the nervous system, have of late attracted considerable attention.

J. W., aged 37, inmate of the hospital, states that, as a lad, he consorted with thieves; but he denies having been of drunken habits, though this may well be doubted. About nine years since, he was sentenced to imprisonment in Perth Penitentiary for fifteen months on account of theft. After about a year of solitary confinement, he began to hear "voices", which cried to him in at the door of the cell when it was shut as well as when it was open. Sometimes the voice seemed that of a man; at other times, that of a woman. Ever since then, to use his own expression, they have "terribly plagued" him. They would tell him "not to be ashamed to steal or to beg"; they have told him to take away his own life. He had hitherto been able to resist the temptation or order. They have always been in the right ear, "never in the left". He has often been in doubt whether to regard these voices as real or imaginary, but at present he speaks of them as fancies. Without being asked the question, he remarked that he had often put cotton into the ear, which would frequently almost, but not altogether, put the voice away at the time; but it might come back as loud as ever, even though the cotton was still in the ear. His hearing was carefully tested, but no defect was found in either ear; nor had he pain or other abnormal sensation in them.

He also suffers from hallucinations of vision. "I imagine", he said, "I see figures of little men and women, particularly with the right eye." He can see them when the eyes are shut. The other senses are not involved. He is quiet and dull in disposition. His general health and condition are good.

REMARKS BY DR. ROBERTSON.—One-sided hallucinations are in mind the analogues of unilateral convulsions or hyperæsthesia. In the latter cases, through morbid action, the centres for motion or sensation, or a part of them proportionate to the amount of the side involved, would seem to be called into excessive exercise; so, in the former, the highest centre for hearing on one side, which is probably opposite to that on which the imaginary voice is heard, is apparently specially implicated. And, to quote from a previous paper of mine on this subject,\* "just as the partial may merge into the general convulsive seizure, or as the limited disorder of sensory function, such as is seen in a severe neuralgia, may, though more rarely, be diffused in various directions along sensory nerves, so may the sensorial disturbance evinced by an illusion, or the psycho-sensorial disorder manifested by hallucinations, become generalised, involving the mental powers in varying degrees in different cases". In this primarily unilateral aspect, the correspondence between the physical and the mental seems complete. So may we consider it to be with the location of the lesions on which the respective symptoms depend. In the case of a hemichorea, we turn to the corpus striatum as the probable centre involved. In an epileptic seizure beginning by one-sided convulsions, and with retention of consciousness at its commencement, we now look rather to the surface of the brain, and particularly to the convolutions bounding the fissure of Rolando, as at least the immediate, and often, I believe, the sole, focus of irritation in such cases. Where there is a hemihyperæsthesia of cerebral origin, we consider it likely that the thalamus opticus or its neighbourhood has suffered. In like manner, when a voice is projected outwards and is always referred to one ear,

\* Read at the Edinburgh meeting of the British Medical Association, and published in the *Glasgow Medical Journal* for October 1875.



we seem equally warranted in locating the centre of morbid action in some point of the opposite hemisphere; this point being the superior temporo-sphenoidal convolution, should Ferrier be correct in his conclusion as to the seat of the auditory centre.

What has been said respecting hearing is doubtless true, *mutatis mutandis*, of the other senses; but, in my experience, unilateral hallucinations of them are far less common. Thus, as stated in the paper referred to, out of thirty-four cases in which there were well-marked hallucinations of one or more of the senses, in only six were they absolutely confined to the one side, and all of these were of hearing. In one patient, the visual hallucinations, as in J. W.'s case, were decidedly more pronounced in the one eye than the other. The disorders of the other special senses were bilateral; at all events, they could not be determined to be unilateral.

## REVIEWS AND NOTICES.

THE FUNCTIONS OF THE BRAIN. By DAVID FERRIER, M.D., F.R.S., etc. London: Smith, Elder and Co. 1876.

THE discovery in 1870 by Fritsch and Hitzig of the electric excitability of the surface of the brain was a fresh point of departure in the history of cerebral physiology. The new method of inquiry, in the hands of skilful men, soon yielded surprising results, and there appeared to be the immediate prospect of having a solution of many difficult problems connected with the functions of the brain. In Germany, Russia, France, America, and Great Britain, various physiologists and physicians immediately entered on this new field, and we venture to say that no scientific question connected with physiology and the medical profession has excited so much attention and provoked such discussion since the appearance of the "Cellular Pathology" of Virchow. The first in this country to notice the importance of the method employed by the two Germans, Dr. FERRIER entered on a fresh investigation, modifying methods of experiment, striking out into new paths of research, and pushing ahead with characteristic industry and earnestness. The results of his labours are in the work before us. In these days of hasty criticism, when the "early copy" is rapidly skimmed over, so that a review, filled with copious extracts, appears perhaps on the very day of the publication of the book, our readers may have expected a notice of this work before this time. The delay, however, is an advantage, inasmuch as we can now more calmly consider the book, and endeavour to ascertain what it has really added to our knowledge. When a new method in science is invented, men of sanguine temperament are apt to regard it as a key which will unlock many secrets, and they hail it with shouts of joy; but as time passes on, and the method and its results are subjected to criticism, it often appears that the advance has not been so great as was at first expected. Let us see whether this applies to the present work or not.

Before proceeding to a detailed notice of this important book, we wish to state our opinion that very few men in this country were better fitted for entering upon an examination of the functions of the brain than Dr. Ferrier. Trained in the study of logic and psychology by so able a master as Bain of Aberdeen, he added to his professional accomplishments those of a physiologist who was thoroughly acquainted with experimental methods. His bias towards research in cerebral anatomy and physiology having been shown by an elaborate graduation thesis on the *corpora quadrigemina*, it is what might have been expected that, on becoming cognisant of the researches of Fritsch and Hitzig, he was the very man to enter upon the new field. To work this field thoroughly, and to expound the results of his researches with clearness, required three qualifications not often met with in the same person: first, the writer must be a physiologist, basing his knowledge of the functions of the brain on anatomy, histology, and experiment; second, he must be a physician, having a practical knowledge of diseases of the nervous system, so as to be able to appreciate the value of pathological results; third, he must know the modes of thought and the language of psychologists, so that he can bring to bear on the great problems of consciousness, memory, and the general relations of mind and brain, all the facts derived from anatomy, physiology, and pathology. Dr. Ferrier's volume shows, on almost every page, that he is singularly fitted for this kind of work; and consequently the book on perusal gives generally a feeling of thoroughness and comprehensiveness of grasp, which appeals both to the physician who looks to physiology for facts to help him in diagnosis and treatment, and to the mental philosopher who wishes to know as much as possible of the functions of the brain, the organ with which his studies, on the objective side, are chiefly related.

The method followed by Dr. Ferrier in composing this work has the merit of making the whole subject intelligible even to a non-professional

person. Instead of at once bringing forward the results obtained by electrical excitation of the surface of the brain, he begins by giving the reader a general description of the structure and functions of the spinal cord and encephalon. He brings before him, in clear and accurate language, a summary of our knowledge of the nervous system, so that the inquirer is gradually brought up to the point when the method of electrical excitation was commenced. This may be regarded as the first part of the book. Then he gives in two or three chapters a *résumé*, by no means wearisome, of the results of his own experiments on the cerebellum, cerebrum, and the basal ganglia. Interwoven with this part are criticisms of other modes of investigation, details of experiments on relative questions, and replies to those physiological critics, such as Brown-Séquard, his pupil Dupuy, Carville and Duret, and Burdon Sanderson, who have objected to the interpretation of some of the results obtained by the electrical method. Frequently, also, Dr. Ferrier shows the practical side of the whole matter by introducing illustrations of pathological states, and by endeavouring to harmonise these with the results arrived at by his own experiments. The eleventh chapter, in some respects the most important and certainly the most difficult to write, is devoted to a consideration of the bearing of these results on psychology; the twelfth is a kind of summary of the author's views regarding the functions of the various parts of the encephalon; and the thirteenth and last is a chapter replete with technical details regarding cerebral and cranial topography. Such is the plan of a book, wisely conceived and skilfully executed. From this point of view, our criticism may be summed up in a single sentence, recently uttered regarding it by a distinguished anatomist, who is no mean judge of literary merit: "It is a clever book."

In the progress of science, it is rarely the lot of one man to originate an entirely new method, or to present an entirely new aspect of truth. It has always been the case that suggestions and hints as to future progress have floated in the atmosphere of thought before the appearance of a great discovery, and in these days of rapid diffusion of ideas, it must be so to a greater extent than hitherto. The theory of "evolution" has not entirely originated with Herbert Spencer; "Darwinism", in its widest sense, has not been produced solely by our great countryman; and the wonderful discoveries of Crookes of movements *in vacuo* of discs under the influence of light were guessed at by another. It is, therefore, only fair, when any discovery is announced, to ask who were the pioneers, who were the men, often labouring in obscurity, whose thoughts and suggestions prompted the discoverer? In the case before us, there can be no doubt as to the answer. The speculations of Hughlings Jackson on the pathological causes of various nervous affections, and the experimental method of the two German physiologists Fritsch and Hitzig, lie undoubtedly at the basis of Dr. Ferrier's work. This is acknowledged by Dr. Ferrier in such a manner as, we trust, will be satisfactory to scientific men in Germany, who have shown not a little irritability on the subject.

The next question is, what has this method of research contributed to our knowledge of the functions of the brain? Prior to these experiments, it was supposed that the surface of the brain could not be directly acted upon by electricity. The surface of the brain, consisting of grey matter, was held to be inactive under various modes of irritation, such as cutting, pricking, stimulating by electrical currents, etc. It could only be affected, apparently, by influences travelling in the physiological order, from below upwards; that is, irritations applied to a nerve, *e.g.*, in the leg, would transmit influences upwards to the grey matter on the convolutions so as to cause a sensation of pain and possibly excite voluntary muscular movements; but it was not supposed, indeed it was denied, that grey matter could be directly stimulated, and it was generally held that the grey matter of the brain, on the surface of the convolutions, was somehow or other associated only with mental phenomena (a term of the most vague physiological significance), feeling, willing, thinking. It was conceded, also, that the neural process connected with a feeling of volition to perform a certain movement, such as flexing the right forearm, or turning the head to the left, must take place in grey matter somehow in the convolutions of the cerebrum, but there was no notion that there were centres in the grey matter of the hemispheres for each individual group, or for associated groups, of muscles. It was rather conjectured that a kind of general mandate was transmitted from the cerebral convolutions to a basal ganglion or to the cerebellum, and that thence influences were sent along certain routes so as to cause movements of particular groups of muscles. But the importance of the new method largely consists in this, that it has been proved that when certain areas of grey matter on the surface of the brain are traversed by an electric shock (as in opening and closing the continuous current) or by a rapid series of such shocks (as obtained by the use of any kind of induction machine), movements of definite groups of muscles are



observed. Interruptions of the continuous current constitute the method of Fritsch and Hitzig, while the use of induction-currents is preferred by Ferrier. Now there is no doubt whatever about the statement that irritation of certain definite areas is followed by certain definite movements that can be predicated. Such an able experimentalist as Dr. Ferrier can easily persuade the most sceptical of that. If this be so, knowledge of the fact ought to be kept carefully apart from any hypothesis as to its explanation. Other kinds of irritations in these so-called motor centres will probably cause convulsive movements or paralytic affections of definite groups of muscles, as has been advocated by Hughlings Jackson. Thus the fact is of great practical importance, and no doubt may constitute a valuable guide in the diagnosis and prognosis of disease.

But when we ask, Why is it so? we are met by many difficulties. Is the effect following the application of electrodes to the surface of the brain due to a true stimulation of grey matter, exciting in it functional activity, or is it due to stimulation of nerve fibres in the corpora striata or deeper ganglia? It seems to us that the weight of evidence is in favour of the view that the grey matter is the part really stimulated. There is no direct proof that grey matter (in the sense of nerve-cells as apart from nerve-fibres) is stimulated: grey matter contains nerve fibres: these may be stimulated and possibly the nerve-cells are inactive; it will be difficult to prove that the cells are the parts really excited. Dupuy and others have attempted to account for the phenomena by supposing that diffusion currents reach the deeper parts of the brain, and recently Dupuy has put forward a notion (which we must regard as at present destitute of proof) that the effects are due to irritations of vaso-motor nerves in the pia mater. Now there is no doubt that diffusion of current must, on physical principles, take place to a certain extent when electrodes are placed on the surface of the brain, but it is very improbable that this takes place to such an extent that currents of the strength employed in these experiments would loop downwards so as to irritate the deeper parts. Carville and Duret "placed non-polarisable electrodes on the brain at a distance from the exciting electrodes and connected them with a galvanometer"; and they found that decided deflection of the needle occurred at the moment of stimulation". Dr. Ferrier attributes considerable importance to this experiment, but justly points out that it is no proof that such extrapolar currents really reach the deeper parts. In such experiments with a delicate galvanometer, it is very easy to be mistaken. A thin film of fluid on the surface of the brain between the stimulating electrodes and those of the galvanometer would account for the deflection Carville and Duret observed, without the extra-polar current having traversed the grey matter at all. The facts that weigh most with us in accepting the view that definite areas of grey matter on the surface of the brain are irritated directly are these. 1. Deep anaesthesia prevents the phenomena from occurring (anaesthetics, such as chloroform, arrest the activity of nerve centres both as to centripetal and centrifugal compressions, but they do not affect the irritability or conductivity of nerve fibre to any appreciable degree, so that deep anaesthesia preventing movements on electrical irritation is just what one would expect. 2. The results are definite and precise, stimulation of one "centre" calling forth movements differing entirely from stimulation of a centre in close approximation to it. 3. Stimulation of the surface of the brains of pigeons, where the layer of grey matter is very thin, produces little or no effect, a result unaccountable on the theory of diffusion, because if the stimulus be applied to the corpora striata immediately underneath, convulsive movements at once ensue. 4. There are extensive areas on the surface of the brain of the dog, cat, and monkey, the stimulation of which produces no apparent effect. We think, therefore, it must be conceded, as an empirical fact, that stimulation of certain areas of grey matter is followed by certain definite movements. But the question now arises, Are these areas the spots where volitional impulses originate? Are they truly "psycho-motor centres"? As Dr. Ferrier says, "The mere fact of the excitation of movements is, as we have already seen, no proof that the regions stimulated have a motor significance, for the stimulation of a sensory centre may give rise to reflex or associated movements"; and he adds, "If these regions are centres of voluntary motion, paralysis of voluntary motion ought to follow from their destruction, and any apparent exception to this result must be capable of satisfactory explanation, consistently with this view, if it is the correct one".

He then proceeds to detail certain experiments made by himself and others where certain "motor" centres were destroyed, with the result usually of causing paralysis of the groups of muscles which were believed to correspond to these centres. We confess, after reading this part of the book, to a feeling that this ground still requires to be carefully gone over. Destructive experiments are open to many fallacies, evident on a moment's consideration; and there is also the important fact, as has

been clearly shown by various experimentalists, notably by Goltz of Strasburg, that under some circumstances considerable portions of grey matter may be removed from the surface of the brain, including even "motor centres", and still no distinct paralysis ensues.

There is also the theory of bilateral action of the hemispheres, as ably expounded and illustrated by Broadbent, and the fact which has received abundant illustration in these cerebral experiments, not only that one hemisphere can take up part of the work of the other, but that one area of grey matter may possibly do part of the work of another area even in the same hemisphere.

The ninth chapter, entitled "The Hemispheres considered physiologically", contains an account of some remarkable experiments made by Dr. Ferrier on the centres for the senses, sight, hearing, touch, smell, and taste. He also alludes to centres for organic sensations, and connected with sexual feeling. Here Dr. Ferrier runs the risk of trying to prove too much. Not content with mapping out the surface of certain convolutions in areas for certain definite movements, he attempts to show the position of centres which are the ultimate recipients of sensory impressions. If he have succeeded in this, the discovery is one of a most brilliant character, but we feel sure that his readers will agree with us in saying that more evidence is required. It is difficult to judge of the sensations of an animal. A boy, watching his pet rabbit, transfers his own consciousness into it, and many a lady believes that there is some deep meaning in the looks and habits of her cat or in the arch movements of her canary; nor is the physiologist free from the risk of misinterpreting the movements and looks of animals. Dr. Ferrier, no doubt, took every precaution to remove all sources of fallacy from his observations, but still there is the risk of error, a risk, in our opinion, so great as to make it impossible, in the meantime, to accept Dr. Ferrier's conclusions as to these sensory centres as scientific facts. We do not say he is wrong; indeed, the probability is that he is right, but until his conclusions are buttressed by stronger evidence from the pathology of man than is at present forthcoming, we think they should be received with caution.

However much one may be inclined to differ from Dr. Ferrier in his own opinions, it must be allowed that he always gives fair value to the opinions of others; indeed, his tendency is rather to attach more importance to some investigations than we would be inclined to do. He is too credulous. For example, his statements regarding recent investigations as to the functions of the semicircular canals in connection with the influence of labyrinthine impressions on equilibration, feeling of rotation, etc., would lead one to suppose that the whole question was settled, an opinion not shared in by most physiologists. The experiments of Mach, Breuer, and Crum-Brown, ingenious and valuable as furnishing us with many empirical facts, have not demonstrated that the phenomena observed have anything to do with the semicircular canals. Evidence may appear any day that these phenomena are due to another cause than irritation of the nerves in the ampullae.

The appearance of this book is not only certain to enhance the reputation of the author, but it is a credit to the profession of this country. It is now in the hands of physiologists and physicians, and at present it is to be regarded as the foremost work on the physiology of the brain. Physiologists, in these days of obstruction to physiological work in Great Britain, have little chance of verifying or extending their conclusions: it remains, therefore, for the physician in the asylum or the hospital ward and *post mortem* theatre, to do so. If every case of cerebral disease be rigidly scrutinised in the light of these researches, much may be done either to advance knowledge or to prevent us from accepting error under the guise of truth.

THE PHYSIOLOGY OF MIND. By HENRY MAUDSLEY, M.D. London: Macmillan and Co. 1877.

THIS book is the first volume of a third and greatly enlarged edition of the *Physiology and Pathology of Mind*, which has now been for some years out of print; and we are certain that all who study the important and difficult problem of the relations between the body and the mind will welcome the new issue. Dr. MAUDSLEY's books have drawn attention to a class of mental facts hitherto too little understood, and have done much towards the foundation of the new methods. To the student of psychology, indeed, his work is more indispensable than that of almost any living Englishman.

But while we cordially admit all this, we must take exception to the excessively polemical tone in which the author insists on speaking of all methods but his own. In the new preface, it is true, he almost apologises for "the vehemence of youthful enthusiasm", and claims to "have sought to maintain the level of a more sober style"; while he also protests against the accusation that he had "recklessly attempted to discard entirely the psychological method of inquiry into mental phenomena",



and acknowledges that the two studies must work together. Yet none the less do we find, in the first chapter on the Method of the Study of Mind, a grand preliminary flourish of trumpets, to the effect that men were first in the theological stage, then in the metaphysical, and now, in the fulness of time, are become positivists. And then Dr. Maudsley pours out his scorn on "metaphysics" (by which he appears to mean all speculation other than inductive science)—a study "cultivated only by those who are engaged, not in action where the true balance of life is maintained, but in speculating in professorial chairs; or if, by any others, by the ambitious youth who goes through an attack of metaphysics as a child goes through an attack of measles; or, lastly, by the active and ingenious intellects of those metaphysical philosophers who, never having been trained in the scientific study of nature, have never submitted their understandings to facts, but live in a more or less ideal world of thought". These and other such passages are, we venture to think, among the "wild and whirling words" of youthful vehemence, which this more mature recension should have suppressed. May we point out yet another? "Plato interrogated his own mind, and set forth its answers with a clearness, subtilty, and elegance of style, that is unsurpassed and unsurpassable; until then, the probably yet far distant event of a better mind than his appearing, his system may well remain as the adequate representation of what the metaphysical method can accomplish. Superseded by a more fruitful method, it is practically obsolete; and its rare advocate, when such an one is found, may be said, like the Atrurian parrot of which Humboldt tells, to speak in the language of an extinct tribe to a people which understand him not." Fine writing certainly—brave words; but, if the writer imagines that Plato is a brilliant example of the introspective method of psychology, such as we are familiar with, *e. g.*, in Locke or Hamilton, we must recommend him to reconsider that branch of his subject.

These, however, are, after all, only questions of taste; but there is room also, as we are looking at the faults of the book, for a serious criticism of the matter of the author's arguments against the old methods. We do not mean for a moment to defend them—rather the contrary; but Dr. Maudsley should give them fair play. Now, he is in the habit of speaking throughout as if everyone whom he calls a "metaphysician" followed exactly the same method, namely, that of *introspection*—"looking into your own mind to see how it works". The author has no great difficulty in showing up the crude fallacies involved in this. He remarks on the small number of capable observers, and the divergencies between their testimony. He says justly, that to observe the mind is to fix it in unnatural stationariness. The method, also, being restricted solely to those mental facts of which we are conscious, can give no account of the many phases of our mental life, which all admit to take place unconsciously. This is quite conclusive reasoning against a particular school of psychologists; but, as Dr. Maudsley himself says, that school is already defunct. No one now really upholds the theories of Locke and the Scottish school about the scrutiny of consciousness. If Dr. Maudsley could either refute, or reconcile with his physiology the later idealistic theories, such as those of Kant and his followers, he would be doing an incalculable service to philosophy. Instead of that, he seems to think that he has settled the matter when he has rekkilled this dead school of observational psychology, and settles down peacefully into a satisfied Comtism.

Hence it is that Dr. Maudsley assumes at once a consistent materialism. "We must break down the absolute and unholy barrier set up between physical and psychical nature", he says—and every one will applaud the sentiment. But he goes on to assume that this must mean that human consciousness—the spirit of man—is simply a function of matter. This may be true and it may not. Many profound writers believe that the solution is exactly the reverse; that nature, or matter, is in some way a function of thought or mind. A book like this misses half its point when it assumes in this off-hand way questions which should either be discussed fairly or let alone.

Once assume, however, that "mind is a general term embracing those functions, the substance beneath which is brain" and Dr. Maudsley's reasoning is as clear and logical as the most fastidious critic could desire. In his own domain he is unrivalled. The liveliness of the style makes dull things interesting, and the novelty of many of the results and methods gives a singularly living character to the book. He begins by a study of "the development of mind", as he calls it, *i. e.*, of complex nerve-centres and brains, in the animals, culminating in man. Then he considers closely the functions of the spinal cord, the sensory centres, and the cerebrum, which he considers to be, speaking generally, the organs of reflex action, sensation, and ideation. On the last subject he is very daring, and has some entertaining theories about the "mechanism of ideation" and the cerebral arrangements by which concepts are formed from percepts, etc. He also dis-

cusses, from a physiological standpoint, the question of the freedom of the will; concluding, of course, that volition is merely a link in the chain of physical causation, and as explicable as any other if we only knew all the details. In any particular act, he says truly, "character determines volition"; but, if he had followed out the old Aristotelian dictum, of which this is one half, he would have come upon the more difficult and more necessary question, "Is not character itself a result of past acts of will?" But Dr. Maudsley sets it all down as pure inheritance and effect of circumstances. Men are so far the sport of their surroundings. Yet he holds—and if it be an inconsistency it is a welcome one—that will is also a creative force; that men react on their circumstances and remake their world. "Great men", he says, "co-ordinating in themselves the forces that were at work around them, have accomplished what the world had at heart in that age". The force, however, which they displayed was not their own; "the power of the universe was behind them, and they became the organs of its manifestation". And so he is led to the admission of an universal guiding power, pervading all the world's progress, and living in its life, of which he speaks in the language of earnest religion. "This is a power from which all life and energy proceed, which has been from the beginning, is now, and, so far as we can see, ever shall be. We come back, indeed, to something which, however we name it, or forbear to name it, is very like the theological Trinity—God the Unrevealed and Unrevealeable, God the Revealed, and God the Revealer."

These words suggest a deep question. Are our materialists and our idealists so far apart after all? Science at the bottom discovers this vague pervading tendency; the soul of all progress and all life. The same principle in us has manifested itself in a self-conscious form, as spirit, or thought. The idealist need not ask any more than this to prove his case. He could simply answer, that since we find this highest form of the universal soul in our own minds, we should try to discover the laws of its workings, as Kant and Hegel did, in the hope that these may prove a key to the whole life of the universe; and if it be objected that we have no right to transfer our subjective results to nature, he will reply that the results are not subjective; for if we search deeply enough we shall find that the analysis of self and consciousness takes one back beyond this or that particular human mind, to the universal self, which is the basis of them all. Above all, he would protest against the attempt of Dr. Maudsley and others, to explain the higher forms by the lower. If there be one tendency, one spirit pervading all things—and towards the realisation of which all things progress—it surely follows that the lower stages are less really instructive, and probably more misleading from the fatal facility of study. Therefore, instead of seeking the explanation of mind and thought with Dr. Maudsley, in airy hypotheses about brain-paths and functions of nerve-centres, he would await the development of truer notions about the real nature and process of thought, confident that when these are clearly stated they will not contradict and will explain all that science has really established concerning the organic mechanism.

A CONTRIBUTION TO THE TREATMENT OF UTERINE VERSIONS AND FLEXIONS. By EPHRAIM CUTTER, A.M., M.D. Second edition. Pp. 216. Boston: 1876.

DR. CUTTER has certainly managed to make a fair-sized book out of considerably little material, besides which, he has clothed his remarks in language that at times borders on the facetious, and more than borders on self-laudation. It is written mainly with a view of putting forward the advantages of his and his father's pessaries, of which, no doubt the retroversion pessary is a good one, as it is fixed by a support passing backwards up the natal cleft, and secured to a belt instead of passing upwards in front, and, moreover, possesses the advantage of being easily applied by the patient herself. The anteversion pessary has the disadvantage that attaches to the majority of such pessaries, that the crutch forms a point of support over which the uterus tends to become more bent. He entirely omits all reference to inversion of the uterus—a most serious malady, and one that taxes to the utmost the resources of the gynaecologist. He has spun out a list of articles of diet by the typical device of printing about one hundred and forty names in separate lines. In his remarks on leeching the cervix uteri, he has stated that the injection of salt and water will immediately cause the withdrawal of a leech that has escaped into the uterus, whereas we have seen such an accident baffle all efforts until the fugitive leech has been extracted with forceps. He is mistaken in supposing that anteversion is the most common form of misplacement of the uterus, as, no doubt, in the unmarried and sterile anteversion is the most frequent, and retroflexion in multipare. His rules for diet



are, however, good, as are also his recommendations for the support of the dress from the shoulders and not from the waist; and he rightly insists on the importance of local depletion of the uterus prior to the use of instrumental support; nevertheless, we do not consider that the literature of this important subject has gained much by this latest emanation from his pen.

**A THIRD ANALYSIS OF THE STATISTICS OF PHTHISIS IN VICTORIA.**  
By WILLIAM THOMSON, F.R.C.S. Edin. Pp. 57. Melbourne: Stillwell and Knight.

In this pamphlet, Mr. THOMSON restates his conclusion as to the steady increase of phthisis in Melbourne and its neighbourhood, and cites a number of important statistics furnished by the Government statist and the Melbourne Hospital in proof. From these, we gather that the death-rate from phthisis for the colony of Victoria during nine years has varied from 11.11 to 12.81 per 10,000 of the population; and that the phthisis death-rate for Melbourne has amounted to 21.23 per 10,000, not differing largely from that of the United Kingdom—*i. e.*, 25.47 per 10,000 population. But Mr. Thomson informs us that these figures do not show us the extent of the increase of consumption in the Victoria colony or in Melbourne, because they do not take into account that during the years alluded to there has existed a far smaller number of persons between the ages of twenty and thirty-five—the period most prone to attack—than formerly; and he concludes that the disease is really more fatal in Victoria than it was some years ago. The question naturally arises, Who are the principal victims—the immigrants, or native-born Australians? We know that the number of consumptive invalids who undertake a sea-voyage to Australia as a last hope of recovery, and many of whom die shortly after landing on that continent, is very large and probably influences the death-rate of Melbourne perceptibly; but our author, who always has a table ready spread for us, shows by a very remarkable one that, among those born in Australian colonies, the percentage of deaths from phthisis has risen from 5.47 per cent. to 15.63 per cent.; and, although these figures may be open to some deductions, they demonstrate only too clearly that, by crossing the seas and establishing ourselves in a new country, we have not shaken off the fatal hold which consumption has acquired upon the English race.

Mr. Thomson maintains that the seasons do not greatly influence the date of deaths from consumption in the colony, and that these do not much vary in the cold wet and dry hot seasons; but he states that tubercular phthisis is observed as a contagious fever in Australia, and quotes in support an anecdote from Oldfield's work, which much resembles tales told of acute form of phthisis endemic in Tahiti and on the coast of Peru, but which do not at all prove its contagious character.

The pamphlet contains valuable tables and much statistical information; but there is a great want of proper arrangement, and the tone of the writer savours too much of the special pleader and too little of the calm scientific observer.

## REPORTS AND ANALYSES

AND

## DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

### EFFERVESCENT SALINE WITH CAFFEINE.

MESSRS. GALE AND CO. of Bouverie Street have introduced a preparation under the above name which promises to be very beneficial in the treatment of sick headache. Two teaspoonfuls in a tumbler of water forms a palatable and refreshing saline draught, which acts as a mild aperient; and the caffeine it contains renders it well adapted to remove sick or bilious headache. If taken in the morning, it acts as an agreeable substitute for seidlitz powders.

### MAUGHAM'S SOLUTION OF IRON.

MR. THOMAS MAUGHAM, of the Chemical Works, Park Road, Clapham, has introduced a solution of iron, which we have administered with marked benefit to several patients suffering from debility. It has a pleasant odour, somewhat akin to aromatic vinegar, and has a colour like that of *vinum ferri*. It can be given mixed, either with water or simple syrup, and is not changed by ammonia or the fixed alkalies, or by vegetable tonic infusions. It can be readily disguised for administration to children. Altogether, we can recommend this preparation as a therapeutic agent of value.

## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, JUNE 23RD, 1877.

### BRITISH MEDICAL ASSOCIATION: THE MANCHESTER MEETING.

THE forty-fifth annual meeting of the Association will be held—as our members are already aware—in Manchester during the second week of August, commencing on Tuesday, August 7th. The meeting will be under the Presidency of Dr. Eason Wilkinson, Senior Physician of the Manchester Royal Infirmary, and one of the oldest, staunchest, and most respected friends and members of the Association. Dr. William Roberts, bearing his blushing honours of F.R.S., will read the Address in Medicine; Mr. Spencer Wells, the hero of one of the greatest modern achievements of British surgery, will be the orator in his own department of knowledge; and Dr. Barnes, than whom there is no higher authority, will deliver the Address in Obstetric Medicine. Sir William Jenner, with characteristic loyalty, takes the Presidency of the Section of Medicine, and, in so doing, honours alike the Association and himself. He has worthy colleagues in Mr. Lund, the Senior Surgeon of the Manchester Infirmary, President of the Section of Surgery; Dr. Priestley, the accomplished and eminent President of the Obstetric Section; Professor De Chaumont; Professor Arthur Gamgee; and Dr. Bucknill, the acknowledged chieftain of psychological medicine in Great Britain. On another page will be found the full list of the officers of sections, giving the promise of great scientific activity; and it will be observed that in the sections, as in the addresses, Manchester, although the seat of an important medical College and of considerable medical institutions, has not claimed for itself any undue proportion of officers. It is desirable that intending readers of papers should, as soon as possible, communicate to the honorary secretaries of the sections the titles of the papers which they propose to read; and we may also remind them that they should send in their manuscript at least ten days before the meeting, together with a short abstract intended for immediate publication. The abstracts of all papers accepted are, if furnished by the authors in time, published immediately in this JOURNAL as part of the report of the meeting. By a by-law of the Association, papers read at the meeting are the property of the Association; but, if not published in the JOURNAL within nine months of the meeting, can be reclaimed by the authors.

In addition to the voluntary papers presented on subjects selected by the authors, certain subjects are mentioned in the various sections on which contributions are invited for the purpose of special discussions. In the Section of Medicine, the treatment of aortic aneurism and of pleuritic effusion have been selected; and, in the Section of Surgery, internal urethrotomy. The Section of Medicine will have the advantage of the attendance of Professor Charcot, the eminent physician of the Salpêtrière, and Professor of Pathology in the Faculty of Paris. The New Sydenham Society has lately published, in an English dress, a part of M. Charcot's recent and most able studies of diseases of the nervous system. Dr. Charcot has thrown light on so many departments of physiology, pathology, and medicine, that it is hard to particularise to what department he may be considered as most attached. But his most recent labours, on the localisation of cerebral disease by clinical and pathological labour, are of peculiar interest in practical medicine, as well as in continuing, defining, and correcting



the conclusions arrived at by the splendid physiological researches of Ferrier and of Fritsch and Hitzig; the unrivalled anatomical studies of Lockhart Clarke; and the valuable clinical observations of Hughlings Jackson. It is, we believe, probable that Dr. Charcot will make a communication to the Section of Medicine on this subject. Other eminent men from France, Germany, and America, have been invited, and have expressed their intention of attending this meeting of the Association.

There can be no doubt of the hospitable reception which will await them and other guests—members of the Association. Manchester has great traditions in respect to scientific activity, to enterprise and power of organisation, and to social resources and liberality. On this occasion, it appears to have resolved to bring all these qualities and resources into play. When last the British Medical Association visited Manchester it numbered only 2,000 members, after twenty-two years of existence. During the following ten years, it made but little progress in numbers; but a new era opened in 1866, from which date it advanced by leaps and bounds, and it numbers now nearly 7,000 members, extending throughout Great Britain and Ireland, and, indeed, by virtue of its numerous Associates in the public services and among our colonists, far beyond the limits of the United Kingdom. The largest attendance of members at any meeting, other than the last great meeting in London, has not much exceeded a thousand visitors; it is probable that the attendance at so great a centre as Manchester, and under the influence of so attractive a programme as that which we publish to-day, will not fall far short of the number who visited Edinburgh. But the arrangements of Manchester will admit easily of that, and probably, also, of a far larger host of visitors, if they should gather to the hospitable summons which is issued. It will be seen that the Corporation, the principal residents, and the medical men of neighbouring towns, cordially join with the medical profession in Manchester in preparing a reception which will do honour to the city, and which will make the Manchester meeting of 1877 one which will remain prominent in the bright record of the annual gatherings of the Association.

The programme of entertainments, of social meetings of interest, of kindly facilities from proprietors of the great industrial establishments is rich and varied; more so than could be expected of any other than a foremost city such as this, which has accepted the occasion of the visit of the Association as one of public as well as of professional interest.

The executive of the Association will be able to render a satisfactory report of the year's proceedings. The Committees of the Association have not been unmindful of public and professional interests. The financial status of the Association is sound and prosperous in every department. Its influence is extending; and the formation of new Branches in Ireland and Scotland, where formerly the members maintained their connection with the Association only through the medium of the JOURNAL, is at once a satisfactory proof that the thoroughly democratic constitution of the Association commends itself to all our professional brethren, and that they feel more and more the advantages of drawing closer their ties to the Association, which aims at the advancement of the scientific and social interests of the profession, and of increasing their representative weight in the Councils of the Association. The immense and steadily increasing addition to the numbers of the Association since the commencement of the decade in which we have had the editorial management of the JOURNAL cannot but be gratifying to us, and an incentive to increased efforts to make the JOURNAL in every way worthy of the unequalled professional constituency which it now represents; but we have always laboured to increase the local organisation of the Association in Branches, and the greatest possible activity in those branches. For it is in the vitality, earnestness, and working power of the Branches that the advantages of association are most fully felt. It is there that the personal advantages of professional fellowship and the cultivation of a powerful professional opinion can be best obtained: the local representation and elaboration of opinion is the truest source of strength to the Association and to the whole

profession, and we heartily rejoice to be able to say that at no period in the history of the Association have its Branches been so numerous, so widely spread, so active, and so well organised as at the present.

It seems reasonable to hope that the great meeting now approaching may serve still further to consolidate the power and usefulness, and to increase the numbers, of the Association, and that the social and scientific results of the meeting may be such as to reward our brethren in Manchester for the efforts they are making in preparation for this meeting.

#### MARRIED SOLDIERS' QUARTERS.

How to improve the condition of the soldier is one of the important questions of the day. It is a mere truism to affirm that, if we are to have an army at all, its ranks must be recruited from the best physical material our island can produce; and that strong fully developed men must take the place of the weedy lads too often seen in our marching regiments. But, to ensure this desirable result, it is of the first importance that a healthier tone of feeling concerning military service be encouraged among our working classes. To regard the red coat as a badge of honour rather than of degradation, and to look upon the possible defence of the glory and stability of the country as one of the privileges of citizenship, seems only natural in a patriotic land like our own; but, in spite of these theoretical considerations, it is practically found that the acceptance of the Queen's shilling is still deemed one of the last refuges of the destitute. We know how eagerly commissions are now competed for by our upper classes, and how an army career seems to promise all that is best and brightest in social comfort at home, as well as in stirring excitement abroad; and we can only wait in patience for the time when the same halo of romance may gild the more monotonous duties of the private and make the attainment of his position an object of legitimate ambition to persons of his class. And in later years much has been done to sweep away the old-fashioned but still deeply rooted prejudice against the wives of the recruiting sergeant. The degrading marks of former days, which branded deserters and others with an indelible evidence of past offences, are now happily abolished; corporeal punishment is restricted within narrow limits; pay is increased; opportunities of promotion are widened; and, above all, ample occupation is now provided for those well-conducted men who have served their full time in the ranks. And although, of course, we can never expect to compete on equal terms with the labour-market and the present high rate of wage, we can, at all events, conscientiously promise our recruit that industry and success in his new occupation will infallibly lead him to a respectable position, and possibly to a station in life which is beyond the wildest dreams of the agriculturist or mechanic. In order, however, to present a full measure of attraction before the dazzled eyes of our rural population, as well as to obviate some of the worst moral and physical evils of barrack-life, we are told by theoretical enthusiasts that we have only to pull down the barriers which now hedge in matrimony, and permit all the men in any regiment to marry with full official sanction. Now, enforced celibacy has many evils and can never be a popular institution in a free country like ours; but expediency and the exigencies of military service have forced upon our authorities the inconveniences attending the presence of large numbers of women and children in our military stations at home or abroad. Marriage is restricted within certain limits, because barrack accommodation is limited, because the regimental washing, which forms no inconsiderable share of the family purse, cannot bear indefinite subdivision, and because it is found that the young and growing recruit must interpose his full daily ration between his rapidly developing frame and the wear and tear of drill. But, with the improvidence usually looked upon as almost an essential part of our public services, we find that, in anticipation of official permission, a very considerable number of soldiers marry, as it is termed, "without leave", and pay the penalty of their indiscretion by an amount of



misery and discomfort which few beyond the regimental medical officer can thoroughly appreciate. The punishment for this defiance of regulation is only indirect, but is quite heavy enough; for the husband, being officially regarded as a single man, is compelled to eat his bachelor rations whilst his wife and children are in a state of semi-starvation at home, to sleep in his barrack-room, to be deprived of all married privileges, and to hand over for domestic use a sum rarely exceeding threepence a day.

No system, however perfect, can, of course, provide a remedy for such a state of things as this; and all we can expect our central authorities to do is to see that our officially recognised married people are treated with that comfort and decency which the sanctity of English home-life has rendered imperatively necessary; and, in this respect, it is allowed on all hands that great improvements have been made of later years. Ample accommodation has been provided in most of our newly built barracks; and each family is furnished, as a rule, with from one to two good rooms, and with the use of a washhouse, cooking kitchen, and other of the conveniences of co-operative life; and it is only at Aldershot and other of our crowded camps that the old-fashioned and indelicate arrangement prevails of subdividing one large room by an inefficient partition of rugs or blankets, and allotting each section to a separate family.

It is with much regret, therefore, that we observe in the pages of a contemporary a grave indictment against the arrangements for married soldiers at the Royal Victoria Hospital, Netley; and the more so, because the defects so justly exposed are structural in character and depend on deficient space and inconvenient arrangement. Isolated and unhealthy, exposed to every extreme of season, and affording a peculiarly favourable field for the spread of infectious disease, these quarters seem singularly unfitted for healthy occupation; and the comfort of one of the most useful branches of the service—the Army Hospital Corps—must seriously suffer. May we hope that the publicity now given to these evils may prove the first step towards reform?

#### A LAST WORD ON THE ARCTIC EXPEDITION.

THE debate opened by the Right Hon. Lyon Playfair on Monday evening in the House of Commons on the subject of the report of the recent Committee brings to a final, and it might almost be hoped satisfactory, conclusion the question raised by the comments which were made in our columns and in the *Sanitary Record* on the return of that expedition, upon the course pursued by Captain Nares in failing to carry out the recommendations of the Medical Director-General for supplying sledge-parties with a daily ration of lime-juice. There will, of course, always be those whose reason will refuse to be convinced by any evidence in this matter, and who will decline to conform to any decision which is contrary to their will. Leaving such persons aside, it may be considered as settled by authority which is indisputable, that the outbreak of scurvy which so seriously crippled the northern sledge-expedition was due to this deviation from the Director-General's recommendations, and to the consequent want of lime-juice for the sledge-parties, and to no other cause whatever. The evidence of this was overwhelming, and the decision of the Committee, of which the majority consisted of admirals, the minority being unbiassed and highly competent medical men, was quite unanimous. Sir George Nares escaped, as Mr. Ward Hunt says, more severe condemnation than that conveyed in the very qualified and gentle letter of reproof addressed to him by the Board, because the memorandum of the Director-General appears not to have been, according to naval etiquette, an order which he was bound to obey. This is, however, sailing rather near to the wind, since the fact that this document was included and specially referred to in the sailing orders makes it something very like an order. No one, however, will desire that Captain Nares should be harshly dealt with in such a matter, and we are disposed amicably to concur in the view taken by the Admiralty. Nevertheless, we must point out that Sir George Nares, in framing for himself, and in defiance of medical

advice, acting upon the utterly groundless and absurd hypothesis that he could "saturate" his men with lime-juice by issuing a preliminary double ration, and in disregarding instructions so detailed and so emphatic as those with which he was furnished by the medical department, committed an error of a very serious kind, and one which, it may be hoped, will never be repeated. Mr. Ward Hunt himself showed a singular haste, on the return of the expedition, in arriving at a favourable conclusion in the first instance, and great slackness in consulting the scientific head of the department, on which alone he could have relied for a decision as to the medical facts of the case. The history is one which is creditable neither to the administration nor to the executive department; but the lesson has been tolerably sharp, and a very public one. It has been part of our duty from the first to insist that it should be publicly studied. We were met in the first instance by blank denials and very discourteous contradictions of the facts which are now proved to be true, and of the inferences which are now confirmed by the highest authority. It was very necessary, therefore, as the result has proved, that the matter should be fully inquired into; and we may at least now feel certain that no one will in future venture to deny the efficacy of lime-juice in preventing scurvy, and that combatant officers, whether administrative or executive, will hesitate long before they substitute their own crude and ignorant theories for the ascertained results of observations and applied science.

Mr. Ward Hunt, by way of justifying his own want of administrative conduct in the matter, assured the house that the outbreak of scurvy did not in any way compromise the success of the expedition, or hinder its results. It may be well, therefore, on this subject, to quote the opening words of Commander Markham's official report on the exploring expedition, which Mr. Hunt may have read, but appears to have forgotten. "Owing to obstacles, which to realise must be seen and encountered, and the dire disease that afflicted every single individual, with the exception of the officers, comprising my party, we were unable to attain such a high latitude as was hoped for and anticipated. But, although it has not pleased Almighty God that we should achieve the success, etc."

The peculiar piety of Captain Markham's explanation of the attack of scurvy contrasts rather painfully with the result of the inquiry of the Arctic Committee; but there can be at least no doubt as to the plain statement that the disablement of every individual of the northern exploring party by scurvy prevented them from pushing further forward to the Pole; and that this disablement was due to a "dire disease"—scurvy—which afflicted the party because its commander had disobeyed the plain, earnest, and stringent recommendations to adopt a well-known, well-tried, and highly successful means of prevention, with which he was abundantly furnished.

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THE Earl of Wharcliffe will distribute the prizes at the Charing Cross Hospital Medical School on Wednesday, June 27th, at 3 P.M.

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HIS ROYAL HIGHNESS THE DUKE OF CAMBRIDGE, President of King's College Hospital, will preside at the distribution of prizes in the Medical Department of King's College, London, on Wednesday, June 27th, at 3.30 P.M.

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THE Hospital Sunday collections are so far quite equal to the average of previous years. This is regarded as satisfactory, because nearly all the charities have this year suffered from the depression in trade, and it was feared there would be a serious falling off in the total returns. Up to Thursday evening, more than £13,000 had been paid to the credit of the fund.

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THE Emperor of Brazil, with his physician, went over St. Thomas's Hospital on Wednesday morning. His Majesty was received by Mr. F. Mason, surgeon, and other hospital authorities, and expressed much pleasure at the state of the institution. Dr. Carter Blake acted as interpreter.



THE buildings erected at Battersea Park by the Victoria Dwellings Association (of which Mr. Walter, M.P., is chairman) will be opened by the Earl of Beaconsfield, on Saturday (to-day) at five o'clock. The Home Secretary and the Bishop of Winchester will take part in the ceremony. The buildings to be opened are intended as models of dwellings for artisans and labourers, to replace the habitations condemned in various parts of the metropolis under the Act of 1875.

#### PROVIDENT DISPENSARIES AND THE HOSPITAL SATURDAY FUND.

A MEETING—chiefly of medical men—convened by the Hospital Saturday Fund, was held in the Board-room of Charing Cross Hospital, to discuss the question of provident dispensaries receiving pecuniary assistance from this and kindred funds. Mr. Samuel Morley, M.P., who presided, in opening the proceedings, expressed his gratification at the disposition shown by working-men to take their reasonable share in promoting the welfare of hospitals. The subject which had brought them together was an interesting one, and he felt that some wisdom had been shown in the method proposed of arriving at a wise conclusion with regard to it. They would not be asked on that occasion to commit themselves to any view of the case, but simply gather sufficient information on the subject as to enable them at some future meeting to decide upon the proper course to be taken. The discussion was opened by Mr. Hamilton Hoare, and was subsequently taken part in by, among others, Sir Charles Trevelyan, Mr. Brudenell Carter of St. George's Hospital, Dr. Ford Anderson, Mr. Alsager Hay Hill, Mr. Jabez Hogg, Dr. Edmunds, Mr. Hughes, and Mr. Nelson Hardy; the balance of opinion being slightly in favour of continuing the annual payments to the dispensaries, but with greater discrimination than has hitherto been shown. The meeting was adjourned, in order that time might be allowed for the opinions of those interested in the question at issue to be thoroughly matured.

#### COFFEE-TAVERNS.

THE medical profession generally, and the members of this Association especially, have always shown themselves to be warmly interested in the promotion of habits of sobriety among the people, and in favouring the growth of means which can wean them from continual resort to drinking-bars and gin-palaces. We have already mentioned the recent origin at a drawing-room meeting at the house of Mr. Ernest Hart of a Coffee Tavern Company (Limited) for the metropolis, started with the object of providing for London coffee-taverns and cocoa-houses for the people, on the plan on which eighteen such houses have been successfully started in Liverpool during the last two years. The following report in the *Times* of Tuesday last states the most recent incident in the progress of this movement.

"Another large and commodious coffee-tavern was opened yesterday, at 78, Lower Thames Street, by the Coffee Taverns Company (Limited), in the immediate neighbourhood of Billingsgate Market, by Lord Cowper, K.G., in the presence of a large assembly of working men from Billingsgate and the surrounding warehouses. The house, which will accommodate many hundred customers, was crowded with visitors of the class it is intended to provide for. The observations of the different speakers were lustily cheered, and one of the residents of the neighbourhood volunteered a speech, in which he assured the directors of the company that now that for the first time the working people of the neighbourhood had a light, airy, cheerful, and handsomely fitted refreshment-house open to them and their families, where they could get a cup of cocoa or of coffee for a halfpenny or a penny, and a fair chance of getting rest and drink without going to the public-house, they felt they had a fair chance, and there need be no doubt of the success of the place, as the crowd assembled to welcome the opening might sufficiently testify. The chairman of the company, Mr. Pope, and the honorary secretary, Mr. J. C. Barnard, Lancaster Place, W.C., did the honours of the house to their visitors from the West End. It is in all respects conducted on the principles described in the lecture which we recently noticed by Mr. Ernest Hart, and is one of a series of houses which are intended to offer a serious competition to public-houses on strictly commercial principles. The directors include the Right Hon. W. Cowper-Temple, M.P., the Hon. W. Russell, Mr. T. Hughes, Q.C., Mr. Ernest Hart, and Dr. Norman Kerr.

There is a *minimum* guaranteed return of 5 per cent. on the capital invested in the houses, and thus far the managers have succeeded in giving to the houses so popular a character as at once attracts large custom from a class of persons who hitherto had no other resort than the public-house or the gin-palace."

It is hardly necessary to add that the directors, equally with the secretary of this company, give their services without any fees or remuneration. The working expenses of the company will probably reduce the dividend to about 4 per cent.

#### HOME HOSPITALS.

THE Mansion House meeting, in support of the Home Hospital movement, on Wednesday, 27th instant, will be influentially attended. The Duke of Northumberland; Mr. Walter, M.P.; Sir Rutherford Alcock; Mr. F. D. Mocatta; Mr. Blake, M.P.; Monsignor Capel; Canon Miller; Dr. Quain; Mr. Jonathan Hutchinson; and Mr. Ernest Hart, will be amongst the speakers on the occasion. We are requested to state that tickets for the meeting can be obtained on personal application at the Mansion House, or by letter from Mr. Henry C. Burdett, Seamen's Hospital, Greenwich, S.E.

#### TEACHING THE DEAF.

ON Monday afternoon, by permission of the Lord Mayor, a public meeting in aid of the Training College for Teachers of the Deaf (German system) was held in the Long Parlour of the Mansion House. The Bishop of Gloucester and Bristol presided, and among those present were the Rev. Canon Fleming (rector of St. Michael's, Chester Square), Mrs. Julia Ward Howe, Mr. Jabez Hogg, the Rev. Samuel Smith, Mr. Skinner, Mr. Campbell Praed, Mr. St. John Ackers, and others. The necessity for an improved system of education for the deaf and dumb in this country has led to extensive inquiries being made into the plans pursued on the Continent and elsewhere. The results thus obtained, according to the speakers, point conclusively to the German system, which communicates language by lip-reading and articulation as possessing a manifest superiority over other methods, especially for the poor, as it enables them to make their way in the world much better than those who are unable to use spoken language. The benefits under that system have, it was believed, only to be widely known in order to be thoroughly appreciated by the public. It was a terrible thought that there are numbers of grown people in our midst speechless for no other reason than that the power of speech, which exists in all, even in those who were born deaf, had never been developed, but allowed to be lost through want of cultivation. A system, then, which could restore speech where it had been lost through disuse, in consequence of deafness, and create speech where it had never existed, and give to the deaf the faculty of reading and understanding spoken words from the motions of the lips of other persons, should, it was contended, require no very great advocacy to secure public recognition and support. In order to provide for the more general extension of such an educational system for the deaf and dumb, it was most important that the proposed training college should be established without delay, for the reason that new schools for the deaf and dumb are constantly being opened, and the education afforded by them is based upon an inferior system, because there are no masters or mistresses qualified to teach a far superior one. There was also a great demand for governesses in private families. It was, therefore, proposed to establish the training college in the immediate neighbourhood of London; and an English gentleman, Mr. A. A. Kinsey, had been trained for that special work by practical education in the best schools of the kind in Germany, and was in every way qualified to act as Principal of the College. Funds only were needed to enable him to commence work. A practising school would be attached to the College, in which all the branches of a sound English education would be given, signs and the manual alphabet being rigidly excluded. A gentleman had offered £1,000, on condition of a further sum of £4,000 being raised by July 1st. The objects of the meeting were enforced by the Bishop of Gloucester and Bristol, Canon Fleming,



and others, and resolutions in support of the proposed College were passed. Mrs. Julia Ward Howe briefly recounted the well known circumstances of the cure of Laura Bridgman. A vote of thanks to the Lord Mayor for allowing the meeting to be held in his official residence was carried with enthusiasm, and the meeting then separated.

#### M. LITTRÉ.

OUR Paris correspondent writes:—I am sorry to have to report that M. Littré, the eminent *savant* and lexicographer, has for some time been obliged to keep his bed. He is suffering from great prostration of strength, resulting from profound anæmia. M. Littré, who also belongs to the medical profession and is author of one of the best medical dictionaries in the French language, is in his seventy-seventh year.

#### DEATH FROM AN OVERDOSE OF CHLORODYNE.

AN inquest was lately held at the Havelock Hotel, Hastings, on the body of Mr. H. Franklin. It appeared from the evidence of Dr. Julius, that the deceased had accidentally taken an overdose of chlorodyne and died in consequence, and the jury returned a verdict to that effect.

#### DR. BROWN-SÉQUARD.

ON Wednesday next, Dr. Brown-Séquard will deliver an address on the mode and origin of symptoms of brain-disease, at the meeting of the Lancashire and Cheshire Branch of the British Medical Association in Liverpool; and, subsequently, will deliver three lectures on Convulsions, Chorea, Rigidity, and Trembling, as the effects of organic diseases of the brain, at the Liverpool School of Medicine. The profession of Liverpool generally are invited to attend these lectures.

#### THE EMPEROR OF BRAZIL.

OUR Paris correspondent writes:—His Majesty Don Pedro d'Alcantara, the Emperor of Brazil, has rendered himself so deservedly popular wherever he has been, that I think a separate notice of his visit to Paris would not be unacceptable to the readers of the JOURNAL. I shall speak of His Majesty, not in his official capacity of a sovereign, but as a simple *savant*—a title he seems to prize more than anything else. Don Pedro is a most indefatigable man; and the interest he takes in all that touches the arts and sciences, works of industry in general, agriculture, public instruction, etc., found him wherever there was anything new to learn. Few travellers know Paris as well, for he was to be seen everywhere; and he might have been seen any day on the boulevards drinking his "bock" or sipping his "sherry cobbler" like any other mortal. Notwithstanding the various occupations that took up much of his time, the Emperor never missed a single weekly meeting of the Academy of Sciences, of which he had been elected corresponding member. This election is considered an exceptional favour, as by the rules of that learned body the door is shut against sovereigns. But Don Pedro is more than a sovereign, he is an Academician; and, as such, during his stay in Paris he served as representative between his French colleagues and the *savants* of his own dominions. Thus, at the meeting of June 4th, which was the last he attended, the Emperor presented, in the name of M. Guignet, Director of the Polytechnic at Rio Janeiro, some interesting communications of the highest importance in a scientific and industrial point of view. M. Guignet gives, in the first place, a description of a bituminous schist, of which he forwarded samples, and which, when treated by the same processes of distillation as those employed for fossil coal, furnishes a lighting gas equal, if not superior, to that which is extracted from the best pit-coals. This substance is found in the neighbourhood of Bahia. The learned geologist has also described, in the neighbourhood of Cacapaba (in the province of San Pedro, Rio Grande), the existence of a considerable bed composed of a sort of kaolin mixed with quartz and animal matter. At Brazil, this white argil is employed for the same purposes as lime in Europe; and, being mixed with water, it is used for whitewashing the walls of the houses. Moreover, it may be worked with the hand, bears burning

like the kaolin, and is well adapted to the manufacture of fine pottery. In another paper, M. Guignet gives a description of the coal-mines of the Andes and of the fossils that are to be found on these mountains. After having presented these communications to the Academy, Don Pedro observed that these new sources of industry, if properly developed, will not only exercise a happy influence in a commercial point of view, but will afford numerous and interesting subjects for study to the geologist and naturalist. Here, then, is a practical sovereign! Besides being Corresponding Member of the Academy of Sciences, Don Pedro is Member of the Geographical and Anthropological Societies of Paris.

#### CHLORAL-HYDRATE.

IN two extremely important and interesting communications, which Dr. Oscar Liebreich, Professor of Materia Medica in the University of Berlin, has published recently, he calls attention to the extreme importance of medical men ascertaining that the chloral furnished to their patients is none other than the pure crystal. Dr. Liebreich records effects observed by him in Berlin and elsewhere, which indicate that cake chloral is apt to contain impurities of the most irritating and dangerous character. Not only do these impurities injure the hypnotic effect of chloral as mere adulterations, but they are of an irritating character, and lessen directly the desired effect of the chloral in producing calmness and sleep. Dr. Liebreich pointed this out when first he discovered and investigated the therapeutic effects of chloral and introduced it into medicine. It appears, however, that manufacturers, pharmacutists, and physicians, have by no means been mindful of the cautions which he then gave, and a large amount of the chloral in use is of the dangerous kind indicated; it is, indeed, asserted, that of the chloral sold in solution in this country, 80 to 90 per cent. is made with other than the purest materials; and, unfortunately, it appears that there is no known test by which the purity of the chloral when once in solution can be adequately ascertained. We publish in another column an interesting account from a correspondent in Berlin, who visited the manufactory of the great chemical makers Schering, in which this subject is not inopportunistically referred to; and, as the matter is one of considerable therapeutic interest, we shall take a further opportunity of referring in detail to the experience and statements of Dr. Oscar Liebreich of Berlin as to the subject of the purity of this most valuable medicine. It is obvious that, in chloral-hydrate, we have been endowed with an agent of inestimable therapeutic value, but it is clearly one which is liable to abuse, and not without its dangers; and if, indeed, it should prove—as Dr. Liebreich believes—that many, if not most, of the accidents which have occurred, are due to the impure and most dangerous character of the article most rife in commerce, it becomes highly important that measures be taken to insure absolute purity in this most potent drug.

#### THE CUSTODY OF LUNATICS.

AT Worship Street, Mr. Bonfield, a relieving officer of the parish of Bethnal Green, accompanied by two medical gentlemen, brought before the court a young woman, twenty-nine years of age, who was stated to be a lunatic "not under proper care and control", and, under the 67th section of the Act, 16 and 17 Vic., cap. 97, he asked for an order for her removal to a county lunatic asylum. It appeared that the young woman was the daughter of a Mr. Lincoln, living in Old Ford. She had suffered from epilepsy, and had become a lunatic. It was said that she was kept in the house of her parents, who, though they might do all they could for her comfort, were, according to what was alleged, unable to do what was necessary. The relieving officer deposed to having visited the place and found the apartments to which the young woman was confined had but little furniture and were dirty. The evidence of Mr. Mall, of Victoria Park Square, and of Dr. Richards, medical officer of the parish, was to the effect that the removal of the young woman was desirable on sanitary and other grounds, and that in a county asylum she would have her necessities attended to, to the



improvement of her health and comfort. The father was called, and said that the unfortunate woman was his daughter, and had lost her reason after many attacks of epilepsy. Himself and wife, with a servant, attended to her. She had the two kitchens at the basement of the house for herself. Sometimes she chose to be in one, sometimes in the other. In cross-examination, the witness said there was no carpet on the floor, but that was for cleanliness. There were two chairs, a table, and an iron bedstead in the rooms. His daughter was sometimes unclothed, but that was because she tore her clothes. Mrs. Lincoln and a son corroborated the statement of the father as to everything possible being done for the comfort and care of the unfortunate woman. It was denied that she was untended, that the rooms were left in a dirty state, or that the patient was kept confined. It was admitted that she was not allowed to go into the garden at the rear of the house, though she escaped there sometimes. She could get fresh air in the area fronting the house, but that was much confined. It was also admitted that she seldom was able to go out for an airing, there being much difficulty in getting her in and out of a cab. Dr. Sykes, of Dalston, deposed that he had attended the patient during the past fourteen years, and had seen her within the past fortnight. He agreed that fresh air and exercise were of importance, but he did not believe that her removal to an asylum would be a benefit to her, but rather that it would kill her. Mr. Bushby said that he had looked through the statutes bearing on the case, and could not find that the visiting justices or commissioners had any authority for visiting lunatics if they were not confined for profit. The Lord Chancellor, no doubt, had power to give an order for a lunatic to be examined. The point to be considered in this case was the construction to be put upon the words, "Not under proper care and control". It was quite clear that the woman was a lunatic, and that she was under the care of her natural guardians. Then the question arose, had she as much care for assisting her recovery and her health as she would have in a public asylum? It might be not; but the same might be said of every case in which a private lunatic was kept. He did not think that argument would warrant a magistrate to order a removal or allow a person to enter and interfere in the matter. Her natural guardians were liable for her proper care, and if they neglected her the parish could report the matter to the proper authorities, whoever they might be.

#### ARSENICAL COLOURING.

DR. G. OWEN REES, Consulting-Physician to Guy's Hospital, writes to the *Times* of June 18th:

I have had occasion more than once to bring cases before the notice of the medical profession in which severe symptoms were experienced by patients who were being slowly poisoned with arsenic. This slow poisoning is going on at present very extensively, and I have, therefore, determined to address you, and ask a place in your columns for a short statement, which, I trust, may be seen and considered by your numerous readers. In a recent number of the *BRITISH MEDICAL JOURNAL*, I described a sad instance of poisoning by an arsenical colouring matter contained in the green calico lining of some bed curtains. For months and months this source of poison was not discovered, and the symptoms were treated as those of natural disease. On the removal of the curtains, the patients at once recovered their health. This poisonous lining has been sold, and, I believe, is still selling freely, and is, doubtless, producing severe suffering. There is, however, another source of arsenical poisoning of which I have only lately been informed, and against which I would especially warn your readers. It exists in the colouring matter of a green muslin, which, I am told, is much used for ladies' dresses. I am indebted to Dr. Debus, the Professor of Chemistry in our school at Guy's Hospital, for this observation. He made the examination of the bed curtain lining above alluded to; and thinking that other green coloured goods might also contain arsenic, he purchased some muslin of a very beautiful pale green tint for analysis. It proved to contain upwards of sixty grains of an arsenical compound (Scheele's green) in every square yard, and this was so slightly incorporated that it could be dusted out with great facility. Now, sir, it is not easy to conceive anything more lamentable than this, nor do I see how the evil can be arrested save by the interference of Government. Here is a cause for nausea, vomiting, violent headache, inflammation of the eyes, etc., which can only be removed by stopping the manu-

facture of these deleterious fabrics. Our suspicions should not only be directed to material of green colour, for Dr. Debus informs me that the beautiful red, scarlet, and mauve colours, so much in use and so justly admired, are sometimes contaminated with the arsenic used in their preparation, the metal not being always properly separated. Imagine, sir, what the atmosphere of a ball-room must be where these muslin fabrics are worn, and where the agitation of skirts consequent on dancing must be constantly discharging arsenical poison. The pallor and languor so commonly observed in those who pass through the labours of a London season are not to be altogether attributed to ill-ventilated crowded rooms and bad champagne, but are probably in great part owing to the inhalation of arsenical dust shaken from the clothing of a number of poisoners, who, though blameless, are not the less pestilential.

#### AN AUSTRALIAN STIMULANT.

BARON MUELLER has given, in an Australian medical journal, an account of his recent examination of the leaves of the "pitury", said to be of great power as a stimulant, and to be found growing in desert scrubs from the Darling River and Barcoo to West Australia. He is of opinion that it is derived from the *Duboisia Hopwoodii*, described by him in 1861, the leaves of which are chewed by the natives of Central Australia to invigorate themselves during long foot journeys through deserts. The blacks, he says, use the *Duboisia* to excite their courage in warfare; a large dose infuriates them. The *Sydney Herald* is informed also that some dry leaves and stems, said to come from far beyond the Barcoo country, and called "pitcherine", are used by the aboriginals as we use tobacco, for both chewing and smoking; and it is stated that a small quantity causes agreeable exhilaration, prolonged use resulting in intense excitement. It is observed that the blacks, after chewing the leaves, plaster the plug formed by so doing behind the ears, as they believe the effect is intensified thereby.

#### THE WAR.

A SANITARY train of twenty-two railway carriages will shortly leave Berlin, or rather Guben, for the Russian camp. It is intended for the reception of invalids, and has been fitted out by German sympathisers and philanthropists. The Turkish Embassy at Berlin likewise receive contributions for the wounded and sick of their army.

#### ANTI-VACCINATION.

AT a meeting of the Liverpool Health Committee on June 14th, the deputy medical officer of health called attention to what he described as a striking instance of the great injury that is done to the public health by the proceedings of the anti-vaccinationists. The father of a family of eight children, he stated, was influenced by the exaggerated statements of these people, and rather than have his children vaccinated paid the fines when summoned before the magistrates. The result was that no sooner did smallpox attack one member of the family than all succumbed, and they were lying in hospital suffering from the disease. During the epidemic of smallpox the anti-vaccinationists of Liverpool propagated their views from house to house, and paid the fines inflicted on people for not complying with the Vaccination Act.

#### TREATMENT OF ECZEMA.

A CLINICAL lecture by Dr. R. W. Taylor of New York, on the treatment of eczema, published as one of the series edited by Dr. Seguin (Putnam and Sons, New York), deserves attention on account of the clearness and value of the rules laid down for the different forms of that disease. Dr. Taylor points out the unsuitableness of fatty preparations, tar, and alkalies in acute erythematous eczema, and recommends warm baths, applications of warm water, and soothing powders. The febrile condition is benefited by cathartics and mild diet. Hot drinks are to be avoided. In old people, with intense itching at night, chloral hydrate and bromide of potassium are recommended, whilst opium should not be given on account of its action on the vessels of the skin. When the eczema is acute but scaling and moist, hot water is injurious, and ordinary black wash mixed with a small quantity of glycerine applied with lint takes its place. The therapeutic indications in the case



of delicate children with chronic eczema are to remove the disease by suitable applications and correct the disordered condition of the digestion, which Dr. Taylor shows is not the cause, but the consequence, of the skin-disease. The use of arsenic is recommended only in cases of chronic scaling eczema, and should never be given in acute inflammatory conditions. But it is worth noting that the author states that arsenic will rarely of itself cure eczema, and is never to be given to the exclusion of appropriate local treatment. As Dr. Taylor gives in detail the formulæ for the remedies he has found most useful, and explains fully the methods of applying the external remedies, the lecture will be found worth consulting by all who have to treat cases of eczema.

#### THE CONVERSAZIONE AT THE ROYAL COLLEGE OF PHYSICIANS.

ON Wednesday evening last, a large concourse of members of the profession and visitors met within the College walls, on the occasion of the annual *conversazione*. Among the guests received by Dr. Risdon Bennett, the President, were: His Majesty the Emperor of Brazil and suite; the Chinese Ambassador; Bishop Cloughton; the Dean of Lincoln; Sir James Paget, etc. Mr. G. Cruikshank was also present during the evening. The *élite* of the profession were largely represented. Numerous articles of art and science were exhibited. Several figures and groups of statuary were lent by Mr. H. P. MacCarthy; and a most interesting series of etchings by G. Cruikshank, from 1803 to the present year, were placed in a room by themselves, and must have given pleasure to all who saw them, heightened by the presence of the artist himself in the College. A case of brilliant jewelry, illuminated by a lime-light, was exhibited by Mr. Flower. Galton's whistle, for testing the limits of auditory sound, was exhibited by Messrs. Tisley and Spiller; the pitch can be regulated with exactness by means of a screw. At the same table were instruments illustrating the theory of harmonic vibrations, and the analogies of light and sound. Two forms of Dr. Dupré's apparatus for the estimation of urea by the hypobromous method, and numerous microscopes and philosophical instruments, attracted due attention. On the whole, the *conversazione* was characterised rather by the brilliancy of the assemblage than by any other feature.

#### WILL-CASES.

THE glorious uncertainty of the law has been well illustrated in two will causes tried this week in the Court of Probate. In the Walrond case, no serious effort was made to support the will; although, from a scientific point of view, the mental unsoundness of the testator appeared, to say the least, to be extremely doubtful. Perhaps, however, in this case, the compromise which was effected contained the elements of both prudence and justice. The *Times*, in a sensational leader on this case, has fallen into the singular error of stating that "the law and custom of this country recognise that a man may be sane enough to manage his affairs, but not sane enough to make a will"; whereas the law of this country is directly the reverse. Of custom or common practice, there is none in such matters. Proceedings are instituted during life or after death, according to the circumstances of each case; and, if there were less lumber, loss, and delay in Lincoln's Inn Fields, perhaps there would be less will-work for Justice Hannen. A second will-case, in which a most extraordinary verdict was arrived at on Wednesday, was that of Sewell v. Wells. The testator, Mr. Henry Sewell, a City man, had executed a will in 1873, by which he left the interest of £27,000, with house and belongings, to his wife for life; making his brothers and sisters residuary legatees: a sane and just will, as every one admitted. On the 8th and 15th of March, 1875, his brother, Mr. William Sewell, found him labouring under the delusions that he was a ruined man, that he had rendered himself liable to be declared a fraudulent bankrupt, and that the officers of justice were in pursuit of him: testimony the accuracy of which Justice Hannen declared there was no reason whatever to doubt. On the 6th of April following, he was seen by Dr. Harrington Tuke, who found him

suffering from suicidal mania, and who placed him under the control of a resident medical attendant. He did make several attempts to commit suicide, including persistent refusal of food, while he was in a lunatic asylum; and it does not appear that his delusions ever gave way up to the time of his death. On March 10th, being two days after his brother had found him under the delusions which continued to the end, he made the disputed will, by which he bequeathed the whole of his property absolutely to his widow. The jury returned the verdict that the testator had done nothing which could render him liable to be declared a fraudulent bankrupt; that he entertained the belief that he had done something which rendered him so liable, and that that belief was a delusion; but that, when he executed his last will, he was of sound mind. We have not heard that application has been made for a new trial; but a verdict more illogical in itself, or more opposed to the evidence in its chief term, has rarely, we should think, shocked the toughened nerves of the President of the Court of Probate.

#### THE HOSPITAL FOR DISEASES OF THE THROAT, GOLDEN SQUARE.

WE understand that the inquiry into the management of the medical department of the Throat Hospital, in Golden Square, will be held on Wednesday next, June 27th.

#### WESTMINSTER HOSPITAL.

SIR RUTHERFORD ALCOCK writes to the *Times* as follows: You will confer a great favour upon the authorities of this hospital, if you will accord them the privilege of announcing in your columns that they have received a gracious intimation from the Queen of her approval of the scheme of reparation and improvement of the present building now in progress, and likewise of Her Majesty's kind intention to subscribe to the fund; and that the liberality of some of the principal City companies and of the public, in response to the recent appeal in the *Times* by His Grace the Duke of Westminster, the President, has already relieved the House Committee of the responsibility of the cost of the work (£12,000) to the extent of £3,000, which they desire most cordially to acknowledge.

#### CROYDON BOARD OF HEALTH AND INFECTIOUS CASES.

SICK wards for infectious cases have been provided by the Croydon Board of Guardians at the Union, and, by the present arrangements of the Sanitary Authority, any non-pauper cases arising in the district can be removed to these wards. It appears, however, that the Local Government Board has intimated to the Guardians its disapproval of this arrangement, and requires provision for non-pauper infectious cases in a separate building. Dr. Carpenter and other members of the Board of Health look upon the erection of a special hospital separate from the Union wards as an unnecessary expense, and a deputation is appointed to wait on the Local Government Board for the purpose of arranging the matter.

#### SIR WILLIAM SMART.

THE following is a statement of the services of Sir William Smart.

Inspector-General Sir William Smart, K.C.B., entered the Navy in 1841, on an appointment as supernumerary to the flagship in the first China war; and being sent to H.M.S. *Cruiser*, served in her from 1841 to 1843. Next in H.M.S. *Sappho*, he served on the Cape and East African Station, 1843, and returning home from her in 1846, was appointed to H.M.S. *Trafalgar*, on Channel and Mediterranean service, and was selected from her to join the flagship of Sir William Parker, where he received promotion to the rank of surgeon in 1850 for services during a severe visitation of cholera. From 1851 to 1853 he was surgeon of the *Spitfire*, surveying-vessel in the Levant, and from 1853 to 1857 of the *Diamond* frigate, in which he had charge of the hospital of the Naval Brigade in the Crimea throughout the siege of Sebastopol. On the *Diamond* being paid off, he was sent, as staff-surgeon, to take charge of the wounded in the second China war, on board the hospital-ships *Hercules* and *Melville*, commanded by Deputy Inspector-General Burns; and, both receiving promotion for their services, Deputy Inspector-General Smart was placed in charge of the hospital. Between 1860 and 1864 he was Chief of the Naval Hospital at Bermuda, the



head-quarters of a large fleet during the United States' civil war and the combined French and English expedition to Mexico. After this important service he was removed to Greenwich Hospital, in which he served as deputy inspector-general and inspector-general from 1864 to 1869, when that naval establishment was abolished. In 1873 he received his present appointment as Superintending Inspector-General of Haslar. Promoted successively to ranks of surgeon, staff-surgeon, and deputy inspector-general, for special services, Sir William Smart has also received the following marks of approval: In 1856, Sir Gilbert Blane Medal; 1857, Knight of the Legion of Honour; 1864, Testimonial from French Government; 1867, Companionship of the Bath; 1876, Honorary Physician to the Queen; 1877, K.C.B.

#### THE OUTBREAK OF SMALL-POX AT ORSETT.

It appears that small-pox at Orsett was first observed on June 8th in a young woman in the seventh month of pregnancy, who had been admitted into the Orsett Temporary Fever Hospital. Two other patients were found to be suffering from the same disease, and it soon spread over the adjoining workhouse; nine additional cases having been sent thence to the small-pox hospital. The disease then made its appearance in the village of Orsett, and ten more cases were reported to the medical officer of health, Mr. R. Corbet. Up to the present time, there have been twenty-seven cases in the village, but no fresh one since the 15th inst. Altogether, there have been twenty-two cases in the small-pox hospital, of which six have proved fatal, and another death is apprehended. There has only been one death in the village, and the cases there are all going on well. At the present time, there are thirteen cases in the hospital, ten of whom are convalescent, and twenty-four in the village, nineteen of whom are out of all danger. It is worthy of remark, that not one case of the disease has occurred in a successfully revaccinated person. Five patients had had small-pox previously; two of them had been inoculated with small-pox when infants; one of these patients died. The population of Orsett is given as about 1,650.

#### DEATH UNDER ANÆSTHETICS AT THE EAST SUFFOLK HOSPITAL.

AN inquest was held last Saturday, at the East Suffolk Hospital, in the case of a man fifty-six years of age. Examination had shown him to be a fairly healthy man, with a good circulation. A piece of necrosed bone had to be removed from his leg, and no reason was found for disallowing anæsthetics. Bichloride of methylene and ether were administered by Junker's arrangement. Inhalation was commenced with methylene, followed in fifteen seconds by ether; in five minutes he became unconscious, and Dr. Elliston began to remove the necrosed bone. At one time the patient partially recovered consciousness, and struggled very violently. When the operation was almost completed, the pulse was observed to fail, the breathing became stertorous, and gradually ceased. Artificial respiration, Faradisation, and injections of brandy were used, without success. Not more than half a drachm of methylene and about half an ounce of ether were used. It is to be regretted that no *post mortem* examination could be made. A verdict was returned of Death from the effects of anæsthetics.

#### THE VICTORIA AND BELGRAVE HOSPITALS FOR CHILDREN.

At a meeting of the sub-committee of these hospitals, appointed to consider the question of their amalgamation, held on Wednesday last, the 20th inst., the Duke of Westminster in the chair, it was unanimously agreed that they should be amalgamated forthwith under the name of the South-western Hospital for Children. The Belgrave Hospital goes to the Victoria Hospital site, and additional land is to be purchased, and another wing, with about fifty beds, to be added to the present Victoria Hospital, making in all over one hundred beds. It was incidentally remarked at the meeting that the Belgrave Hospital had at present only eight children as in-patients, with a staff of eight paid officials, and requiring no less than two fair-sized dwelling-houses for their accommodation. The wisdom of the course adopted must be apparent to all. Small hospitals have, no doubt, their advantages, but it is more than counteracted by their increased cost. In the city

and liberties of Westminster there are no fewer than five or six hospitals for the treatment of the diseases of women and three hospitals for children, besides four large general hospitals. The waste of money is very great, without any corresponding benefits. The example set by the above-named hospitals may, we trust, before long be followed by other medical charities.

#### THE PUBLIC HEALTH.

THE Registrar-General's return for the week ending Saturday, June 16th, states that during the last week, 5,673 births and 3,311 deaths were registered in London and twenty-two other large towns of the United Kingdom. The mortality from all causes was at the average rate of 21 deaths annually in every 1,000 persons living. The annual death-rate was 21 per 1,000 in Edinburgh, 23 in Glasgow, and 25 in Dublin. The annual rates of mortality per 1,000 last week in the twenty English towns, ranged from Brighton, 13, to Manchester, 29. The annual death-rate from the seven principal zymotic diseases averaged 3.2 per 1,000 in the twenty towns, and ranged from 0.9 and 1.0 in Leicester and Brighton, to 4.9 and 5.0 in Liverpool and Wolverhampton. In London, 2,263 births and 1,315 deaths were registered. The annual death-rate from all causes, which in the two preceding weeks had been equal to 21.3 and 22.1, declined last week to 19.4, a lower rate than has prevailed in any week since the end of October. To the seven principal diseases of the zymotic class 218 deaths were referred, against 236 and 220 in the two preceding weeks. These 218 deaths were 14 below the corrected average number from the same diseases in the corresponding week of the last ten years. The fatal cases of small-pox in London, which in the five preceding weeks had slowly but steadily declined from 78 to 58, further decreased last week to 55, of which 25 were certified as unvaccinated, and 8 as vaccinated. The deaths referred to diseases of the respiratory organs were 199, showing a further marked decline from recent weekly numbers, but exceeding the corrected average weekly number by 13. In greater London, 2,738 births and 1,541 deaths were registered, equal to annual rates of 32.7 and 18.4 per 1,000 of the population.

#### SOUTH AMERICAN MEAT.

AT the Cannon Street Hotel there have been exhibits of fresh meat which, it is stated, were preserved in Montevideo ten months ago. The importers are the preservers, a firm at Montevideo, who declare that the meat can be sold at from 3d. to 4d. per lb. retail, without bone, and hopefully look forward to a large trade being done in this meat—as hopefully as have the promoters of many other like inventions. The meat is turned out of zinc cases, and it is not particularly unsightly, though it differs considerably in appearance from the joints seen at the cheap butchers'. The meat shown was beef, and it had very little fat—indeed, it might be pronounced to be all lean. The mode of preserving it was stated to be a secret. It is fairly stated by the importers that the beef is not expected to be equal to the beef of the stall-fed ox of England, but it is urged that it will supply good steaks for the frying-pan, and thus cut and cooked it differs very little from steaks generally in look.

#### SCOTLAND.

AT the annual meeting of the Montrose Royal Asylum and Infirmary Board, held last week, it was stated that the past year's accounts showed a surplus of very nearly £2,000.

A NUMBER of the ratepayers of Perth have instructed a solicitor to raise an action against the Perth Water Commissioners for restoration of £350 taken from the public funds in order to assist the opposition to the Water Bill. Previously to the parliamentary inquiry, the Commissioners took the opinion of counsel as to whether they could oppose the Bill from the rates; but the opinion obtained was not favourable to this, and a guarantee fund was subscribed by some of the public. Im-



mediately before the parliamentary contest, however, the Commissioners met in private, and by a majority agreed to take £350 from the funds to assist the opposition; and it is this sum, which, it is alleged, has been illegally spent, they are now called upon to restore.

EDINBURGH continues to be remarkably free from infectious diseases. No death from fever, diphtheria, scarlatina, or measles, was recorded last week; and no case of small-pox is known to the authorities. The only deaths from infectious diseases during the week were from whooping cough (five) and erysipelas (four). Fully three-fourths of the total mortality was due to diseases of the chest, and old people suffered most severely from this cause. Thirty per cent. of all the deaths were of persons over sixty years of age.

#### THE EDINBURGH BOTANICAL GARDENS.

At a recent meeting of the Edinburgh Botanical Society, the Professor of Botany, Dr. Balfour, detailed the steps which had been taken to acquire the ground next to the Botanic Gardens as an arboretum. The Government, he said, was now pledged to enclose the ground and complete the arrangements in the course of two years. It was to be hoped, therefore, that immediate steps would be taken to fence the ground and begin the building of the lodges at the different entrances, so that the grounds might be properly laid out. For Inverleith House and a small piece of additional ground, the Government had paid £4,900; the intention being that the house should be the residence of the Regius Keeper, from whom, in consideration of this, they withdrew the salary. The building was at present in a state of great dilapidation, in consequence of the fire which occurred there last October. Amidst this desolation, the professor remarked, there had sprung up in all parts of the house a very remarkable fungus, which, in its fresh state, was of a very beautiful violet colour, and which had never been described. It was stated at the meeting that, at the Botanical Gardens, the present was the latest season ever known to the present officials.

#### LIVINGSTONE MEMORIAL.

ON the 9th inst., the memorial-stone of the Livingstone Medical Missionary Memorial Training Institution was laid in the Cowgate, Edinburgh, by the Rev. Dr. Moffat, the African missionary, in presence of a large number of spectators. The buildings will cost £10,000, of which from £6,000 to £7,000 have been raised.

#### WATER-SUPPLY OF FORFAR.

IN a case which has recently been before the law-courts of Edinburgh, in which the Board of Supervision proceeded against the authorities of the burgh of Forfar for not carrying out a scheme for supplying the town with good water, the Court, on the presentation of a joint note agreed upon between the parties, has issued a formal judgment. The Court finds that the local authority have hitherto failed to do what is required of them by the Public Health (Scotland) Act of 1867, or otherwise by law; that obstructions have thereby arisen in the execution of the Act; and that the local authority are bound to take the proceedings required by statute for introducing a supply of water sufficient and suitable for the domestic use of the inhabitants of the burgh of Forfar, and for the sanitary and other purposes of the burgh; ordaining them forthwith to take and carry out, according to law, the proceedings necessary for carrying into effect the scheme of Mr. Bateman now proposed by the local authority; and finding the local authority liable to the Board of Supervision in the expenses hitherto incurred, and, *quoad ultra*, continuing the petition. Mr. Bateman's plan includes the formation of a reservoir in the Den of Ogil, to cover about thirty-five acres of ground.

#### AGRICULTURAL CHEMISTRY.

THE Highland and Agricultural Society are about to make a valuable series of investigations, under the direction of Dr. A. P. Aitken of Edinburgh, on land specially selected for the purpose. The experi-

ments are to be undertaken with the following objects: 1. To determine the relative effects of the various phosphatic manures; 2. To determine the relative effects of the various common nitrogenous manures; 3. To determine the relative effects of the various common potash manures; 4. To try the effect of the various ammoniacal guanos against common imitations used; 5. To determine practically the wealth of the soil; 6. To ascertain the effect of leaving land unmanured; 7. To determine the effect of sulphuric acid, in so far as the preceding experiments are defective on that point; 8. To try the effect of continuous cropping; 9 and 10. Experiments in stone troughs or tanks exposed to the weather, and pot-excrements conducted under glass.

## IRELAND.

THE office of Surgeon to the Longford Infirmary is vacant by the resignation of Dr. Henry Edgeworth. The election will take place on the 4th of July next.

#### ROYAL COLLEGE OF SURGEONS OF IRELAND.

THE lamented death of Mr. Henry Wilson leaves a vacancy in both the Council of the College and in the Chair of Ophthalmic and Aural Surgery. As candidates for the Professorship, the names of Dr. A. H. Jacob, Surgeon to the late Dublin Eye and Ear Infirmary and ex-Ophthalmic Surgeon to the City of Dublin Hospital; Mr. H. R. Swanzy, Surgeon to the National Eye and Ear Infirmary and Ophthalmic Surgeon to Steevens' Hospital; Dr. C. E. Fitzgerald, Surgeon-Oculist in Ordinary to the Queen in Ireland, Ophthalmic Surgeon to the Richmond Hospital, and Assistant-Surgeon to the National Eye and Ear Infirmary; and Mr. R. Rainsford, Assistant-Surgeon to St. Mark's Ophthalmic Hospital and Ophthalmic Surgeon to the Adelaide Hospital, are mentioned. As Dr. Jacob at present holds a seat on the Council, it will be necessary for him to resign it before competing for the Professorial Chair. There will be two vacancies, therefore, on the Council to be filled. In addition to the two gentlemen, Messrs. B. F. McDowell and Corley, who were unsuccessful in obtaining seats at the recent election, and who, we understand, will again come forward, we hear that Mr. W. Stokes, Professor of Surgery in the School of the College, will offer himself as a candidate for the Council. Mr. Madden, Retired Deputy Surgeon-General, who has lately come to reside in Dublin, has also allowed himself to be put in nomination. Although he is a Fellow of the College of thirty-three years' standing, it is hardly probable that he will consider it advisable to go to the ballot, as he is not even known by name to the great majority of the electors. The election cannot take place until three weeks have elapsed from the date of the vacancy occurring.

#### OVARIOTOMY IN DUBLIN.

THIS operation was performed on successive days in two of the Dublin hospitals last week. The first case was operated upon in the Rotunda Hospital by the master, Dr. Atthill. The patient was an unmarried woman aged 40, who had been three times tapped. The cyst was multilocular, and contained some solid matter. There were some slight adhesions anteriorly. The anæsthetic used was ether, and was successfully administered by Mr. Ormsby by means of his new inhaler. Up to the present (eighth day), the case is progressing most favourably. The second case, unfortunately, which occurred in the Adelaide Hospital died the day after the operation. The patient on whom Dr. Atthill recently operated in the Rotunda (JOURNAL, May 19th) left the hospital perfectly well a fortnight ago.

#### "M.A.O."

At the annual meeting of the senate of the University of Dublin to be held this day (Saturday), the following grace from the provost and senior Fellows will be submitted to the senate: "That the degree of Magister Artis Obstetricæ be conferred (*honoris causa*) on Edward



B. Sinclair, M.D., and on Alfred McClintock, M.D." Dr. Sinclair, as our readers know, is the able King's Professor of Midwifery in the University School of Physic and Physician to Sir Patrick Dun's Hospital and Maternity, and has taken an active part in inducing the University authorities to institute this new degree. The reputation of Dr. McClintock, the distinguished author of the classical *Clinical Memoirs on Diseases of Women* and editor of *Smellie's Midwifery*, is so universal and acknowledged that the University, in appointing him and Dr. Sinclair the first recipients of this degree, deserves credit for thus, as it were, indicating the type of men whose attainments it should be the ambition of future "M.A.O.s" to emulate. By elevating the most important "speciality" to a publicly recognised scientific standpoint, the University of Dublin has evinced a graceful and far-sighted cognisance of the high position to which obstetric practitioners have, within late years especially, raised their department of medicine and surgery.

#### PUBLIC HEALTH (IRELAND) BILL.

A PETITION from the King and Queen's College of Physicians, praying for amendments in this Act, similar to those petitioned for by the Irish Medical Association, was presented to the House of Commons, on Monday last, by the Hon. David Plunkett, M.P. for the University of Dublin.

#### UNIVERSITY OF DUBLIN ATHLETIC SPORTS.

THESE annual sports came off last week in the College Park, and were attended by 30,000 people. The flat race of one mile for the cup presented by the Medical School was won by Mr. Dwyer, who accomplished the distance in four minutes thirty-five seconds.

#### HEALTH OF DUBLIN.

DURING the week ending June 9th, the deaths registered exceeded the births by two, and represented an annual mortality of 30.6 in every 1,000 of the population. The deaths from zymotic affections amounted to 46; the average number for the corresponding week of the previous ten years being 31.2. Twenty-four, or more than one-half of the deaths from these diseases, resulted from measles; and the mortality from diseases of the respiratory organs continued high, 31 deaths having occurred, being double the average number in the corresponding week of the previous ten years.

#### MERCER'S HOSPITAL, DUBLIN.

A NEW wing is in course of erection at this hospital, which, when completed, will give accommodation to about fifty additional beds, and which will be entitled the "Napier Wing". A sum of £2,000 was placed at the disposal of the governors for the erection of this wing, which is almost completed; but, during the progress of the works, it was found that one of the walls of the old building was in such a dangerous condition that it was necessary to rebuild it at a cost of several hundred pounds. Moreover, other portions of the old building have recently been found to be so insecure as to require a considerable additional outlay; and, to cover this necessary extra expenditure, and to render the new wards fit for the reception of patients (painting, furniture, etc.), a sum of £1,200 is required, for which the governors have recently made an appeal to the public for the funds necessary for these alterations. During the past year, 21,525 persons, of whom 932 were intern patients, were afforded relief in this hospital, which well deserves the support of the charitable.

#### HEALTH OF IRELAND: QUARTERLY REPORT.

DURING the quarter ending March 31st, the births registered in Ireland amounted to 37,142, being equal to an annual ratio of 1 in every 35.9, or 27.8 per 1,000 of the population; and the deaths to 26,958, affording an annual ratio of 1 in every 49.5, or 20.2 per 1,000. The birth-rate was slightly under the average for the corresponding quarter of the previous five years, and the death-rate was much under the average, notwithstanding a very general prevalence of

diseases of the lungs and air-passages, owing to the exceptionally harsh and broken weather experienced during the quarter. Deaths from preventable diseases, though slightly in excess of those in the first quarter of last year, were yet under the average. Bronchitis, pneumonia, and other chest affections, in addition to being unusually fatal as primary diseases, complicated such ailments as measles, whooping-cough, etc., with the result, especially among the poorer classes, of unduly increasing the mortality from these diseases. The registrars' notes contain several references to sanitary improvements, and to the happy effects resulting therefrom; but the complaints from the registrars of districts in which the sanitary arrangements are most defective, largely preponderate. In some instances, the fault is attributed to the apathy of the local authorities, and others to the laziness of the people themselves; and the registrars point out that they despair of effecting any permanent improvement so long as the poorer classes occupy the wretched cabins at present so numerous in many of the rural parts of Ireland. The deaths from the eight principal zymotic diseases were 2,448, or 9.1 per cent. of the total deaths, and 45.9 in every 100,000 inhabitants. Of these, small-pox caused 25 deaths, 18 of which occurred in Dublin; measles, 134, the disease being principally confined to a few districts, and being unusually fatal. The number of deaths from scarlet fever amounted to 418, being 35 less than in the preceding quarter, and 223 under the number in the first quarter of last year. Ninety-nine deaths were attributed to diphtheria, and 499 to whooping-cough, being much beyond the average. There were 696 deaths from fever, a number rather less than the average for the March quarter; whilst diarrhoea caused 433 deaths, and simple cholera 6. The deaths of 22 persons stated to have been aged 100 years or upwards were registered. Of these, 9 were returned at 100 years, 2 at 102, 2 at 103, 1 at 104, 2 at 105, 2 at 106, 2 at 107, 1 at 108, and 1 at 110 years.

#### DUBLIN SANITARY ASSOCIATION.

THE annual meeting of this Association took place at Molesworth Street last week, the chair being occupied by Dr. Gordon, president of the College of Physicians. The annual report showed that the members now number two hundred and sixty-three, being a decrease of nineteen from the previous year, which apparent falling off was due to the removal of members who did not subscribe, the actual number of subscribing members having considerably increased. During the past year one hundred and fifty-eight reports of nuisances were forwarded to the sanitary authorities, comprising two hundred and twelve distinct nuisances, and including overcrowding, defective ashpit and privy accommodation, insufficient water-supply, manure heaps, and accumulation of filth, unscavenged streets and lanes, slaughter-houses badly kept, etc. The attention of the Committee having, in November, been directed to the increase of smallpox in various parts of England, having considerable communication with Dublin, a letter was addressed to the various hospitals in Dublin that receive fever patients, calling the attention of the governors to the prevalence of the epidemic, and urging upon them the necessity of reporting to the Public Health Committee, at the earliest possible moment, the admission to the wards of any case of that disease. In the same month, two deaths from smallpox having taken place, a placard was circulated extensively throughout the city, and distributed to the national schools and other public institutions, urging the adoption of precautions, especially of careful revaccination, against the spread of the infection. In last October a recommendation was made to the Public Health Committee, that they should allow compensation for clothes destroyed by the hospital authorities in cases of smallpox patients, a suggestion which met with but little practical result. During the past year, a limited liability company for providing healthy dwellings for artisans was formed, and blocks of buildings capable of accommodating one hundred and forty-one families are in course of erection in three streets in Dublin. The Committee had pleasure in stating that the Corporation have taken steps to put in full force the provisions of the "Artisans' and Labourers' Dwellings



Improvement Act, 1875", and have adopted the "improvement scheme" affecting two unhealthy areas containing nearly five acres and inhabited by upwards of one thousand persons. Following the course adopted with regard to the Public Health Bill (Ireland) 1874, a conjoint committee, consisting of representatives from the Colleges of Surgeons and Physicians, the Irish Medical Association, and the Dublin Sanitary Association, was formed to consider the Public Health Bill for Ireland now before Parliament. The report having been adopted, a resolution was carried to the effect that the Association regret that the sanitary condition of Dublin was excluded from the inquiry recently held by the Local Government Commissioners, and that the Executive Committee be requested to procure a public inquiry into the causes of the high death-rate in Dublin and its general unsanitary condition. The following members of the profession have been elected among the office-bearers for the ensuing year.—*Vice-Presidents*: Fleetwood Churchill, George H. Porter, Robert McDonnell, Samuel Gordon, William Stokes.—*Executive Committee*: Thomas Grimshaw, Thomas Hayden, Joseph Kenny, Charles Moore, Thomas Purcell, Albert Speedy, Henry Stewart, Henry Tweedy, S. Woodhouse.—*Hon. Secretary*: John W. Moore.

#### NOTES ON THE MEDICAL INSTITUTIONS OF MANCHESTER.

THE Manchester Royal Infirmary was established in 1753. In the beginning, the charity included the dispensary, lunatic hospital and asylum, and public baths, and, with the exception of the public baths, given up in 1847, it still includes them. The present Infirmary has grown by successive developments out of a building erected on the same site, which was opened in 1755 as a hospital for the reception and treatment of "such diseased and wounded persons as were from indigent circumstances unable to supply themselves with medical assistance, as a lunatic asylum and as a dispensary for the relief of indigent sick at their own homes". It is not easy to ascertain what was the original number of beds; but, in 1801-2, the building was enlarged, so as to admit of an addition of sixty beds; and, in 1834-35, the number of beds available for patients was one hundred and seventy-eight.

The trustees were incorporated in the year 1842; and, in 1845, complaint was made that the hospital was too small for its requirements, the number of beds being only 192: 67 for medical and 125 for surgical patients. The ultimate result of this complaint was, that a lunatic hospital was built in the environs of Manchester, at Cheadle, to which the insane patients under treatment in the old building were removed in 1848. The same year, the south wing of the Infirmary was completed and brought into use; and, three years afterwards (in 1851), the north (Jenny Lind) wing. In 1852, the Manchester House of Recovery (or house for the reception and accommodation of persons sick of fever) was united with the Infirmary and Dispensary; and, in 1855, wards were appropriated in the Infirmary for the reception of fever patients. At this date, there were in the wards 277 beds for the reception of patients, of which 57 were reserved on the upper floor of the south wing for fever cases. In 1867, the Barnes Convalescent Hospital at Cheadle was opened in connection with the Infirmary, accommodation being provided for thirty-four patients; since that time, an entirely new building has been erected, and one hundred and forty patients can now be admitted. In 1871, a new fever hospital at Monsall, near Manchester, was opened, and the fever patients removed from the Infirmary building. By the opening of these two associated hospitals, the accommodation for patients ordinarily at the command of the Infirmary authorities was nearly doubled.

The Royal Infirmary stands well in a large open space in the heart of the city, separated from neighbouring buildings by busy thoroughfares. The building is formed of a central block and two wings, the latter being thrown back at right angles from the extremities of the central block. The main building, in addition to a sunk basement, has three storeys, and has been constructed throughout on a uniform plan. A central corridor, continuous from the wings to the central block, traverses longitudinally each floor, and from it open, on either side, the different wards and other rooms. In the basement, below ground-level, are the dead-house, *post mortem* room, the still-rooms of the dispensary, the principal store-rooms, the dairy, the nurses' dining-room and servants' hall, the rooms of the storekeeper and housekeeper, and bedrooms for porters, servants, and nurses. On the ground-floor are the administrative offices, the rooms of the medical staff, and the

dispensary rooms; the latter, with the accident-room, occupying the whole of this floor in the north wing. The second and third floors contain the wards (twenty-nine in number), with the addition of the sisters' rooms, the rooms of the head-nurses, the chapel (which occupies part of both floors), and the operating-room (on the third floor). The cubic space per bed ranges from 1,000 cubic feet to 2,000; in the principal wards, from 1,200 to 1,500. Ventilation of the wards is effected by the aid of the windows, of open fireplaces, and of large apertures near the ceiling, between the wards and the corridors.

Within the area in rear of the building, and enclosed on three sides by it, are placed, below the level of the ground, the kitchen and its offices, the boiler-house, wash-house, etc.

St. Mary's Hospital for the Diseases of Women and Children is, with the exception of the Royal Infirmary, the oldest medical charitable institution in Manchester. It was founded in 1790, by the late Charles White, F.R.S., Dr. White (his son), Mr. Edward Hall and Mr. Richard Hall. For the first ten months, the board assembled monthly at the "Bridgewater Arms", in High Street, for the purpose of organising plans for the future regulation of the institution. Patients were, nevertheless, attended during this period at their own homes. Afterwards, a house was taken for the hospital, and "licensed for the public reception of pregnant women, pursuant to an Act of Parliament".

In 1795, a large inn was bought and converted into a hospital.

The nucleus of the present Museum was given to the hospital after the death of Dr. White, by his celebrated father Charles White.

In February 1847, the hospital, which was then located in a comparatively insignificant building in South Parade, was, to a great extent, destroyed by fire; nearly the entire collection of healthy and morbid preparations (White's Museum) was consumed. The premises were rebuilt (1849) on a larger scale, and, in 1850, a number of wards provided for the admission of in-patients—women and children. In 1853, the name of Lying-in Hospital was abandoned, inasmuch as it was inferred from that designation that the confinement of pregnant women as *in-patients* was a common occurrence, if not the principal feature; the fact being, on the contrary, that the delivery of patients within the walls was a comparatively rare event, as in case of Cæsarean section or other severe operative interference being required.

The present hospital, built to commemorate the visit of the Queen to Manchester and Salford, was opened on October 10th, 1856, being the fifth anniversary of that event.

The acting medical staff consists of an honorary physician, three honorary surgeons, a resident-house-surgeon and obstetric assistant, and two officers in charge of the home-patients (cases of disease occurring in women and children). The maternity department is conducted through the assistance of a large staff of midwives, who in any difficulty send for the resident obstetrical assistant, who again in his turn must call in one of the surgeons if any serious operation be required.

The Hospital and Dispensary for Sick Children was started as a dispensary forty-eight years ago. In 1854, it opened six beds to in-patients; enlarged it in 1857 to twenty-five; in 1874, it opened eighty-four beds in the new hospital at Pendlebury. It is now completing its scheme by building the second recess, which adds fifty-four beds to the existing accommodation. The building is on strict pavilion system. The dispensary is situated in town, and works in strict harmony with the Provident Dispensaries' Association. One-third of the hospital accommodation is given to the admission and treatment of zymotic diseases.

#### ANNUAL MEETINGS OF THE ASSOCIATION.

As it may be a matter of interest to members, and also to towns and cities who contemplate inviting the Association to hold their annual meeting, to know the returns of the number of members attending annual meetings, they are as follows.

1866. Dublin .. .. .	266	1862. Birmingham .. .. .	200
1863. Oxford .. .. .	538	1873. London .. .. .	200
1869. Leeds .. .. .	449	1864. Newcastle .. .. .	200
1871. Newcastle .. .. .	324	1865. Birmingham .. .. .	1200
1871. Plymouth .. .. .	264	1876. Sheffield .. .. .	374

It will be seen that the numbers attending the annual meetings have not materially increased, and certainly not in proportion to the increase of the number of members in the Association. It will also be observed, that the responsibilities and burdens of proffering hospitality to the Association vary usually with the population of the seat of meeting, and are not at all necessarily beyond the means and resources of the most modest. The expenses of reception may, we may add, easily be kept within very moderate limits.



## QUEEN CHARLOTTE'S LYING-IN HOSPITAL.

A NEW Committee of Management was appointed at the annual meeting of governors on May 28th. There was a very large attendance. The gentlemen who had shown active opposition to the present working of the hospital were not re-elected. At the first meeting of the new Committee—Viscount Portman, the President, in the Chair—it was unanimously resolved to issue an authoritative statement of the then existing condition of the charity, and not to throw, as heretofore, upon the staff the onus of vindicating the hospital from the attacks made upon it by a minority of the Committee.

The general condition of the charity seems to be most satisfactory. The resident medical officer is a paid official; his functions are chiefly those of general medical supervision. He attends confinements only in special cases, labours in general being conducted by midwives residing in the district, who are summoned on the entrance of patients. This is quite a novelty in the working of lying-in hospitals.

The office of resident midwife is abolished. This we regard as an improvement. It must be almost an impossibility to prevent women resident from accidentally becoming contaminated by intercourse with the nurses, or by undertaking duties, such as monthly nursing, etc., which are dangerous for midwives to perform.

As regards the nursing, it is to be hoped the old pernicious system is no longer adopted, of leaving sixty or seventy individuals for one-half of the twenty-four hours to the care of one night-nurse and an assistant. Great care seems to be taken to disinfect all the bedding, etc., used by the patients, by submitting them to a high temperature. The plan adopted is not stated, but we believe that it is that proposed by Dr. Ransom of Nottingham.

The mortality at this hospital has been for years excessive, and not entirely to be accounted for by the large number of primiparæ (single women), nor does the building explain it. The plan upon which it is built seems to be very good; large corridors, with numerous small detached wards, leading out of them. The staff merits praise for their strenuous endeavours to improve the sanitary arrangements and to wipe out, if possible, the opprobrium of a high death-rate. We shall be very anxious to hear what will be the result of the various innovations.

The firm determination of the governors and the Committee of Management not to delegate the general medical supervision of the hospital, in the absence of the physicians, to an unqualified pupil learning his midwifery, must meet with universal approval. Lying-in charities demand every care and precaution to prevent the rise and spread of puerperal fever, and for such an important task a young unpaid unqualified man is hardly suited.

## A GERMAN CHEMICAL MANUFACTORY.

[FROM A BERLIN CORRESPONDENT.]

SCHERING'S chemical manufactory in Berlin is a most interesting place for the production of many medicines much in demand and highly valued all over the world, especially in England, Russia, and America.

As in England the wholesale chemical trade has reached the highest point of development, the chemical industry of Germany is chiefly the intermediary between the progress of science and its practical application. In this respect, Schering's manufactory stands pre-eminent; it furnishes the principal preparations for chemical research in the laboratories of the high schools, especially in the domain of organic chemistry.

We recently had an opportunity of inspecting the premises, under the courteous guidance of Messrs. E. Schering and J. F. Holtz, practical chemists, and were convinced, that the chemical preparations intended for medicinal use are produced with the most painstaking accuracy and care.

In the centre of the premises is the boiler-house. Three large Cornish boilers furnish the steam, which is used chiefly for boiling under tension, but in many cases is also utilised by direct introduction into liquids which require to be heated. Adjoining the boiler-house is a drying-room, wherein a very high temperature is maintained for the speedy desiccation of various chemicals. The large manufacturing room occupies one-half of the central building. On the left are a large number of cylinder-shaped vessels for the decolorisation and purification of glycerine, which is distilled by means of overheated steam in large quantities in other parts of the premises. In the centre of this room are five large copper double boilers in which, under a

pressure of three or four atmospheres, salt brines of various kinds, glycerine, etc., are boiled down. On the right, there are various large vessels for making solutions, iron boilers, etc. Along the back wall, lastly, there are erected air- and water-pumps, hydraulic presses, vacuum apparatus, and a steam-engine, which communicates through the wall with a narrower building running alongside of the large room, wherein, separated by glass partitions, the various rolling, pounding, sifting and grinding machines work. Large quantities of Chinese, Persian, and Turkish white and black gall-nuts are here broken up, for the purpose of producing the most beautiful tannic acid in four different modifications. Amongst these, the acidum tannicum levissimum, in the shape of brilliant large and small scales, occupies the first place. It is used for medicinal purposes as well as for dyeing. Adjoining is a room for the reacquisition of ether and alcohol, which are both plentifully used in obtaining tannin, and which, from their volatility and inflammability, may easily involve the inexperienced manufacturer, not only in danger, but in great losses. Opposite to the central building there goes on, in a separate building, the preparation of gallic and pyrogallic acids.

A shed is appropriated to the manufacture of chloral by first conducting chlorine into alcohol, and subsequently, after complete saturation, distilling this mixture. This is a most interesting spot for every medical man and chemist, but still more interesting is the preparation manufactured therein, and particularly because its nature, the manner of its formation, the different phases through which it has to pass, have not as yet been thoroughly fathomed; so that, in its preparation, not only may the manufacturer by bad working meet with severe loss, but, what is much worse, through want of care in the preparation, a hydrate of chloral may be produced which is dangerous to the patient and not to be trusted by the physician. During the action of chlorine upon anhydrous alcohol, there are produced, during the preliminary stages, hydrochloric acid and a number of chlorine-compounds, which, if they remain as impurities in the chloral, interfere with its effect on the human organism; nay, may even render it dangerous. These foreign chlorine-products are removed from the chloral partly by boiling with sulphuric acid, partly by fractional distillation, partly by crystallisation. The ingenious discoverer of chloral, Professor Liebreich, has, after painstaking work extending over several years, found out a means of removing with certainty all these superfluous chlorine-compounds; and it is this method of making chloral which is solely carried on under Dr. Liebreich's personal control at Schering's manufactory.

While commercial chloral forms whitish shapeless cakes, often still exhaling hydrochloric acid, and appearing more or less damp, the so-called Liebreich's chloral is in small glassy rhomboids, very hard, with a slight odour, permanently durable, and unmixed with compounds which may disturb its effect. In order to enable every medical man to convince himself that he really receives the pure chloral, as prepared at Schering's manufactory, Dr. Liebreich has added his signature to the label; and only such original packages as bear also the trade-mark of Schering's manufactory are to be used with security and confidence for medical purposes. It is the more necessary to pay exact attention to the marks mentioned above, as there is in the market another crystallised chloral which in outward form is not very unlike Liebreich's. This chloral, however, is crystallised out of the higher or lower chlorinised products of alcohol, or else out of water; and for that reason it often contains the dangerous adventitious products which have repeatedly endangered the reputation of pure hydrate of chloral. The consumption of Liebreich's chloral increases year by year.

What has been said of hydrate of chloral applies also to chloroform. Many deaths that have occurred during the administration of chloroform are solely to be attributed to the presence of different chlorine-products. Besides, in the case of chloroform, many of the kinds met with in the trade are easily decomposed by light and air, turn acid, and then mar the desired effects, or even prove deadly. The chloroform prepared from Liebreich's chloral has none of these faults; and the medical man can confidently administer such chloroform without fear of producing, through no fault of his own, a fatal termination. This preparation, also, Schering's manufactory provides with its trade-mark.

Proceeding further, we pass the stoves for the preparation of cyanide of potassium. A few pots and pans, a few shapes and dishes, are all that are required for the production of this chemical, so very important in metallurgy and photography, which, introduced into the organism, produces sudden death. In a large vaulted room of the ground-floor, salicylic acid is prepared; and adjoining are long spaces for the fabrication of iodide and bromide of potassium.

The distillation of pure carbolic acid is carried out on a great scale. A most practical contrivance makes it easy, should a fire break out in the room for the distillation of carbolic acid, to immediately close it



hermetically from outside, and so extinguish the fire before it can reach the other premises. In a separate division are most ingenious apparatus for the distillation of pure mineral acids, as well as a large number of preparations in which the obnoxious hydrosulphuric gas is partly used, partly inevitably set free. Suitable contrivances prevent every inconvenience from this dangerous gas. In the extensive production of sulphur and milk of sulphur, great quantities of this gas are produced.

On the first and second floors, many preparations very important in medicine are produced. A separate division contains the preparations of silver; another, the salts of gold and platinum; a third, the iodine and bromine combinations of the most various kinds; adjoining those are the salicylate of soda and the preparations obtained by chemical interchanges, croton-chloral-hydrate (butyl-chloral-hydrate), etc.

To name all the preparations made in the establishment would be tedious. After returning through the various store-rooms, where exemplary order, great distinctness, and cleanliness produce the most pleasant impression, we left with the conviction of having seen here an establishment which makes it its task to thoroughly examine every novelty in the realm of chemistry, and, as far as possible, to make it serviceable for the purposes of medicine.

### THE EDINBURGH CHAIR OF MATERIA MEDICA.

THE curators of the University of Edinburgh met on Tuesday for the election of a successor to Professor Sir Robert Christison in the Chair of Materia Medica. There were three candidates: Dr. William Craig, Edinburgh; Dr. Thomas R. Fraser, medical officer of health for Mid-Cheshire; and Dr. W. Handsel Griffiths, Dublin. The curators unanimously appointed Dr. Fraser to the vacant office. Dr. Fraser is a graduate of the University of Edinburgh, and has acted in the capacities of both resident and assistant physician at the Edinburgh Royal Infirmary. He was for seven years assistant to Professor Christison, and afterwards became a lecturer on Materia Medica and Therapeutics in the Edinburgh Extra-Academical School of Medicine. He was examiner in Materia Medica and Pharmaceutical Chemistry in the University of London for the five years' continuous tenure, and was in 1876 appointed examiner in Public Health in that University. During the past year, he has been engaged, at the request of the Lords Commissioners of the Admiralty, as a member of the committee to inquire into and report on the causes of scurvy in the recent Arctic expedition. Dr. Fraser has made important researches on the Calabar bean, on the relation between chemical constitution and physiological action, and other matters, and has written numerous papers, which have given him a world-wide reputation. The choice of the curators is one which will give universal satisfaction to the profession.

### MILK IN THE HOSPITALS OF LONDON.

THE marked, and indeed extraordinary, improvement which has taken place in the milk of the hospitals since we formerly reported on it affords one of the best evidences of the good worked by public analysis. As a supplement to our report, published in the JOURNAL of June 2nd, we now give the analyses of milk from three important hospitals omitted in the report. The analyses are as follows.

Name and Description of the Samples of Milk.	In One Hundred Cubic Centimetres of the Sample.				
	No. of grammes of total solids.	No. of grammes of fat.	No. of grammes of ash.	No. of grammes of "solids" not "fat".	No. of grammes of "real" milk.
Guy's Hospital .....	11.98	2.48	0.75	8.75	103
St. George's Hospital..	12.40	2.40	0.76	8.20	103
Brompton Consumption Hospital .....	12.85	3.04	0.75	9.84	103
Normal milk .....	12.80	3.15	0.73	9.65	103

### MEDICO-LEGAL CASES.

#### ACTION FOR RECOVERY OF FEE.

IN the Queen's Bench Division of the High Court of Justice, on June 15th, before Mr. Justice Manisty and a common jury, the case of *Cass v. Smijth* was tried. The action was brought by Mr. Wm. Cunningham Cass of St. George's Road, Pimlico, to recover £21 from the defendant, Mr. Bowyer Smijth of Chesham Place. In 1874, the plaintiff was called in to attend a person who passed as Mrs. Seymour, at Warwick Street, Pimlico, and he subsequently attended her under the name of Vaughan, at Gower Street, in a dangerous illness. There he saw the defendant, who was introduced to him by her as her husband, Mr. Vaughan, and who, according to the plaintiff's version, undertook to pay his account, and actually did pay him £1 on one occasion, his fees having been previously paid by Mrs. Vaughan herself. In support of the plaintiff's case, a letter, signed "E. Vaughan", requesting him to call on Mrs. Vaughan, was put in. The plaintiff continued his attendance until Mrs. Vaughan died on April 27th, when on his way to visit her he met the defendant, who informed him of her death, and handed him his card with his real name and address, and on proceeding to the house he found a letter which the defendant had left for him with the landlady asking for his certificate of the death and stating that the names of the deceased were Winifred Eleanor Lear, and her age twenty-seven. The defendant had not paid the account, and hence the present action. Mr. Holl, Q.C., and Mr. Gye were for the plaintiff; and Mr. French for the defendant.—Mrs. DAVIS, the landlady of the house in Gower Street, proved that the defendant visited Mrs. Vaughan there daily, but did not live or sleep in the house, and was known as Mr. Vaughan. The defendant, after the death, paid her £4, and left the deceased's clothes with her for her bill.—THE DEFENDANT admitted that he had visited the deceased as "Mrs. Seymour" in Warwick Street, and as "Mrs. Vaughan" in Gower Street, but it was simply as a friend, and he denied that he had ever promised to pay the plaintiff for his attendance on her. He explained the letter of March 12th by stating it was written when Mrs. Vaughan was very ill, at her request, and signed "E. Vaughan", her name being Eleanor, in her name; but it was shown that this letter was a request that the plaintiff would come and see Mrs. Vaughan. In his cross-examination, the defendant said he had instructed that the action should be defended on the ground that the deceased had been leading an immoral life.—MR. JUSTICE MANISTY, in summing up, asked the jury what they thought of a man who could swear that the letter of March 12th was written at the request of the deceased, and signed in her name, "E. VAUGHAN", when in his letter to the plaintiff asking for the certificate of death he signed himself, "Yours truly, E. Vaughan". The jury immediately returned a verdict for the plaintiff for the amount claimed.

#### PYRETIC SALINE.

IN the Exchequer Division of the High Court of Justice, before the Lord Chief Baron and Barons Cleasby and Huddleston, the case of "The Attorney-General v. Lamplough" has been argued. It was tried before Baron Cleasby in May last year, when his Lordship directed a verdict for the Crown, but reserved leave to the defendant to move. It was an information filed by the Attorney-General to recover penalties for the sale by the defendant, without payment of stamp-duty, of Lamplough's "Pyretic Saline". The Solicitor-General and Mr. Dicey argued on behalf of the Crown; Mr. Herschell, Q.C., and Mr. E. B. Cooper argued for the defendant. The argument of the Crown was that the compound was taxable because it was recommended to cure various ailments of the human body; further, that it was sold by a chemist or chemists, and not by the class contemplated by the Act, which exempts from the licence to sell mineral waters such persons as fruiterers, confectioners, pastry-cooks, victuallers, etc. The contention of the defendant was that this was a beverage or mineral water, and being impregnated with soda or with carbonic acid gas it was within the reliefs of sec. 20 of the Act of William IV which was passed in 1833. Every mineral water was more or less a medicine, such as Vichy, Apollinaris, etc. Some of them, such as Schveppe's lemonade and potash-water, were strongly recommended for gout and rheumatism; but no attempt to recover stamp-duties had been made against them. The only mineral waters not known as medicines were lemonade and ginger-beer. The mere addition of chloride of potash, which the Solicitor-General asserted had a medicinal function alone, made no difference in the result produced.

DONATION.—The Corporation of London have made a grant of three hundred guineas towards the fund for rebuilding the Metropolitan Free Hospital.



## ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:  
NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 11th day of July next, at Two o'clock in the afternoon.

FRANCIS FOWKE,

*General Secretary.*

36, Great Queen Street, London, W.C., June 16th, 1877.

BRITISH MEDICAL ASSOCIATION:•  
FORTY-FIFTH ANNUAL MEETING.

THE Forty-Fifth Annual Meeting of the British Medical Association will be held in the Owens College, Manchester, on Tuesday, Wednesday, Thursday, and Friday, August 7th, 8th, 9th, and 10th, 1877.

*President.*—M. M. DE BARTOLOMÉ, M.D., Senior Physician to the Sheffield General Infirmary.

*President-elect.*—M. A. EASON WILKINSON, M.D., Senior Physician to the Manchester Royal Infirmary.

An Address in Medicine will be given by WILLIAM ROBERTS, M.D., F.R.S., Manchester.

An Address in Surgery will be given by T. SPENCER WELLS, F.R.C.S., London.

An Address in Obstetric Medicine will be given by ROBERT BARNES, M.D., F.R.C.P., London.

The business of the Association will be transacted in Six Sections, viz. :—

**SECTION A. MEDICINE.**—*President:* Sir William Jenner, Bart., M.D., K.C.B., F.R.S. *Vice-Presidents:* Samuel Crompton, M.D.; Wilson Fox, M.D., F.R.S.; Henry Simpson, M.D. *Secretaries:* Julius Dreschfeld, M.D., 292, Oxford Road, Manchester; F. T. Roberts, M.D., F.R.C.P., 53, Harley Street, London, W.

**SECTION B. SURGERY.**—*President:* Edward Lund, F.R.C.S. *Vice-Presidents:* W. Adams, F.R.C.S.; F. A. Heath, M.R.C.S. *Secretaries:* S. M. Bradley, F.R.C.S., 272, Oxford Road, Manchester; Henry Morris, F.R.C.S., 2, Mansfield Street, London, W.

**SECTION C. OBSTETRIC MEDICINE.**—*President:* W. O. Priestley, M.D., F.R.C.P. *Vice-Presidents:* A. H. McClintock, M.D., LL.D.; James Whitehead, M.D. *Secretaries:* David Lloyd Roberts, M.D., 23, St. John Street, Manchester; John Thorburn, M.D., 333, Oxford Road, Manchester.

**SECTION D. PUBLIC MEDICINE.**—*President:* Surgeon-Major F. S. B. De Chaumont, M.D., *Vice-Presidents:* Alfred Aspland, F.R.C.S.; W. H. Corfield, M.D., F.R.C.P. *Secretaries:* William Armistead, M.B., Station Road, Cambridge; John Haddon, M.D., Monk's Hall, Eccles, Manchester.

**SECTION E. PHYSIOLOGY.**—*President:* Arthur Gamgee, M.D., F.R.S. *Vice-Presidents:* John Cleland, M.D., F.R.S.; Thos. Lauder Brunton, M.D., F.R.S. *Secretaries:* Joseph Coats, M.D., 33, Elmbank Street, Glasgow; William Stirling, M.D., University, Edinburgh.

**SECTION F. PSYCHOLOGY.**—*President:* J. C. Bucknill, M.D., F.R.S. *Vice-Presidents:* H. Rooke Ley, M.R.C.S.; G. W. Mould, M.R.C.S. *Secretaries:* P. M. Deas, M.B., County Asylum, Macclesfield; T. Clay Shaw, M.D., Middlesex County Asylum, Banstead.

*Local Secretaries:* Dr. Leech, 96, Mosley Street, Manchester; C. J. Cullingworth, Esq., 260, Oxford Street, Manchester; Dr. Hardie, St. Ann's Place, Manchester.

*Tuesday, August 7th.*

11 A.M.—Service at the Cathedral: Sermon by the Lord Bishop of Manchester.

12.30 P.M.—Meeting of Committee of Council.

2 P.M.—Meeting of Council, 1875-76.

3 P.M.—General Meeting.—President's Address.—Annual Report of Council, and other business.

9 P.M.—President's Reception and Soirée.

*Wednesday, August 8th.*

9.30 A.M.—Meeting of Council, 1876-77.

11.30 A.M.—Second General Meeting.

11.30 A.M.—Address in Medicine.

2 to 5 P.M.—Sectional Meetings.

9 P.M.—Soirée by the Mayor and Corporation of Manchester, at the Town Hall.

*Thursday, August 9th.*

9 A.M.—Meeting of the Committee of Council.

10 A.M.—Third General Meeting.—Reports of Committees.

11 A.M.—Address in Surgery.

2 to 5 P.M.—Sectional Meetings.

6.30 P.M.—Public Dinner of Association in the Assize Court Hall.

*Friday, August 10th.*

10 A.M.—Address in Obstetric Medicine.

11 A.M.—Sectional Meetings.

1.30 P.M.—Concluding General Meeting, Reports of Committees, etc.

4 P.M.—Garden Party by President and Reception Committee at Manley Hall.

## EXCURSIONS, ETC.

I. THE profession in several of the towns of Lancashire have shown great interest in the August meeting, and have expressed their desire to co-operate in welcoming the Association.

The medical men of Lancaster have notified to the Reception Committee that they will be glad to entertain fifty members of the Association on Saturday, the 11th of August, and show them the places of interest in Lancaster and the immediate vicinity. Lancaster has long been surpassed in size and population by the newer places which have sprung up in various parts of Lancashire, but it is by far the most interesting town in the county.

The Castle, originally a Norman building, founded on the site of a Roman castrum, but added to and altered at various times between the reigns of King John and Queen Elizabeth, is in a state of excellent preservation, and used as a county jail.

Arrangements have been made by which members of the Association will be able to go through it. St. Mary's Church, close to the Castle, a fine and most interesting edifice, built in the time of Henry VI, and also well preserved, will be shown at the same time. Several institutions, such as the Royal Asylum for Idiots and Imbeciles, the County Lunatic Asylum, and the Ripley Institute, will be visited.

II. The medical men of Southport invite one hundred members of the Association to visit them on the 11th of August, and the great hospitality for which they are noted renders it certain that those who visit Southport will receive a warm welcome.

The Aquarium, Winter Gardens, and magnificent Pier, are in keeping with the town itself, which is one of the best built watering places in England.

III. The Mayor and Corporation have most generously offered to entertain as many members of the Association as may like to visit Blackpool, which is one of the most popular watering places in the north of England, and has been well named the Brighton of the North.

IV. Those who are interested in the question of water-supply will doubtless join the excursion to Woodhead, where the water-works which supply Manchester are situated.

They are probably the largest artificial water-works in the world; the reservoirs cover about five hundred acres, and supply a population of about one million in the valleys of the Irwell and Mersey, besides the numerous works situated therein.

Those who visit Woodhead will also have the opportunity of seeing some dye-works belonging to Mr. Potter of Manchester, at which there is a special and most interesting plan of purifying water in operation. The works themselves are amongst the finest of the kind in Lancashire.

V. Arrangements are being made to visit one of the salt-mines at Northwich. One of these curious mines, about two hundred feet deep, will be lighted up for the occasion.

VI. Professor Boyd Dawkins has very kindly undertaken to conduct an excursion to Castleton, in Derbyshire, which is famed for the magnificence of its scenery, its fine old castle, and its caves. One of the caves is remarkable for its grandeur. A special visit will be paid to some caves recently discovered and explored by Professor Boyd Dawkins, in which abundant remains of prehistoric times have been found, and may still be seen.

The owners of all the most important warehouses, cotton mills, and other works in and round Manchester, have most kindly signified their intention of allowing members of the Association to visit their various places. Several of those which are not usually open to visitors will show at the time of the Association Meeting to members.

A detailed account of the arrangements will be published before the Meeting.

The Mayor and Corporation have intimated their intention of inviting the Association to a *soirée*, which they will give at the Town Hall. This building, which has been in course of construction for the past eight years, and has cost nearly a million, is just completed. It is



probably the finest building of the kind in the world; and its splendid architectural proportions and magnificent decorations will, doubtless, be highly appreciated by all who visit Manchester.

The Council of the Owens College have most kindly granted the use of the College as a place of meeting for the sections, and for all other purposes of the Association. The School of Medicine, which forms one of the blocks constituting the College, will be used as a Museum, and will make a most excellent place for the exhibition of all kinds of preparations, instruments, etc.

The Physiological Laboratory will be devoted to the use of physiological instruments, of which there will be a very fine collection.

One of the rooms will be set apart for the exhibition of microscopical specimens, and this will form a special feature in this year's Museum. At no previous Meeting, probably, has such an excellent series of rooms been at the disposal of the Museum Committee.

Three rooms in the main building have been set apart as Luncheon Rooms. This ample provision has been made to diminish as far as possible the crowding which is almost unavoidable where a large number wish to obtain refreshment about the same time of day.

The Museum of the Sanitary Association will be situated in the College grounds, and thus the whole work of the Association will be carried on in one place.

There will be two Reception Rooms, one at the College and one in the town. This arrangement has been made to enable members to obtain full information of what is going on, without obliging them to go to the College, which is situated above a mile from the centre of the town.

The two Reception Rooms will be in direct connection by messengers or telegraph.

A large building, the Concert Hall, has been taken for the Town Reception Rooms, and it is probable that the Business meetings on the first day will be held in the rooms of the Concert Hall, in which there is ample accommodation.

On Tuesday, the first day of the Meeting, there will be an exhibition of Medical and Dietetic Plants at the Botanical Gardens.

An extremely interesting feature of this *soirée* will be a collection arranged by Professor Boyd Dawkins, illustrating the history of man in Britain from the pleistocene to the historic period, and including many of the remains found in the recently discovered caves in Derbyshire.

There will also be a series of fossils, illustrating the ancient carboniferous flora of Lancashire.

It is intended that in the Medicine section the treatment of aortic aneurism and the treatment of pleuritic effusion, and in the Surgical section excision of the knee, shall be selected as subjects for special discussion.

Gentlemen desirous of reading papers, cases, or other communications, are requested to forward the titles to the General Secretary, or to one of the Secretaries of the Section in which the paper is to be read. All papers should be forwarded to the Secretaries of Sections *on or before the 1st of August*.

No paper must exceed twenty minutes in reading, and no subsequent speaker must exceed ten minutes; all speeches at the General Meeting must not exceed ten minutes each.

FRANCIS FOWKE, *General Secretary*.

36, Great Queen Street, W.C., June 21st, 1877.

#### CAMBRIDGESHIRE AND HUNTINGDONSHIRE BRANCH.

THE annual meeting of the above Branch will be held in the Board Room of the Saffron Walden Hospital, on Tuesday, June 26th, at 2.15 P.M.: HENRY STEAR, Esq., President, in the Chair.

Gentlemen intending to read papers, or be present at the dinner, are requested to inform the Secretary on or before June 19th.

Dinner will take place at the Rose and Crown Hotel, at 6.15 P.M. Tickets (including wine), 12s. 6d. each.

J. B. BRADBURY, M.D., *Honorary Secretary*.

Corpus Buildings, Cambridge, May 28th, 1877.

#### GLASGOW AND WEST OF SCOTLAND BRANCH.

THE annual meeting of this Branch will be held on Tuesday, the 26th instant, in the Faculty Hall, 242, St. Vincent Street, at 2 P.M. The President, Dr. ALLEN THOMSON, will resign the Chair to the President-elect, Dr. G. H. B. MACLEOD, who will give an address on Surgery.

It is also expected that Dr. Allen Thomson will make some statements as to the work done at the recent meeting of the General Medical Council.

Glasgow, June 14th, 1876.

#### SOUTH-WESTERN BRANCH.

THE annual meeting of this Branch will be held in the Geological Society's Museum, Penzance, on Wednesday, June 27th, at 11.50 A.M.

LOUIS TOSSWILL, *Honorary Secretary*.

Exeter, June 21st, 1877.

#### BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE annual meeting of this Branch will be held at the Midland Hotel, New Street, Birmingham, on Tuesday, June 26th, at 3 P.M. An Address will be delivered by the President, SAMPSON GAMGEE, Esq., F.R.S. Edin.

The annual dinner will also take place at the Midland Hotel, at 5 P.M. precisely, for the convenience of country members. Dinner tickets, exclusive of wine, 7s. 6d. each. Members intending to be present are requested to communicate with the Honorary Secretaries on or before June 23rd, in order that suitable arrangements may be made.

JAMES SAWYER, M.D., } *Hon. Secretaries*.  
EDWARD MALINS, M.D., }

Birmingham, May 29th, 1877.

#### YORKSHIRE BRANCH.

THE annual meeting of this Branch will be held at the Museum, York, on Wednesday, June 27th, at 2.45 P.M.

The members will dine at the Black Swan Hotel at 5 P.M. Tickets, 6s. 6d. each.

Gentlemen intending to bring forward communications, or to join the dinner, are requested at once to communicate with the Local Secretary.

W. PROCTER, M.D., *Honorary Secretary*.

24, Petergate, York, June 6th, 1877.

#### LANCASHIRE AND CHESHIRE BRANCH.

THE annual meeting of this Branch will be held at the Medical School, Dover Street, Liverpool, on Wednesday, June 27th, at 1 P.M. President: GEORGE WOODS, F.R.C.S. President-elect: Dr. STEELE.

The dinner will take place at the Adelphi Hotel, at 5 P.M. Tickets (exclusive of wine), 7s. 6d. each. Gentlemen intending to be present are requested to send their names to the Secretary at once.

Dr. Brown-Séquard will give an Address on the Mode of Origin of Symptoms of Brain-Disease.

The following communications will be read:—1. A Note on the Extraction of Foreign Bodies from the Bladder: Mr. Reginald Harrison. 2. Muscular Pseudo-hypertrophy in a case of Hemiplegia: Dr. Ross. 3. On the Extirpation of Cancerous Glands: Mr. W. Mitchell Banks. 4. Mr. R. Parker will show a patient from whom half the Tongue and Upper Jaw have been removed. He will also exhibit a series of Microscopic Specimens illustrative of Surgical Tumours. 5. Dr. Glynn will show Roussel's New Transfusion Instrument. 6. Abscess in the Faculty: Dr. Haddon. 7. Notes on Three Cases of Abscesses treated by Callender's plan of Hyperdistension: Mr. T. Jones.

Notice of papers (which must not exceed fifteen minutes) should be forwarded at once to the Honorary Secretary.

D. J. LEECH, *Honorary Secretary*.

96, Mosley Street, Manchester, June 18th, 1877.

#### NORTH WALES BRANCH.

THE twenty-eighth annual meeting of this Branch will be held at the Corsygedol Arms, Barmouth, on Wednesday, July 11th, at 1 P.M. The President, Dr. RICHARDS, will resign the Chair to the President-elect, ROBERT ROBERTS, Esq., who will deliver an address.

Gentlemen intending to read papers, or be present at the dinner, are requested to inform the Honorary Secretary on or before July 1st.

Dinner at 3.30 P.M. Tickets, 7s. 6d., exclusive of wine.

T. EYTON JONES, M.D., *Honorary Secretary*.

Wrexham, June 18th, 1877.

#### BORDER COUNTIES BRANCH.

THE annual meeting of this Branch will be held at Carlisle, on Friday, July 20th. President: Dr. BARNES. President-elect: Dr. LOCKIE.

Members wishing to communicate papers or cases are requested to send notice to the Secretaries.

RODERICK MACLAREN, M.D. } *Honorary Secretaries*.  
JOHN SMITH, M.D. }

Carlisle, June 16th, 1877.



## BATH AND BRISTOL BRANCH.

THE annual meeting of the above Branch will be held at the top of Park Street, Bristol, on Wednesday, June 27th, at 5.30 P.M., when H. F. A. GOODRIDGE, M.D., will resign the Chair to H. MARSHALL, M.D., President-elect.

Members having any communications for the meeting are requested to give notice of them to the Secretaries.

The dinner will be held at the Volunteer Club, top of Park Street, Bristol, at 6.30 P.M. Dinner tickets, including ice and dessert, 7s. 6d. each. The wines will be served at moderate charges.

E. C. BOARD, Clifton. } *Honorary Secretaries.*  
R. S. FOWLER, Bath. }

Bristol, June 18th, 1877.

## EAST ANGLIAN BRANCH.

THE annual meeting of the above Branch will be held at the Magistrates' Room, Diss, on Thursday, June 28th, at 2.30 P.M.: T. E. AMYOT, Esq., President, in the Chair.

Dinner at the King's Arms Hotel at 5 P.M. Tickets, 12s. 6d. each.

The President kindly invites members to luncheon at his residence at One o'clock.

Members intended to read papers and cases, or to exhibit pathological specimens, or to join the dinner, are particularly requested to communicate as early as possible with one of the Honorary Secretaries, in order that proper notices may be given.

B. CHEVALLIER, M.D., Ipswich. } *Honorary Secretaries.*  
J. B. PITT, M.D., Norwich. }

Norwich, June 1st, 1877.

## NORTH OF ENGLAND BRANCH.

THE annual meeting of this Branch will be held in Bishop Cosin's Library, Durham, on Thursday, July 26th, at 2 P.M.

G. H. PHILIPSON, M.D., *Honorary Secretary.*

Newcastle-upon-Tyne, June 12th, 1877.

## METROPOLITAN COUNTIES BRANCH.

THE twenty-fifth annual meeting of this Branch will be held at the Alexandra Palace, on Tuesday, July 24th, at 4 P.M. President: JONATHAN HUTCHINSON, Esq., F.R.C.S. President-elect: SEPTIMUS W. SIBLEY, Esq., F.R.C.S.

Dinner at 5.30 precisely. Tickets, 15s. each, exclusive of wine.

Further particulars in circulars.

ALEXANDER HENRY, M.D. } *Honorary Secretaries.*  
ROBERT PARLIAMSON, M.D. }

London, June 18th, 1877.

## SOUTHERN BRANCH: DORSET DISTRICT.

A MEETING was held at Wimborne Minster on June 6th, 1877: Mr. WALTER WYKE-SMITH in the Chair.

*New Members.*—Dr. Batterbury of Wimborne and Mr. Nunn of Bournemouth were elected members of the district.

*Election of Officers.*—Dr. Bacot of Blandford was elected President; Mr. Wyke-Smith of Wimborne and Mr. Nunn of Bournemouth, Vice-Presidents for the year; and Dr. Lush of Weymouth and Mr. Parkinson of Wimborne, were elected Honorary Treasurer and Secretary for the present year.

*Communications.*—Mr. PARKINSON related a Case of Puerperal Convulsions. Dr. BATTERBURY read a Case of Obstinate Vomiting in Bright's Disease in a Child.

*Habitual Drunkards.*—A petition to the House of Commons in favour of legislation for habitual drunkards was signed by all the members present.

*Dinner.*—The members subsequently dined together at Laing's Hotel.

## EDINBURGH BRANCH: ANNUAL MEETING.

THE annual general meeting of this Branch was held on June 12th, at 5, St. Andrew's Square; Dr. LUNLOP, R.N., in the Chair. Apologies for absence were received from Sir Robert Christison, Dr. Matthews Duncan, and others.

*Office-Bearers.*—The office-bearers were re-elected, with the exception that Dr. Strachan of Dollar was elected a Vice-President in the place of Professor Lister. Mr. Chiene, Dr. Miller, Dr. Houston

(Kirkcaldy), and Dr. Bremner, were elected members of the Council of the Branch, in place of those retiring by rotation. Dr. Matthews Duncan, Dr. Ballantyne (Dalkeith), and Dr. Brodie (Liberton), were elected representatives of the Branch on the Council of the Association for the ensuing year.

## REPORTS OF SOCIETIES.

## MANCHESTER MEDICAL SOCIETY.

APRIL 4TH, 1877.

ARTHUR RANSOME, M.D., President, in the Chair.

*Aneurism.*—Dr. SIMPSON showed a case of aneurism.

*Tumour of the Testis.*—Mr. BOUTFLOWER showed a large tumour of the testicle, measuring six inches by three inches, removed from a patient in the Salford Hospital. The case was of interest, inasmuch as it occurred in a young man aged 22, who never had syphilis nor received a blow. The mass consisted of a tissue of scirrhus (?) nature, and had attained its present size in six months from the commencement of the symptoms. The man had an unhealthy anæmic cachexia, which had disappeared since the operation.

*Cephalotribe.*—Dr. LLOYD ROBERTS exhibited his cephalotribe. It is light, weighing only two pounds two and a quarter ounces, and combines power and compactness with efficiency. The screw, instead of being a separate and removable part of the instrument, is united to the handle of one blade, along which it moves in a slot, so that it can be placed out of the way of the hands during the introduction of the blades. When the blades are in position, the screw can be instantly brought into action by the movement of the hand, thus obviating the necessity of an assistant.

*Spina Bifida.*—Mr. WILLIAMSON showed a child with a very large spina bifida, situated in the lumbosacral region.

*Urethrotomy.*—Mr. LUND read a paper on internal urethrotomy, with its modern improvements.

MAY 2ND, 1877.

ARTHUR RANSOME, M.D., in the Chair.

*Specimens, etc.*—Dr. SIMPSON exhibited a patient with an abnormal condition of the neck. He also mentioned several cases of aneurism, and made some remarks on their treatment.

Mr. JONES showed a girl aged 14, whose knee he excised last December. The bones were ankylosed firmly in the straight position, and the patient was able to walk with but little difficulty. (This case was reported in the BRITISH MEDICAL JOURNAL, June 9th, 1877.)

Dr. DIXON MANN showed—1. Some of Mottershead's constant current batteries, with improved arrangements for distributing the work over the whole series of cells; the direction of the current in these batteries is indicated by the handle of the commutator. 2. An induction apparatus, made by Mottershead and Co., which yields a current in one direction only; the coil consists of a graduated series of wire, arranged so as to obtain the greatest inductive influence. 3. A galvanometer, devised by himself (Dr. Mann), and graduated in units of current, with the view of estimating the actual amount of electricity administered to a patient. The instrument contains a resistance coil, and can also be used for measuring batteries on short circuit. 4. Various kinds of electrodes, including an improved sponge-holder.

*Abnormal Stomach and Intestines.*—Mr. WHITE (Ashton Infirmary) showed a very interesting preparation of abnormal stomach and intestines, obtained from a woman aged 29. In its long diameter, the stomach measured twenty-one inches, and was capable of holding ten pints of fluid. The oesophageal entrance was much dilated, and when first examined the organ was distinctly double, the constriction being situated seven or eight inches from the pyloric end. This condition had disappeared in consequence of the too forcible distension with air. A pouch projected from the cardiac extremity. The small intestine was much larger than natural, and the greater part of it was situated in the pelvis. A number of diverticula projected from the upper part of the jejunum. They consisted of mucous, muscular, and peritoneal coats, and communicated with the bowel by large circular mouths. The large bowel was normal, except that the ascending and descending portions had each a very distinct mesentery. The pelvis was very capacious, and the soft structures closing the outlet prominently projected, forming a very large hernia-like pouch. This commenced four years ago.

*Excision of the Tongue.*—Mr. HEATH brought before the Society a patient whose tongue was removed by Syme's method. The operation



had been performed for malignant disease, which made its appearance about three months before as a hard nodule in the soft tissues beneath the tongue. When admitted into the infirmary, the man could scarcely bear the severe radiating pains in his head. These, with the inability either to eat or sleep and the constant escape of saliva from the mouth, made his life miserable, and he willingly submitted to the operation of entire removal of the organ under chloroform. The incision-wound healed readily. The operation entirely removed the pain and salivation; and when asked, the man declared he would rather undergo a similar operation again than suffer the pain which he had endured.

*Speculum Clamp.*—Mr. WHITEHEAD showed a new form of speculum clamp.

*Malignant Epithelioma.*—Mr. BRADLEY mentioned a case of multiple epitheliomata. One of the tumours was situated on the left forearm; the rest, nine in number, upon the right thigh. The disease had appeared two years before, and some of the femoral tumours had attained a large size. They had been removed by Mr. Bradley, and the wound was healing. Mr. Bradley observed that epithelioma was unquestionably frequently a purely local affection; if the abnormal growth were removed, cutting wide of the disease, there was an end of it, the disease never reappearing in many cases. In such a case as the one he related there was a true diathesis, and for this condition he suggested the term epitheliosis.

*Misplaced Testis.*—Mr. STOCKS exhibited a man, one of whose testicles has missed the scrotum, and passed into the front of the perineum.

*Uterine Polypus.*—Dr. LLOYD ROBERTS showed, for Mr. EWART, a large polypus of the uterus.

#### BORDER COUNTIES BRANCH.

FRIDAY, MAY 4TH, 1877.

HENRY BARNES, M.D., in the Chair.

*Removal of Cast from a Female Bladder.*—Dr. SKAIFE (Wigton), for Dr. ROBERTSON (Penrith), read notes of a case in which a body (false membrane?) was removed from a female bladder. The patient was a girl aged 21, who had always been very delicate, having suffered from enlarged glands, bronchitis, and general debility. Two years ago, she had rheumatic fever; subsequently she had been troubled with frequent calls to pass urine, and often noticed a sandy deposit in it. Since the end of last December, the desire to micturate had been almost constant, with much suffering. Dr. Robertson first saw her about the end of last March. The urine was then loaded with phosphates, mucus, and blood. She had extreme suffering from constant efforts to make water. The following day, Drs. Robertson and Woollett passed a sound into the bladder, but no additional information was thus obtained. On the next day, the suffering was increased; and, on making an examination, the substance exhibited to the meeting was found presenting at the orifice of the urethra. It was removed by traction with forceps, and was followed by a considerable gush of urine. The patient had had perfect relief since, but had atony of the bladder. The substance was a greyish-white purse-shaped body, of about the size of a hen's egg, and two lines in thickness. It presented by its mouth, and the fundus contained two openings corresponding to the orifices of the ureters. Its interior was lined with a calcareous deposit. Dr. Robertson's impression was that this sac was a false membrane formed upon the mucous surface of the bladder, analogous to croupous membrane; through time, it became shed, and the bladder made violent efforts to expel it.

*Biliary Calculi.*—Dr. CAMPBELL (Garlands) read notes on biliary calculi, and submitted for inspection a case containing biliary calculi found in 28 subjects; and accompanied it with a tabular statement of the sex, age, presence or absence of symptoms of jaundice and of disease of the liver. He stated that, out of 357 *post mortem* examinations made at the asylum, biliary calculi were found in 28 cases. In 19 of these 28 cases during the patient's life in the asylum, evidences more or less severe pointed to the presence of gall-stones. In these 19 cases, pain, sickness, vomiting, retching, feeble pulse, and cold sweats were in a more or less severe character present in several of the cases, frequently recurrent, in some only present once during life in the asylum. In three of the cases, jaundice occurred, and was recovered from. Of the 28 cases, 10 were males, 18 females; 21 of the 28 were above fifty years of age, and nine of the number were above seventy years of age. In one case, a calculus was, at the *post mortem* examination, found in the common duct; and in this case the calculi found in the gall-bladder, from their number, regularity of size, and facets, formed rather a rare specimen. In all but one case, there was change found in the liver-structure, principally fatty degeneration; in a large number of the cases, there was evi-

dence of the presence at one time of inflammation of the peritoneal coat; in one case, acute inflammation of the organ, with the presence of several abscesses. Dr. Campbell pointed out that, though in only 19 of the cases symptoms had been observed, yet several of the cases had not been long under observation; that the asylum physician had had almost entirely to rely on the signs of disease observed by himself, as many of the patients were unable to tell their symptoms; and that, unless sickness or prostration were present, much discomfort might quite well be experienced by a patient without its being noticed. He then discussed the symptoms and treatment of hepatic colic; the formation of gall-stones and their ingredients; the relations of sex, age, and habits in gall-stone disease, quoting the recorded observations; and concluded by calling attention to the obscure abdominal symptoms caused by biliary calculi making an attempt to make their exit by ulceration through the abdominal parietes.

#### MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, MARCH 7TH, 1877.

J. D. GILLESPIE, M.D., President, in the Chair.

*Excision of the Knee.*—Mr. ANNANDALE showed a girl whose knee-joint he had excised five years ago. This case, and one shown at the Clinical Society of London by Mr. Barwell, were the only two known where a movable joint was also an useful one. The patient had motion at the site of excision, and could walk well. The sound limb was an inch and a half longer than the other.—The PRESIDENT asked if the mobility was intended or accidental. In either way the result was magnificent.—Mr. ANNANDALE explained that it was not an intentional result.

*Dislocation of the Hip-joint from Disease.*—Mr. ANNANDALE showed a specimen of dislocation of the head of the femur from disease. The interesting point was that the amount of disease was not great, and was due to a secondary inflammation of the joint, following on a psoas abscess. The capsular ligament was destroyed, but the Y-shaped ligament of Bigelow was left. The displacement was, as they saw, an unusual one, and was caused by the patient lying before death with his leg flexed.

*Hip-Disease.*—Mr. ANNANDALE exhibited an interesting specimen in connection with hip-disease. There was evidence of active inflammation in the joint, but none of any suppuration. He incised antiseptically, and cut the head of the femur out. The point to which he wished to direct attention was that the disease began in the epiphysis. It was quite evident that, unless the necrosed bone now shown, which was lying loose in the cavity, had been removed, there would have been suppuration.

*Dislocation of the Knee from Disease.*—Mr. ANNANDALE exhibited a specimen obtained in a case of dislocation at the knee-joint from disease. The tibia was displaced back and the limb was useless. He first divided the hamstrings, but without effect. He then made a free lateral incision, and sawed off the condyles of the femur with the ankylosed patella. He was, however, still unable to bring the limb straight until he cut off another slice. He did not, however, interfere with the tibia. This was now the second time he had operated in the manner, and with a good result on both occasions.

*Gag for Operations on the Mouth.*—Mr. ANNANDALE showed a gag for keeping the mouth thoroughly open in operations on it. The best for this was the late Sir William Fergusson's. In using it he had, however, found two disadvantages; viz., the handles were in the way when the patient was lying, and the instrument was apt to slip. He had, therefore, had made and used an instrument which was a modification of Sir William Fergusson's and Mr. Hutchinson's. It had handles which could be removed, and also a mould for the teeth.

*Tumour of the Eyeball.*—Dr. ARGYLL ROBERTSON showed an eyeball removed from a woman three weeks ago. The tumour was in the interior of the eye, and had emerged thence through the sclerotic, close to the inferior margin of the cornea. Three years ago, her eyesight had failed, and a year afterwards she noticed a small spot which corresponded to the spot where the tumour protruded. One-third of the vitreous chamber was occupied by a growth, which, when examined by Dr. Wyllie, was found to be melanotic, there being large melanotic cells undergoing endogenous development. It was interesting that, although present for at least two years, it only filled one-third of the vitreous chamber. From its being so limited, and as the optic nerve on section was healthy, he hoped the disease had been eradicated.

*Tumour of the Orbit.*—Dr. ARGYLL ROBERTSON showed a tumour of the orbit, removed from a boy ten years of age. It caused extensive protrusion of the eyeball, and had been growing for three years. It extended back to the apex of the orbital cavity, and was intimately



associated with the optic nerve, which was lost in it. Yet the boy could count fingers held before the eye, although the whole nerve was so implicated. From this, and the fact that the movements of the eye were unimpaired and the tumour not connected with the periosteum, we took a favourable view of its nature. This was confirmed on microscopical examination, as it was found to be a simple fibrous growth.

*Wound of the Axilla.*—Mr. BELL related the following case. On Saturday night, a young gentleman at the Gymnasium had gone outside the railing of one of the swings. When there, he got confused, lost his head, and was thrown out, alighting on a paling. As he was insensible, he was brought into one of his wards, when the following was found to be the nature of the injury. A large piece of paling, pointed at one end, nine inches long, three inches broad, and half an inch thick, had penetrated just below the axilla and passed up between the scapula and chest-wall, appearing at the acromion process. It fortunately did not pierce the skin there, and the subclavian vessels were uninjured. He diluted the wound, washed it out with carbolic lotion (1 to 20), and dressed it with antiseptic precautions, using free drainage. The patient was now doing well, and the wound was quite sweet. The case was interesting from a medico-legal, as well as from a surgical, aspect, inasmuch as small pieces of all the layers of clothes he had on at the point of transfixion were found on the top of the paling. When the patient was picked up at the Gymnasium, the proprietor did not know that there was such a large piece of his paling in him, because only a small part projected at the wound.

*Diseased Heart.*—Dr. G. W. BALFOUR showed a heart. Four months ago, the patient had been admitted into his ward, with a distinct thrill in the aortic area, the subclavian, carotid, and brachial arteries, and even low down in the abdominal aorta. There was a loud musical diastolic aortic murmur. Such cases were not common. Walshe had recorded only one, while Hayden had never met with one, but gave an account of a case. Dr. Balfour himself did not believe it was so rare, as he had seen two cases in Dr. MacLagan's wards, and at present had four under his care with a thrill and a loud diastolic murmur. In one it was so loud that the patient's wife could hear it across the dining-table; indeed, he felt ill unless it was so heard. It was evident that in such cases there was something projecting across the current of blood. Sir Thomas Watson related three cases, and in one the inner half of all the segments was depressed, producing the vibrations. In the case now shown, one segment of the aortic valve was so depressed. There was no systolic murmur over the base, but only in the aorta. The diastolic murmur was loud and musical. His diagnosis was, therefore: aorta dilated, two segments healthy, but, when blood descended, one segment below the level of these two causing, by its vibrations in the current, a musical diastolic murmur. The case was interesting, too, because digitalis was given freely and for a long time. Two of Nativelle's digitaline granules (one granule = ten minims of tincture) were given every four hours. Every now and then the pulse sank and the urine fell, so that the question arose whether this was due to too much or too little digitalis. For reasons he would not give now, the dose was increased on such occasions to three granules every four hours. The day before the patient died, he left orders to increase the dose; but as he was sinking so rapidly as to be lying down, the house-physician did not administer it. On *post mortem* examination, the heart was found in diastole, so that it was clear he died from want of digitalis, not from too much. It was interesting that much larger doses were borne, not only without impairment, but with benefit. This showed the changes in their ideas, as he recently met a medical man who remembered a case, forty years ago, where digitalis was being given in four-minim doses of the tincture. Death occurred, and was attributed to the too free use of the drug.

*Aneurisms on Terminal Branches of the Pulmonary Artery in the Walls of Cavities.*—Dr. BYROM BRAMWELL said that, since the publication of Rasmussen's paper, the attention of physicians and pathologists has been directed more closely than before to the source of the hæmorrhage in cases of fatal hæmoptysis; and several observers have confirmed the statement that in many instances the source is a ruptured aneurism on a terminal branch of the pulmonary artery. He showed four specimens which he lately met with in the Newcastle-on-Tyne Infirmary. The first patient, a coloured man aged 21, was admitted under the care of Dr. Gibson, suffering from extensive pulmonary disease, more marked on the right than on the left side. While in hospital, he had three attacks of hæmorrhage, expectorating on each occasion between thirty and forty ounces. Before each hæmoptysis, there was a marked fall in temperature. The man died thirty hours after the last bleeding. At the necropsy, extensive tubercular disease of both lungs was found. The right apex was hollowed out into a cavity of the size of an orange. At the inferior part of this cavity, the

walls of which were dense and cicatricial, there was a small aneurism of the size of a pea. It was unruptured, and was situated on a minute branch of the pulmonary artery. A second smaller cavity in the middle of the lung was filled with coagulated blood, partly recent, partly old and decolorised. Another aneurism of the size of a cherry was found in this cavity. This aneurism had ruptured by a slit-like opening, about three lines in length. Still lower down, there was a third aneurism, larger than the others, more irregular in shape, and almost completely filling the cavity in which it was situated. Its wall was at one part very thin, but it was unruptured. It was situated on a branch of the pulmonary artery. The cavity of the aneurism was divided by a well marked septum into two parts. From the lower end of the sac two efferent vessels sprang. The second patient, a man aged 28, was admitted under the care of Dr. Philipson, suffering from tubercular phthisis. On December 15th, he was attacked with violent hæmoptysis, the blood spurting from the mouth and nose. He was dead in a few minutes. At the *post mortem* examination, both lungs were found to be infiltrated with tubercle. In the left apex, there was a cavity of the size of a small apple, and in this cavity was situated a round aneurism of the size of a cherry. The aneurism had ruptured by an opening sufficiently large to admit the passage of a good sized probe. The cavity in which it was contained, the bronchial tubes of both lungs, and the trachea were filled with blood, partly fluid, partly coagulated. All four aneurisms contained a small quantity of fluid blood. In none was a clot found. One of the patients had suffered from syphilis. In both patients the arterial system was healthy.

*Colica Pictonum, due to Swallowing a Lead-bullet.*—Dr. TURNBULL of Coldstream read a case. Early one morning, he was summoned to see a boy aged 9, who was suffering great pain in the abdomen. The history was that he had recently swallowed a lead-bullet. No alarm had been felt by his parents at the time he did this; but they gave him a dose of castor-oil and put him to bed. The pain when he saw him was very severe, paroxysmal, and felt chiefly round the navel. At first, he thought it was due to mechanical obstruction; but soon he felt sure it had more of the character of lead-colic. There was, however, no blue line on the gums. The treatment adopted was hot poultices locally, opium, sulphate of magnesia, and diluted sulphuric acid, for the purpose of coating the bullet with an insoluble sulphate. Chlorodyne was also employed. The severe pain, however, continued, and also strangury, along with some internal hæmorrhage. He then lost flesh rapidly, and ultimately died, three weeks after swallowing the bullet. In such cases, Dr. Turnbull said that an emetic should be administered at once, and a guarded prognosis given.—The PRESIDENT regretted that there was no *post mortem* examination. At the same time, it was a valuable case; because many surgeons had seen instances where halfpence and pence were swallowed without harm. He himself had seen two such, and there was no reason why copper should not prove fatal as well as lead. Probably no poison had been more investigated than that of lead, and the paper to-night was a valuable addition to its literature.—MR. ANNANDALE, while he believed that the bullet was the cause of death, could not coincide with the explanation given. The bullet probably lodged in the intestine, caused a twist because of its weight, and thus produced obstruction.—Dr. SANDERS had never read of such a case. As to its nature, it was one of difficulty. The symptoms were highly inflammatory, as shown by the temperature (102 deg.) and the high pulse. Such was not the case with lead-poisoning, which was an apyretic disease. The symptoms of violent colic left it an open question whether there was obstruction or lead-poisoning. As to Mr. Annandale's suggestion, if he followed the case aright, the bowels were cleaned by purgatives and there was no stercoraceous vomiting. It appeared most probable that the bullet lodging caused inflammatory action, and therefore ulceration, as was shown by the vomiting of blood. The case was one where a *post mortem* examination would have been of the greatest value. Nevertheless, even without that, it was extremely instructive.—Dr. WYLLIE inquired as to the seat of the pain. From observations he had made in the *post mortem* room as to the position of the stomach, he believed it probable that, in Dr. Turnbull's case, the bullet remained in the stomach, and set up an inflammation there which led to ulceration and perforation.—Mr. BELL thought it extraordinary that the bullet did not pass in the ordinary way. He agreed in the main with Dr. Sanders and Dr. Wyllie, but thought the bullet had probably lodged in the vermiform appendix. Although no chemist, he believed that the presence of the products of inflammation would cause a more active absorption of the lead into the system.—Dr. CARMICHAEL said that the suddenness of the change pointed to perforation and collapse, following on ulceration.—Dr. A. G. MILLER inquired as to the treatment. Mr. Bell's remarks suggested to him that the case would have had a better termination if the boy, instead of being kept quiet, had been made to



run about. In such cases, it would probably be advisable to do this, so as to encourage the passage of the bullet downwards.—Dr. KEILLER thought the boy should have been turned upside down.—Dr. TURNBULL had felt the case to be a difficult one. Although he had applied to many of his friends, he had been unable to get any record of one like it. He would have been glad to have got an explanation of the strangury. Such strangury and emaciation he had never witnessed. Another point on which he would have liked information was the advisability of giving an emetic. In one case, castor-oil was given with a good result. He was perfectly confident that the boy did not die of obstruction. The frequency of cattle being poisoned with the lead-spray from targets, as pointed out by Mr. Robertson of Kelso, was an interesting fact, and had a bearing on his case.

*The Action and Sounds of the Heart.*—Dr. PATON read a paper, entitled experimental researches on the action and sounds of the heart, in which views very different from those usually held were described.—The paper was criticised by Dr. Sanders, Dr. G. W. Balfour, Dr. Smart, and Dr. Bramwell; after which, Dr. PATON replied, expressing his belief in the correctness of his views.

## PATHOLOGICAL SOCIETY OF DUBLIN.

SATURDAY, MARCH 24TH, 1877.

THOMAS HAYDEN, F.K.Q.C.P., President, in the Chair.

*Rupture of Branch of Pulmonary Artery in Phthisis.*—Dr. J. W. MOORE showed the thoracic viscera of a man aged 44, who fell a victim to phthisis affecting both the larynx and lungs. He was a baker by occupation, and necessarily exposed to extreme and sudden changes of temperature. This fact, in his opinion, laid the foundation of his illness, which commenced before last Christmas. He was admitted to the Meath Hospital on March 5th, 1877, with all the evidences of advanced pulmonary and laryngeal phthisis. Early on the morning of March 16th, considerable hæmoptysis set in from the right apex, where complete dulness on percussion and a loud gurgling *râle* were now heard. After death, which occurred on March 17th, the right pleural cavity was found obliterated by old adhesions, and the pleura at the apex was much thickened. An anfractuons cavity, as large as a middle-sized orange, existed in the apex of the right lung, and a vessel which had ruptured in its wall was the source of the fatal hæmorrhage. Extensive depositions of old standing tubercle existed in both lungs. As regards the larynx, the epiglottis, aryteno-epiglottidean folds, and the arytenoid cartilages themselves, were enormously thickened. There was a polypus on the left true vocal cord. Considerable ulceration also existed on the interior of the larynx, and extended to the necrosed junction of the alæ of the thyroid cartilage.

*The Etiology of Cheyne-Stokes's Respiration.*—The PRESIDENT laid before the Society the thoracic viscera of an intemperate wine-porter, aged 38, who became subject to "shortness of breath" about last Christmas. Frequent calls to micturition occurred in the middle of January. There was visible pulsation in the carotid arteries, and also in the veins. The heart beat with a double impulse, the apex-beat being one inch and a half to the left of the nipple. There was also a double first sound. About three weeks after admission, Cheyne-Stokes's respiration set in. Apnoea lasted for twenty-two seconds, and was followed by three acts of respiration in the next five seconds. There was marked distress during the ascending period of breathing. No alteration was noticed in the pulse during the cycle of breathing. The aortic second sound was sharp and ringing, and led to the diagnosis of dilated and atheromatous aorta being made. After death, the liver was rather large; the right kidney weighed thirteen ounces, but was structurally sound. The left kidney, atrophied, weighing but two ounces, showed no trace of cortical substance. There was hæmorrhagic infarction of the lungs. The heart was remarkably large, weighing thirty-six ounces. The left ventricle was greatly thickened. All the valves were normal and competent. The aorta was dilated and atheromatous. The President laid stress on the interesting features in the case as follows: 1. The doubling of the first sound, indicative of simple hypertrophy of the left ventricle; 2. The large left ventricle causing the double impulse; and 3. The Cheyne-Stokes's respiration, dependent, he believed, on a dilated and atheromatous aorta.

*Partial Fracture of the Shaft of the Femur.*—Dr. E. H. BENNETT exhibited an instance of partial fracture of the shaft of the thigh-bone in its upper third. The form of the fracture was V-shaped, the apex of the V being placed close to the lesser trochanter, the sides being each about an inch and a half in length. The included tongue of compact tissue which had been displaced was still projecting above the level of the surface of the bone, and already some callus had been deposited along the lines of fracture. The injury appeared to have resulted from

the deposits of secondary cancerous tubercles in the substance of the trochanteric region and upper part of the shaft of the bone, which had weakened its structure so as to cause its yielding while the absorption had not yet reached a degree sufficient to determine complete fracture; no cancerous tubercle, however, occupied the lines of fracture.

## CORRESPONDENCE.

### MEDICAL REFORM.

SIR,—I should feel obliged by your allowing me to ask through your columns for answers to the following questions. The information sought for is in aid of the Medical Act Amendment Bill, which this Association now have awaiting its second reading in the House of Commons.

1. Can any gentleman give me the names of magistrates who have dismissed charges brought against persons, under the Medical Act, 1858, for falsely assuming medical titles?

2. About what was the date of the dismissal? And where did it take place?

3. What was the title assumed? And what the defendant's name?

4. Was any fictitious or genuine diploma produced by defendant, or alleged by him to be in his possession?

Replies will very gladly be received by, sir, your obedient servant,

R. H. S. CARPENTER, *Honorary Secretary.*

Medical Alliance Association (late East London Medical Defence Association), 533, Commercial Road, E.,

June 20th, 1877.

P.S.—Much confusion and trouble having lately occurred, in consequence of the Medical Defence Association having been mistaken for the East London Medical Defence Association, it has been found necessary for the last named Association to adopt some distinguishable title; and they have, therefore, taken that at the end of this letter, viz., The Medical Alliance Association.—K. H. S. C.

### MEDICAL ACT (1858) AMENDMENT BILL.

SIR,—I am instructed to forward you a copy of resolutions respecting the above, unanimously passed at a meeting of the Nottingham Branch of the Medical Defence Association, held on the 14th instant, and respectfully to solicit your consideration and support of the same.

I am, sir, yours obediently, HENRY A. HATHERLY, *Secretary.*

1. That this Society strongly urges upon Dr. Lush, and the other Members of Parliament associated with him in introducing a Bill to Amend the Medical Act of 1858, the great importance of adopting a clause whereby prescribing, as at present carried on by many druggists and other unqualified practitioners, should be considered an infringement of the Act, and render such persons liable to a penalty.

2. That no amendment of the Medical Act can be considered satisfactory which does not make the carrying out of prosecutions of offenders incumbent upon the General Medical Council.

3. That the 31st Section of the Medical Act be amended, so that all "registered" medical practitioners may be able to recover for medicines in a court of law.

4. That copies of these resolutions be sent to Dr. Lush, M.P.; Sir Trevor Lawrence, M.P.; Lord Edmund Fitzmaurice, M.P.; W. Grantham, Esq., M.P.; and W. Ritchie, Esq., M.P.; also to the editors of the leading medical journals.

Nottingham, June 16th, 1877.

## PUBLIC HEALTH AND POOR-LAW MEDICAL SERVICES.

### THE WEST BROMWICH BOARD OF GUARDIANS.

SIR,—The enclosed paragraph is taken from the *Birmingham Daily Mail* of the 4th instant.

"At the meeting of the West Bromwich Guardians to-day, Mr. Downes, who has been medical officer for Handsworth for many years, applied for superannuation allowance. Mr. Hampton said he regarded the application (which was not acceded to) in the same light as he would an appeal for aid or relief, a statement which elicited cries of 'Shame'. Mr. Hampton frequently interrupted the meeting; but at last the Chairman characterised his conduct as shameful, and told him he was about the only member who had to be kept in order. Mr. Hampton retorted that he did not care a button what the Chairman thought."

It merely affords an example of the "insolence of office" exhibited by Poor-law guardians towards medical officers.—Yours, etc.,  
Handsworth, June 5th, 1877. LICENTIATE.



### WORKHOUSE MEDICAL OFFICERS AND CASES OF DRUNKENNESS.

SIR,—I have recently returned from India, and have seen a correspondence in your JOURNAL referring to cases of drunkenness brought by the police to the Westminster Workhouse. I lived with Dr. Rogers for upwards of twelve months, in the same capacity as Dr. Phillips, and my experience quite coincides with his. I will quote one case, which made rather an impression on me, that of a woman left late at night by a policeman, for whom I got an urgent order to attend. Shortly afterwards, I saw her in the receiving-ward abusing the nurse. While I was examining her, she became uncomfortably affectionate, attempted to embrace me, addressing me as her "darling Charley". Now, this was the most apparent case of drunkenness "without any other complication" I ever saw. I cannot understand how any policeman possessing the smallest knowledge of drunkenness could mistake her case for one of illness. Several somewhat similar cases came under my notice, "generally late at night", without having been previously seen by a police-surgeon. These cases usually took their discharge early next morning, congratulating themselves on having escaped the police-court. I am glad to see that Dr. Rogers has established his opinion respecting the so called epileptic; and have no doubt that, if properly supported by the Poor-law medical officers throughout the metropolis, his untiring efforts to mitigate the nuisance will be rewarded by success.—Yours faithfully,  
G. BEAMISH, L.R.C.S.I., etc.  
Charing Cross Hotel.

### PUBLIC HEALTH MEDICAL APPOINTMENTS.

LEACH, J. Comvns, B.Sc.Lond., S.Sc.C.Camb., appointed Medical Officer of Health for the Rural Sanitary District of Sturminster for three years.

### MILITARY AND NAVAL MEDICAL SERVICES.

SURGEON-MAJOR SAMUEL ROWE has been appointed Governor and Commander-in-Chief of the West African Settlements.

SURGEON-GENERAL THOMAS LONGMORE, C.B., who has retired on half-pay, after a long and honourable service in the Army Medical Department, retains his appointment as Professor of Military Surgery to the Army Medical School at Netley.

THE pay and allowances of medical officers doing duty with corps will, on and after July 1st next, be issued monthly in arrear instead of in advance, as at present. Abroad, the issues from that date will be made by the departmental paymaster at the station in which the medical officer may be serving.

ARMY MEDICAL DEPARTMENT.—Surgeon-Major W. J. Wilson assumes medical charge of the 1st Station Hospital, Aldershot, during the absence on leave of Surgeon-Major R. J. W. Orton. Surgeon Tobin assumes medical charge of the 2nd Brigade, Aldershot, during the absence of Surgeon-Major Wilson. Surgeon Cogan has relieved Surgeon Johnstone at musketry in the North Camp, Surgeon Johnstone having proceeded to Portsmouth for duty. Surgeon-Major Chapman, from Dublin, has taken over medical charge of troops at Longford, and replaced Surgeon-Major W. Atkinson, who accompanied the 53rd Regiment to Jersey. Surgeon Ulick A. Jennings accompanied II Battery B Brigade, R.I.A. to the Curragh Camp, June 4th, and returned to Dublin on its completion. Surgeon D. C. Canny has assumed medical charge of the troops at Birr, replacing Surgeon-Major W. C. Roe, gone on leave of absence, pending embarkation for the Cape of Good Hope. Surgeon N. Wade, recently in medical charge of the troops at Linen Hall Barracks and Aldborough House, has been struck off the strength of the Dublin Garrison.

### ARMY MEDICAL DEPARTMENT.

SIR,—Though only 50 men are asked for to fill up the ranks of the department, there must be many more vacancies, as you will see by the *Army List* of January last, there are only 42 administrative and 67 executive medical officers, whereas there were, in January 1869, 43 of the former and 104 of the latter, a total reduction of 243, or more than 50 per centum. In the same list, only 112 surgeons appear as having entered during the same eight years, or only 14 per annum. Of course, others did enter, but the elimination which goes on in the early years of service would be rather alarming to the candidates for *Licenses* and dismissed after ten years, if they only inquired into the statistics of their chums of ever obtaining the former.

It is obvious, too, that the number of vacancies must increase unless something be done to fill them up in the way you have so often indicated. Let us have no more short service, except service shortened by a good retirement when earned—say 1s. a day for each year's service; two medical officers in each regiment, who will attend their own sick in the station hospital, if station hospitals must be; liberal treatment with regard to sick leave and exchanges; sixty-one days' leave a year, with such periods of short leave as may be obtainable; the present scale of pay, etc., revised; and I fancy there will soon be no scarcity of candidates.

Mr. Hardy must be easily pleased when he is satisfied with *only 14 per annum* examinations where there are only 56 candidates for 200 vacancies! But does he consider the serious detriment to the entire army by the continued discontent and

inefficiency of one of its most important departments? He ought to be reminded that all the claims of medical officers for improvements are made with a direct view to the good of the army generally quite as much as for the benefit of individuals, and that a satisfied and contented service must be the most economical in the end, even if he must give up his scheme for the saving of £50,000 *per annum* out of the unfortunate  
April 1877.  
A. M. D.

### NAVAL MEDICAL APPOINTMENTS.

BACROFT, Surgeon P. J., to the *Resistance*.  
BEAUMONT, Surgeon H., to the *London*.  
BORKEY, Surgeon D. B., to the *London*.  
CROCKER, Surgeon Henry L., to the *Active*.  
HEMWOOD, Surgeon J. D., to the *Minotaur*.  
MUGLISTON, Surgeon Thomas C., to the *Black Prince*.  
NINNIS, Fleet-Surgeon Belgrave S., M.D., to the *Active*.  
POPHAM, Surgeon T. D., to the *Victor Emmanuel*.  
STRICKLAND, Surgeon H. J. T., to the *Swallow*.  
YEO, Surgeon Robert F., to the *Elk*.

### OBITUARY.

#### JOHN WHIPPLE, F.R.C.S., PLYMOUTH.

VICE-PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION.

MR. JOHN WHIPPLE, Consulting Surgeon to the South Devon and East Cornwall Hospital, and a Vice-President of the British Medical Association, died at Plymouth on June 18th. He had been ailing for the past twelve months, but performed his professional duties up to a month ago, when he was confined to his room, and since then he never rallied, despite constant and careful attention from Dr. France and Mr. Square. Mr. Whipple was the son of Commander Whipple, R.N., and was born at Kingsbridge on June 24th, 1800. Choosing the medical profession, he received his education at the Royal Naval Hospital, Stonehouse, where he was the pupil of the late Sir Stephen Hammick, Bart. He also studied at St. Thomas's Hospital, London, and became a licentiate of the Society of Apothecaries in 1823, and a Member of the Royal College of Surgeons in 1824. After travelling for some years on the Continent with the late Admiral Sir A. Cochrane as his surgeon, Mr. Whipple settled in Plymouth. For his exertions at the time of the cholera of 1832, he was presented with the freedom of the town and a silver snuff-box, the inscription on which set forth that it was given him "in testimony of the gratitude and esteem of his fellow-townsmen for his humane and unceasing attention to the poor during the awful visitation of malignant cholera at Plymouth in 1832". Mr. Whipple excelled as an operator. On February 7th, 1846, prior to the use of chloroform as an anæsthetic, he successfully amputated the leg of a man at the hip-joint; the third time such an operation had then been performed with success in England. The patient, John Cross, who is now alive, presented Mr. Whipple with a snuff-box in token of his gratitude, and Mr. George Corydon, the then Mayor of Plymouth, wrote to him on the day of the operation thanking him for the eminent skill, dexterity, and humanity displayed by him. Ten years prior to this, Mr. Whipple had performed, for the first time in England, the operation of dividing the tendo Achillis for the cure of club foot. Dr. Little at first supposed that he was the first British practitioner who had effected division of the tendo Achillis, but on learning that Mr. Whipple had performed the operation a year before him, he congratulated him on the precedence. Mr. Whipple took no part in public matters, but always showed great delight in associating himself with the work of the South Devon and East Cornwall Hospital. From the establishment of that institution in 1840 down to 1870 he was one of the surgeons, and when he retired from that office in 1870 (his son, Mr. Connell Whipple, being appointed in his stead) he was elected consulting surgeon to the hospital, a post he held to his death. He was also surgeon to the Plymouth Dispensary for years. Mr. Whipple was President of the British Medical Association at the meeting in Plymouth in 1871; and on retiring from office in the following year was appointed vice-president for life. One source of the great popularity which Mr. Whipple enjoyed throughout a large portion of South Devon and Cornwall was a kindness of heart, leading him readily to feel for the sufferings of all with whom he came in contact, whether the rich or the poor. By many his loss will be long and deeply felt as that of a man who was a good surgeon and a true and constant friend.

#### HENRY WILSON, F.R.C.S.I.

THIS gentleman died at his residence in Dublin, from pneumonia, on June 13th, after a short illness, at the comparatively early age of forty. No Dublin surgeon ranked so high for the last few years in the special departments of surgery he had selected for his practice, that of the eye and



ear. His professional abilities, it need hardly be remarked, were of the highest order, and he was much beloved and esteemed by his numerous friends and acquaintances. Mr. Wilson held various appointments, including the Lectureship of Ophthalmic Surgery in the Royal College of Surgeons of Ireland; that of Examiner in the University of Dublin; Surgeon to St. Mark's Ophthalmic Hospital; and Oculist to the Molyneux Asylum, etc. At his funeral, eminent citizens, including the Lord Mayor of Dublin, in his state chariot, and members of his profession, were present in large numbers, to pay the last mark of respect to the memory of the deceased, who was so highly esteemed.

## MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, June 14th, 1877.

**Vaccination.**—Mr. P. A. TAYLOR asked the President of the Local Government Board whether it was true that a boy named Thomas Taylor was certified by an Ipswich surgeon as having been successfully vaccinated by him on the 20th of May, 1868; whether this boy was not returned by the Ipswich medical officer as having died of small-pox in the borough fever hospital on the 7th of April 1877, unvaccinated; and whether he would cause inquiry to be made into the circumstances?—Mr. SCLATER-BOOTH: I have made some inquiry into this case, and find that, according to the Vaccination Register, it is the fact that the boy in question was certified to have been successfully vaccinated by an Ipswich surgeon on May 20th, 1868. He died in the borough hospital on the 7th of April 1877, of small-pox, and the medical officer in attendance certified that he was unvaccinated—first, because there were no vaccination marks to be seen; secondly, because the mother stated that the boy had been vaccinated three times by the assistant of Mr. Adams, but unsuccessfully. The mother is very positive in her statement as to the vaccination not having been successful; in this she is corroborated by a neighbour who remembers the circumstance. It is not easy to explain the discrepancy between the entry in the Vaccination Register and the facts which have now been ascertained; but the vaccination occurred before the Act of 1871, when certificates were sometimes given without inspection of result.

Monday, June 18th.

**The Arctic Inquiry.**—On this question an interesting discussion was raised by Dr. PLAYFAIR, who called attention to the salient points in the report, and criticised what he considered to be the scientific defects in the preparation for the Expedition. The ventilation of both ships was bad, the dietary did not contain a sufficient amount of vegetable food, and if the lime-juice had been carried in a concentrated form the difficulty which broke down the sledge-parties would have been avoided. At the same time, he expressed unqualified admiration of Sir G. Nares's general conduct of the Expedition—his only object being that the experience gained by it should be utilised.—Dr. CAMERON made some remarks in the same sense.—Mr. GOURLEY expressed the opinion that the Admiralty had been too precipitate in showering honours on the officers of the Expedition; and Dr. LUSH maintained that no officer should have power to set aside the deliberate conclusions of the scientific department.—Mr. GOSCHEN expressed a general approval of Sir G. Nares's management of the Expedition.—Mr. HUNT explained that, though the Admiralty were of opinion that Sir George had committed a mistake in omitting to send lime-juice with the sledge-parties, they made all allowance for the difficulties of his position, and did not throw any serious blame upon him. The report made no difference in the opinion of the Admiralty, that he deserved the honours which had been bestowed upon him, and it was a mistake to suppose that the outbreak of scurvy prevented the attainment of the main object of the Expedition, because it was shown that the North Pole was impracticable by that route.

## MEDICAL NEWS.

**APOTHECARIES' HALL.**—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 14th, 1877.

Calcott, Lewis Berkeley, Oundle, Northamptonshire  
Coker, Thomas, Sharnfield

Hayward, Thomas Ernest, Tewkesbury

Hedd, Robert, Sleaford, Lincolnshire

Khamtata, H. Raj, Jehangir, Bombay

Scott, William George, London Hospital

The following gentlemen also on the same day passed their primary professional examination.

Burrell, James Philip, St. Mary's Hospital, London  
Martin, Theodore, Birmingham

## MEDICAL VACANCIES.

The following vacancies are announced:—

**BATH UNION.**—Medical Officer for the Workhouse and First District.  
**BOLTON INFIRMARY AND DISPENSARY.**—House-Surgeon. Salary, £200 per annum, with board and lodging. Applications to be made on or before the 20th instant.  
**BRIGHTON AND HOVE DISPENSARY.**—Resident House-Surgeon. Salary, £200 per annum, with furnished apartments, coals, gas, and attendance. Applications to be sent in on or before July 2nd.  
**EAST RIDING ASYLUM, Beverley.**—Assistant Medical Officer. Salary, £200 per annum, with furnished apartments, board, and attendance. Applications to be sent in on or before the 23rd instant.  
**FREEDRIDGE LYNN UNION.**—Medical Officer for the Workhouse and the Second Eastern District.  
**MACCLESFIELD GENERAL INFIRMARY.**—Junior House-Surgeon. Salary, £200 per annum, with board and lodging. Applications to be sent in on or before the 23rd instant.  
**NEW HOSPITAL FOR WOMEN, Marylebone Road.**—Junior Physician; also, Resident Medical Officer. Women only eligible. Salary, £50 per annum, with board, lodging, washing, and attendance.  
**PATELEY BRIDGE UNION.**—Medical Officer for the Eastern District.  
**RADCLIFFE INFIRMARY, Oxford.**—House-Physician. Salary, £200 per annum, with board and lodging. Applications to be sent in on or before the 25th instant.  
**ROYAL BERKS HOSPITAL, Reading.**—House-Surgeon. Salary, £60 per annum, with board, lodging, and washing. Applications to be made on or before the 15th inst.  
**SALISBURY INFIRMARY.**—House-Surgeon and Apothecary. Salary, £100 per annum, with board, lodging, and washing. Applications to be made on or before the 28th instant.  
**TIVERTON UNION.**—Medical Officer for the Workhouse. Applications to be made on or before the 25th instant.

## MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

\*BANKS, W. Mitchell, F.R.C.S., appointed Honorary Surgeon to the Liverpool Royal Infirmary, *vice* James Hakes, M.R.C.S. Eng., resigned.  
BLAKE, John Ffrench, L.R.C.P., appointed Surgeon to the Western Dispensary, Westminster, *vice* C. McCann, M.R.C.S., resigned.  
\*CRAVEN, R. Musgrave, M.R.C.S. Eng., appointed an Honorary Medical Officer to the Southport Convalescent Hospital and Sea Bathing Infirmary, *vice* G. B. Barron, M.D., resigned.  
\*DOWSE, Thomas S., M.D., appointed Physician to the North London Consumption Hospital.  
JACOB, Daniel, L.R.C.P. and L.R.C.S. Ed., appointed Assistant Medical Officer to the Derby County Lunatic Asylum.  
SMITH, Richard T., M.D., appointed Physician to the North London Consumption Hospital.  
SMITH, Wm. Robert, M.B., appointed Honorary Medical Officer to the Hospital for Sick Children, Sheffield.  
\*STARR, William, M.D., appointed Physician to the North London Consumption Hospital.  
WEBBER, W. Littleton, F.R.C.S., appointed Surgeon to the Westminster General Dispensary, *vice* Alban Doran, F.R.C.S., resigned.

## BIRTHS, MARRIAGES, AND DEATHS.

The following births, marriages, and deaths have been registered during the week ending June 16th, 1877.

### BIRTHS.

HAYDON, —, June 14th, at 1, Park Street, Galschields, the wife of J. Haydon, House-Surgeon, L.R.C.P. & S.E., of Essex.  
HAYDON, —, June 14th, at 1, Park Street, Galschields, the wife of J. Haydon, M.R.C.S. Eng., of Essex.

### DEATHS.

\*ALLEN, W. John, M.R.C.S. Eng., late of East Retford, at Scarborough, June 14th, 1877.  
\*WILSON, J. W., F.R.C.S. Eng., Consulting Surgeon to the South Devon Hospital, Honorary Member and Vice-President of the British Medical Association, at Plymouth, aged 70, on June 14th.

**UNIVERSITY OF CAMBRIDGE.** At a congregation of the Senate held at Cambridge on May 31st, George Fletcher, M.B., of Clare College, received the degree of M.D.

**TESTIMONIAL TO W. EDDOWES, Esq.**—The friends and neighbours of Mr. William Eddowes of Pontesbury, lately, at a public meeting, presented to him, on his retiring from practice, a testimonial of their respect. It consisted of a centre piece, a tea and coffee service, salt-cellars, salver, fish-fork, card tray, and easy chair. On the salver was the following inscription: "This salver, with other articles to the value of 155 guineas, was presented to William Eddowes, Esq., M.R.C.S., L.S.A., by his friends and neighbours as a mark of their sincere respect and esteem, on his retirement from a medical practice of forty years in Pontesbury, Salop, and its surrounding districts. May 23rd, 1877."



## OPERATION DAYS AT THE HOSPITALS.

MONDAY.....	Metropolitan Free, 2 P.M.—St. Mark's, 6 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.
WEDNESDAY..	St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—Charing Cross, 2 P.M.
FRIDAY.....	Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.
SATURDAY....	St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

LETTERS, NOTES, AND ANSWERS  
TO CORRESPONDENTS.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

AUTHORS desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

PUBLIC HEALTH DEPARTMENT.—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

COMMUNICATIONS respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## A PEPTIC LIQUEUR.

THE editor of *Truth* writes, in the number of June 7th: "A friend of mine, who has just returned from Germany, invited me to a dinner-party last week, and at the close of the dinner—which was a singularly good one—an unknown liqueur was handed round, which was particularly recommended by the host, and which no one could name. It turned out to be a new 'German notion' of applied science to *gourmandise*. The liqueur was a 'pepsin-essenz', invented by Professor Oscar Liebreich of Berlin, capable of digesting cast iron, and of which the epicureans of the German empire propose to insure that good digestion shall wait upon appetite. On this occasion it did so; but whether the cook or the Professor must bear the palm I cannot decide. I have seen an alderman include dinner-pills among his dessert; and over this the 'pepsin essenz', which had the flavour of a delicate hock, has some obvious advantages."

## ERYSIPELAS DURING CONFINEMENT.

ABOUT the middle of November 1875, I was asked to attend a lady in labour suffering at the time from erysipelas of the face. The reason why I attended was, that Mr. W. A. Bonney, whose case it was, being engaged to attend a number of confinements, did not like to risk spreading the contagion. The patient, Mrs. P., forty-three years of age, mother of a large family, had been attacked three days previously with erysipelas of the face, that affection and scarlatina being prevalent in her neighbourhood. The labour was attended by no accident, and she was delivered of a healthy male child. The milk never made its appearance, and the child was brought up by hand. At the end of a fortnight, the erysipelas had subsided, and I took leave of the patient. Some months afterwards, I was sent for, as Mrs. P. was complaining of lassitude and want of appetite. I prescribed citrate of iron and quinine, and she expressed herself to be much benefited by it. About three months ago, I was again sent for. She exhibited great puffiness about the face and eyelids; she was anæmic, and complained of pain down the shoulders, back, and loins. The urine was smoky and albuminous, and showing phosphates of lime, etc. I prescribed tincture of perchloride of iron. As she did not improve under treatment, she, by my advice, consulted Sir George Burrows, who did not express himself very favourably as to the issue of her case.

Her present state is as follows. She is very anæmic, her appetite capricious, her forehead and head covered with nodes, an ulcer on her left arm, on the left buttock, and on the calf of the left leg. The catamenia are pretty regular. The urine is albuminous, and I have detected a few casts in it. She is taking iron and cod-liver oil.

V. POULAIN, M.D., M.R.C.S.

## EXTRA-UTERINE FETATION.

SIR,—In the report of the spring meeting of the South Wales and Monmouthshire Branch (*JOURNAL*, June 9th, page 730), an error occurs, which, with your permission, I may correct.

The case of extra-uterine foetation was operated on exactly eight weeks from the onset of labour-pains, and not a few days, as stated in the report in the *JOURNAL*.

Fishguard, June 13th, 1877.

Yours obediently,  
J. HANCOCK WATHEN.

CORRESPONDENTS are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## DIALYSED IRON.

SIR,—In reply to your correspondent "R. E. F.," I beg to be allowed to say that dialysed iron is a solution of hydrate of iron in water, obtained by dialysis. On the Continent, where dialysed iron is used to a much greater extent than it is here, and whence (indeed the use of it has been imported) the solution is made of a strength which corresponds to 5 per cent. of peroxide of iron ( $\text{Fe}_2\text{O}_3$ ). To prepare it, recently precipitated and well-washed hydrate of iron is dissolved in a solution of perchloride of iron. The liquid is then placed in a dialyser—a cylindrical vessel, the bottom of which consists of parchment paper—and this in turn is placed in a larger vessel containing water. The parchment paper septum permits the passage through it of the perchloride of iron, but not of the hydrate of iron which it holds in solution, or only to a very small degree. After some time, the water in the outer vessel being occasionally renewed, the liquor in the dialyser is found to be free from all but traces of chloride, and the strength of it having been adjusted, is then known as dialysed iron. It is a clear liquid, of a brownish red colour, and slightly styptic taste; it should be preserved in closed vessels in a cool dark place. The process is based on some results of Graham's researches on the diffusion of liquids.

A liquid obtained by dissolving hydrate of iron in a solution of perchloride of iron to saturation is also known as dialysed iron, but the name is obviously misapplied. It may be therapeutically as good a preparation as dialysed iron obtained by dialysis, but I know of no observations that would allow a comparison of the two solutions in this respect to be made.

Trusting these facts may be interesting not only to "R. E. F.," but to many others of your readers,—I remain, yours respectfully,

JOHN MOSS, F.C.S. London and Berlin.

300, High Holborn, London, June 11th, 1877.

## TREATMENT OF CHRONIC ECZEMA BY CHRYSOPHANIC ACID.

SIR,—Mr. C. W. Chubb, whose letter to you is a model for case-reporters to follow, appears almost to challenge me to apologise for communicating to the *JOURNAL* a means for curing patients affected with skin-disease by a method which is only too rapid, not indeed for the practitioner, which at first might seem to be the only drawback, but too rapid for the interests of the patient himself. But Mr. Chubb is evidently, from his letter, one of the very last to think that a rapid cure of the patient is of any other effect than to be an advantage as well as a gratification to the surgeon. I, therefore, gladly reply to his inquiry, for I think his two cases are of great value to the advance of the art of therapeutics. I have now been engaged for twenty years in studying the effect of remedies on skin-disease, and I have never yet observed any effect whatever, either immediate or remote, which has led me to "doubt the propriety of rapidly curing chronic skin-affections", and under this heading I will even include chronic ulcers of the leg. I hope, however, that others will record their experience; for I have good reason to know that such a doubt is generally entertained by the majority of the profession. The popular belief never wavers from the conviction that it is dangerous and wrong to attempt the rapid cure of an old ulcer, and equally of an old skin-disease of any sort.—I am, etc.,

BALMANNO SQUIRE, M.B. Lond.,

Surgeon to the British Hospital for Diseases of the Skin.

P.S.—I am in a position to confirm quite confidently Mr. Chubb's experience of the action of chrysophanic acid in *figurate* chronic eczema; that is to say, chronic eczema occurring in definite circumscribed patches.

## PRINCIPALS AND ASSISTANTS.

SIR,—Will you kindly allow me a place in reference to the cause of the unsatisfactory manner in which patients receive the assistant, whose duties are to dispense, visit in emergencies, and attend midwifery? As principals are apt to think it want of professional tact, or perhaps ability, I think it right they should understand the true cause. In order to describe the monotonous routine of such an assistant's life, I shall give facts from my own experience, as well as from the experience of others. In Yorkshire especially, it seems essential for an assistant to be an active surgery door-porter, so that, if the practice be a large one, it becomes a perpetual torture to him and one of his greatest barriers in performing the higher duties. I consider that no principal should either ask or allow him to do so (unless there have been a distinct understanding that he is engaged as general servant); for patients lose all confidence in the assistant's importance and professional ability.

As regards dispensing, it is the assistant's duty to dispense to those patients who have consulted the principal. Here he must listen to their objectionable discourse—some suggesting on supposition that dispensing is the stepping-stone to the higher duties, while all know him as "the doctor's man", "the man that mixes the medicine", or, in Yorkshire, "the cove as opens th' door".

It is true that the assistant only visits in emergencies; but it is these emergencies that cause dissatisfaction, as patients very naturally receive the man with more satisfaction who glides along in his chariot with known ability and dignity to the man who visits in emergencies with a wet umbrella and muddy pair of boots.

Regarding midwifery attendance, there is also considerable dissatisfaction, the amount of which I can always calculate by the number of times the patients have visited the surgery, where they have had ample opportunity of viewing superiority and inferiority in the extreme.

In order that an assistant may give satisfaction both to patient and principal, it is requisite for him to have a circulated professional ability, and to assume that dignity and importance which become the profession. Therefore, the most assiduous attention should be paid by the assistant to the promotion of these qualities; for, in proportion to the importance of the assistant's duties, his ability and dignity, in comparison with that of the principal, he is received; and he who bears the greatest proportion of these qualities must be sought after. When the assistant's proportion of importance happens to be at zero through no fault of his, the principal must abide by the consequences.—I am, etc.,

AN OLD YORKSHIRE ASSISTANT.

## DISEASES OF THE PUERPERAL STATE.

SIR,—Can any of your correspondents recommend to me the best work on the diseases of the puerperal state, as I find that this, perhaps the most important, part of obstetric medicine is only scantily, and I think inadequately, treated in all the works on midwifery which I have seen?—I remain, sir, yours obediently, R. P.



## REMARKS

ON

## OUR MEDICAL CHARITIES:

BEING

*An Excerpt from an Address delivered at the Annual Meeting of the Birmingham and Midland Counties Branch of the British Medical Association, June 26th, 1877.*

By SAMPSON GAMGEE, F.R.S.E.,

President of the Branch; Surgeon to the Queen's Hospital, Birmingham; etc.

I VERY deeply feel the honour you have conferred on me, and the confidence you have reposed in me, in electing me your President. I am no less conscious of weighty responsibility in endeavouring to discharge the first duty of this office, in the delivery of the annual address.

You cannot have failed to notice that in all parts of the kingdom the subject of medical charities has, during the last few years, attracted a large and increasing share of public attention. It has been elaborately treated in leading serials of such diverse political tendencies as the *Quarterly* and the *Westminster Review*, while many of the leaders of our profession, and social reformers outside its pale, have contributed much valuable material to the discussion. They all concur in the necessity of instituting a thorough investigation into the administration of gratuitous medical relief, with a view to check its widely-spread abuse.

History shows that most of our medical charities were founded by members of our profession. As unpaid officers, the members of our profession contribute more than any other class of the community to the support of our hospitals and dispensaries, and proportionately suffer from any administrative abuses which may exist in them. The advocates of the free system are well satisfied of its superiority, while others contend that it is pauperising and demoralising the community with progressive speed. In this conflict of opinion, without pinning our faith to either side, we have a right to examine the whole question thoroughly, with the sole object of ascertaining the truth and securing the general welfare, with which the honour and well-being of our profession are inseparably identified. The urgent need of the moment, and one which we may reasonably hope to do something towards supplying, is accurate knowledge of facts in particular institutions in different localities. Accordingly it is to the medical charities of Birmingham that I shall address myself, and more especially to their work during a period of ten years, from 1867 to 1876 inclusive.

The number of persons attending the Birmingham Medical Charities was: in 1867, 66,671; in 1876, 104,048; showing an increase of 37,377, equal to 56 per cent. Reckoning the population of the borough of Birmingham for 1867 at 325,895, one person in every five in that year obtained relief from our medical charities, whereas the proportion rose to one in 3.5 in 1876, when the population was 371,839. In the ten years, the borough population increased 13.8 per cent., and the number of persons relieved at the medical charities increased 56 per cent. In other words, in the past ten years the recipients of medical charity in Birmingham have increased more than four times as fast as the general population of the borough. Throughout the same decade (1867-1876) the wealth of Birmingham has gone on increasing to an unparalleled extent. Palatial structures are everywhere rising in our principal streets, millions have been spent in the purchase of gas and water works, and the corporation has already purchased close upon £1,000,000 sterling worth of property, in entering upon the great scheme under the Artisans' Dwellings Act. In proof that the increase of wealth has been substantial throughout the community, a few figures, gathered from most trustworthy sources, will be sufficient. The rateable value of property in the borough of Birmingham has risen from £1,014,037 in 1867, to £1,306,595 in 1876; an increase of £292,558, equal to 28.8 per cent. in the ten years. Still more remarkable is the increase in the value of property within the borough, assessed under Schedule D of the Income Tax. It amounted to £2,136,000 in 1867, and to £4,224,000 in 1876, very nearly 100 per cent. increase. Our Post Office Savings' Bank received £166,337 in 1867, £279,681 in 1876, being an increase of £113,344, over 68 per cent.; while in the No. 1 Building Society, which chiefly consists of working men, the assets were in 1867, £88,302 18s.; in 1876, £163,972 7s. 11d.; being an increase of £75,669 9s. 11d., or 85.7 per cent. These figures prove two facts: a rapid increase in the number of persons obtaining medical charity; a rapid increase in the wealth of all classes of this community.

Is it to be understood that, with the immense augmentation of wealth, the number of the population entitled to gratuitous medical relief has gone on increasing in a progressive ratio? In other words, that, as wealth increases, so do beggars? The answer to this question must be in the negative, so far as we can judge from the official returns of local pauperism. Here is the return for the parish of Birmingham for the week ending December 28th, 1867, and for the corresponding week of 1876:

Total number in workhouse	1376
infirmary at ditto	2,111
receiving out-door relief	848
out-door medical relief	4,898
Total	530
	8,387

showing a decrease of 3,055, equal to 36.4 per cent. in 1876 as compared with 1867. In estimating these figures a variety of circumstances have to be considered. 1867, the year which followed Black Friday, was an exceptionally bad one for trade, and that must have tended to swell the pauper returns; on the other hand, 1876 was not a good year, and the increase of population, other things being equal, would entail some increase in the total of pauperism; yet the decrease is very material. Contrasting the decrease in the parish returns, the general augmentation in the wealth of this community, and the immense increase in the number of persons obtaining gratuitous medical aid at our hospitals and dispensaries, in 1876 as compared with 1867, it appears that in 1876 many thousand persons more than in 1867 sought and obtained gratuitous medical relief, who did not deserve it. Such a state of things suggests a fraud, firstly, on the benevolent who furnish funds for the support of medical charities, in the confident belief that their ministrations are confined to worthy recipients; secondly, on the members of our profession who give their services to hospitals without payment; and thirdly, upon the great body of medical and surgical practitioners, who are prepared to render their services on equitable terms of remuneration, according to the position in life and the means of those who seek their aid.

Reference has already been made to the disciples of a new school of hospital administrators, who, admitting the reality of hospital abuses, maintain that their chief source is the recommendation of improper objects of relief by governors and subscribers; and that the remedy for the evil is furnished by the free admission of patients. If the free system, with the registration fee, really possesses the advantages which its advocates claim for it, it should be generally adopted; and the sooner the better. If, on the other hand, its benefits be illusory or theoretical, and counterbalanced by practical disadvantages, the truth deserves to be known and to be acted upon. That the tendency to the crowding of patients, and the difficulty of regulating their numbers, is greatest in hospitals under the free system, is proved by the numbers attending at the General and Children's Hospitals. The number of patients attending at the General Hospital was, in 1876, 27,444; in 1867, 21,818; increase 5,626, equal to 25 per cent. At the Children's the numbers attending were in 1876, 15,220; in 1867, 10,066; increase 5,154, equal to 50 per cent., in spite of the check of the repeated registration fees. If the numbers persistently increase under the free system, how can it give the Board greater power of control over the expenditure, without sacrificing efficiency and comfort to economical considerations? Conceding that the free system may be easy to manage in a comparatively small community, and that in a large town it may possibly afford the simplest plan of administration in a hospital sufficiently large and well endowed to meet the calls upon its resources, that does not affect the truth of the proposition so tersely and cogently expressed by my friend Dr. James Johnston, that "the free system applied to any institution of limited means, limited staff, and limited accommodation, is not only a mistaken but also a mischievous policy", in the midst of a vast artisan population.

Reference has already been made to the system of charging a fee on admission, as a check on the redundant growth of the free system. If the so-called registration fees were devoted to *bona fide* inquiry into the fitness of patients, something might be said in their defence; but at present they are merely a source of income. It is not difficult to conceive that many persons, unable to work from illness and struggling to keep from the parish, may be most deserving of hospital relief, and yet not have a shilling for the registration fee, to raise which they are compelled to beg; on the other hand, there is nothing to prevent idlers from using the fee as a pretence for money begging, which is, by universal admission, the form of seeking relief most liable to abuse, most demoralising to the applicant, and proportionately most injurious to society. The charm in the idea of a free hospital is that its resources are freely available to all sick and deserving persons; but what becomes of the ideal charm when the condition tacked on to a hearing of his



woes is, that the poor sufferer shall put down a shilling on the counter which separates him from the registration clerk, who, having put the coin into the hospital till, proceeds to interrogate the applicant as to his means? So long as persons know that they will be received as patients at a hospital on paying a shilling, and stating that their earnings are below a certain standard, it requires no stretch of the imagination to understand that a premium is offered to improvidence and fraud. By such a system the hospital is made a vast competitor against provident sick clubs, and the self-respect of the working population is undermined by inducements to untruthfulness, with practical immunity from detection. Under such circumstances, the hospital becomes not only a training school of pauperism, but of duplicity. A fixed standard of weekly earnings is a very fallacious test of fitness for hospital relief. A man with twenty-five shillings a week may be much better off, and from the nature of his ailment less entitled to relief, than one with higher wages.

If one of the young physicians who, at a sitting in one of our free hospitals, sees a couple of hundred patients, possessed all the qualities for a future Sir William Jenner, how could he do justice to his work, or to himself? If, however, the bulk of those patients were distributed amongst a score of general practitioners attached to one or more provident dispensaries, there would be some chance that their ailments would be traced to their causes—that these would be attacked and removed. Cases of special clinical interest doubtless receive more attention; but the great desideratum is to attend, with all available means, to comparatively trivial ailments before they acquire exceptional interest; not to reserve consultations and scientific resources for times of great danger, but to widen the scope of their preventive influence. The figures which I have quoted make it pretty plain that the state of things in our local hospitals, more especially in the free ones, is rapidly approaching a dead lock. If, on the basis of the experience of the last ten years, we endeavour at present rates of progress to forecast for the next decade, the result may be thus stated:

Year.	Population of Birmingham.	Persons relieved at the local medical charities.	Ratio of persons relieved to population.
1867	325,805	66,671	1 in 5
1876	371,539	104,640	1 in 3.5
1886	422,436	162,579	1 in 2.6

If the data of previous decades were at hand for a strict calculation, the result would be still more extraordinary than that arrived at by a calculation in simple proportion: but I prefer to understate the case. The above figures show that in the twenty years from 1867 to 1886 inclusive, the population of Birmingham will have increased 96,541, and the number of persons relieved by the medical charities will have increased 96,661—i.e., every single individual added to the population will have been represented by an additional applicant for gratuitous medical relief.

It would be a waste of words to expatiate on the magnitude of the social evil which those figures represent. The question is, *What is the remedy?* The first thing to do, after discarding fondness or antipathy for either the plan of recommending by notes, or the free system of hospital administration, is to collect all the facts bearing on the causes and extent of abuses in our medical charities. Sooner or later such inquiry must be instituted; and the members of our Association, who as a body are most deeply interested in the issue, will do well to promote such an investigation as the whole case demands. In such a conference, others besides the managers and staffs of our medical charities ought to take part. Whatever the evils of the present state of things, those bodies are responsible for them: in various manners and degrees, it is true, but still responsible.

Referring to the crowds of out-patients at our medical charities, the executive of the Local Charity Organisation Society remark:

"A very large proportion of this enormous number of out-patients could afford to pay the cost of their own doctoring, if that payment could be made in the form of a small weekly payment during times of health as well as of illness; while they would generally be unable, especially when ill, to meet the lump sum of a doctor's bill. The need there is the machinery for bringing the payment for doctoring within the reach of the poorer classes, and this can be done by the establishment of provident dispensaries, as is shown by their success in many other towns. By small weekly contributions to these institutions, the working classes are enabled to pay the cost of their own medical attendance and medicine, and are thus able to avoid the humiliating position of becoming recipients of public charity whenever they are out of health. Any change in this direction seems to us to be hopeless until provident dispensaries are provided."

On this hospital question the working men have invaluable experience to contribute. A well chosen body of their representatives, trained in the work of their provident societies, would very soon throw

light on some of the principal causes of hospital abuses, and the best means of checking them.

A number of provident medical institutions exist already in our midst, but they only very imperfectly fulfil their object. Their plan of work and method of relief, their rates of subscription and of payment to medical officers call for thorough and careful reconsideration. On the principle of mutual assurance, it is possible to make efficient provision for the health of the working classes, including the wives and children, and the object is one which deserves very thoughtful and earnest co-operation in the broadest and truest sense of the term. Hospital abuses will assuredly lessen in direct measure as means are provided and organised for securing the self-respect and health of the people, as two of the chief factors in the nation's happiness and wealth.

No sudden change is possible; but no time should be lost in endeavouring to bring about a more healthy and a more just state of things. We only seek for the reform of such abuses as are demonstrably injurious to society generally. We have unabated confidence in the power for good which the knowledge and practice of the great truths of our profession bestow. We look forward to being able to do more good work when public medical relief shall be administered in such a manner as to accord with the true teachings of science and common sense, without doing violence to the homeliest instincts of thrift. The day is happily gone by, never to return, when the cultivation of science demanded the sacrifice of independence, often of life, from those who were devoted to its pursuit; and the time has come when the physical health of the community may be, and should be, protected without ever widening the boundaries of a *demoralising pauperism*.

But these wrongs and abuses must neither be allowed to provoke us to excessive resentment, nor to make us too eager for change at any price. Let me repeat the protest against too implicit reliance on systems as such. We must be practical above all things. In principle, I believe that the provident dispensary system has in it the essence of the remedy required; very much, if not all, depends upon how it is prepared and used. A too hasty and too wide application of the provident dispensary system in its crude form, or alloyed with the evils which have crept into it, would only lead the public and us into fresh difficulties. Experience of men and things, with good feeling which nothing must be allowed to sour, and patience which nothing must be allowed to tire, will not fail us.

## AN ADDRESS

ON

### OPHTHALMOLOGY IN ITS RELATION TO GENERAL MEDICINE.

*The Annual Oration delivered before the Medical Society of London.*

By J. HUGHLINGS JACKSON, M.D., F.R.C.P.,

Physician to the London Hospital, and to the Hospital for the Epileptic and Paralysed; etc.

V.

THE ophthalmoscope is valuable as revealing to us tissue-changes which are parts of, or local developments of, general morbid states. We may see tubercle in the choroid during acute tuberculosis. The first case of this kind recorded in this country was by Soelberg Wells. Such a discovery may be of very great help towards the very difficult diagnosis of tubercular meningitis as it occurs in the adult.

In some cases we may, so to speak, see syphilis ophthalmoscopically. Obviously, this is a most important matter.

Here is a point where we may easily and precisely study pathological changes during life; and, if opportunity offer, we can study the pathology of syphilis of a part of the nervous system by the microscope, at a known stage of it seen by the ophthalmoscope. Syphilitic retinitis is as much a syphilitic affection of the nervous system as a syphilitic neuroma is, and much more so than the common kinds of syphilitic hemiplegia are. It needs no evidence to show that the discovery of syphilitic chorio-retinitis is a fact of exceeding utilitarian value. It is a great practical point, that it is to be found sometimes in patients whose sight is not incapacitated thereby. An analogous statement was made of double optic neuritis, and the same may be said of the neuro-retinitis with Bright's disease. These pathological changes are often overlooked. I would make one general remark, that, in order to be quite certain whether the retina and optic nerve are diseased or not, we are obliged to look at them. It is to be observed that the ophthalmoscope, in some cases of congenital syphilis, is the only means of arriving at the conclusion that syphilis is the



cause of paralytic or other nervous symptoms. Here the evidence is of exceeding great value, and, when discovered early, may save patients to a great extent from the consequences of inherited taint.

Since Hutchinson's discovery that keratitis is a result, not of struma, as formerly supposed, but of inherited syphilis, there has followed the observation that disseminate choroiditis is also almost invariably of specific origin. The discovery in the eye of changes due to this disease is of great value, both in respect of the diagnosis of acquired and of inherited taint. Without asserting that they are never due to other causes, Hutchinson holds that their presence warrants the gravest suspicion. In establishing a diagnosis of inherited disease in a family, the patches of disorganisation left by choroiditis are often of the utmost value. They are often present without the patient being aware of any material defect of sight, and may be present in the eyes of one child whose physiognomy is good, but in whose brothers or sisters there may have been reason to suspect syphilis. In such cases, their value is almost as great as that of notched teeth, and may often set the matter at rest.

A very peculiar form of very chronic choroïdo-retinitis, occurring in the subjects of inherited syphilis and closely simulating retinitis pigmentosa, has engaged Mr. Hutchinson's attention of late years. Its interest for the physician is increased by the fact that it may perhaps be a parallel change to what occurs in some of the insidious and slowly progressive forms of spinal disease met with in the subjects of acquired syphilis. The subject has also been ably written on by Dr. Fitzgerald of Dublin. This form does not set in suddenly like disseminate choroiditis, but very insidiously, and it progresses, in spite of treatment, to almost entire blindness. It is distinguished from retinitis pigmentosa by its rarely being quite symmetrical, and by the fact that the choroid, as well as the retina, is disorganised.

But by far the most valuable ophthalmoscopic signs of tissue-change in constitutional disease are those occasionally occurring with Bright's disease. These need not be described; they are stated in every text-book. Everybody knows that, in chronic Bright's disease, the state of the arterial system is of extreme importance. We note the state of the arteries carefully, and the loudness and pitch of the second sound, as well as examine the urine for albumen. We ought to examine the eyes by the ophthalmoscope too, and that by routine; for there may be extreme changes without defect of sight. If we do, we shall occasionally find changes which are almost characteristic of that effect. It may be asserted that we have no need to diagnose Bright's disease by the ophthalmoscope. It is done, however, sometimes. It is not a very uncommon thing for an ophthalmic surgeon to be the first to detect the existence of renal disease, and that too in patients who have been long under medical care. In most cases, there is no dropsy; the changes are generally found in cases of the small kidney; occasionally they are seen in cases of large white kidney with dropsy. Besides, too, it is surely important, in so grave a constitutional affection as chronic Bright's disease, to see all that is to be seen. It is important to note that not only the so-called characteristic changes, but considerable hæmorrhages, may exist when sight remains good; for it leads us to infer that small cerebral hæmorrhages may not reveal themselves by any obvious symptoms. Again, if a patient who has Bright's disease has had a most transient and slight hemiplegia, but a little temporary thickness of speech or a slight attack of vertigo, we should reasonably infer that these symptoms were owing to clots in the brain, if we saw clots in the retina. There is no need in such cases to suppose that the renal disease causes these slight symptoms, and especially the local ones, by preventing proper depuration of the blood or in some other roundabout way. If a small clot in the retina can exist without any obvious defect of sight, the inference is, that a small clot may occur in the brain, although the symptoms it produces may be none or slight and transitory. We do find not unfrequently, in one case of Bright's disease, epistaxis, retinal hæmorrhages, and symptoms implying cerebral hæmorrhage, or demonstrably due to them *post mortem*. We see in the brain *post mortem* just the sort of change we saw during life in a part of the nervous system easily looked at. The discovery of these changes leads one to take a very grave view of the patient's case. However, it is to be noted that all changes may disappear. I have known a patient who had the appearances of chronic Bright's disease in an extreme degree, who had convulsions and coma, get well—that is, into the state of health he was before, the fundus becoming practically normal. I have known the retinal appearance to disappear many times.

It is, however, to be noted that these appearances are not absolutely characteristic of Bright's disease. In some cases of cerebral tumour, we find appearances somewhat like them, and occasionally quite like them; and, in some cases of renal disease, the discs simulate the common optic neuritis from intracranial tumour.

I would draw the attention both of ophthalmic surgeons and physicians to some minute ophthalmoscopic observations by Dr. Gowers in certain cases of Bright's disease. Dr. Gowers is so good an ophthalmoscopist, and, above all, knows so thoroughly well the varied healthy appearances of the normal fundus oculi, that I should accept these minute observations of his as being also precise and as exact as it is possible for such difficult observations to be.

Dr. Gowers finds that, in a large number of cases of Bright's disease in which there exists increased arterial tension, the retinal arteries may be seen to be distinctly smaller than natural. The diminution in size can sometimes be noticed as an absolute reduction; sometimes it can be best estimated by comparison with the veins—the size of which, on account of their darker colour, can be more easily estimated. In one instance recorded, a reduction in size of the arteries was observed to coincide with an increase in arterial tension. Small vessels may be sometimes noticed in conjunction with hypertrophy of the heart without albuminuria, and probably coincide with a prealbuminuric stage of Bright's disease. When albuminuric retinitis has set in, the contraction of the vessels is often not to be observed, perhaps on account of the disturbing influence of the local condition. It is, however, to be observed that in some cases of Bright's disease without retinal changes, and with high arterial tension, there is no reduction in size of the visible retinal arteries. This would seem to show that arteriole contraction is not the invariable, and therefore not the only, cause of increased tension.

Dr. Gowers lately showed at the Pathological Society a drawing of a fundus in which periarterial fibrosis was evident (it was extreme, around some of the arteries), and in which some small aneurisms could be seen on some of the vessels. This observation is of interest in relation to cerebral hæmorrhage. I would add that Liouville has found miliary aneurisms in the retina *post mortem*, like those found by Charcot, Bouchard, and Charlton Bastian in the brain.

In a recent number of the *Ophthalmic Hospital Reports* is a report by Mr. Hutchinson on a form of senile amaurosis, the first examples of which were recognised by Mr. Waren Tay. The ophthalmoscopic conditions are peculiar, and have not as yet been illustrated. They consist of numerous round white or glistening dots in the retina or choroid near to the yellow spot or optic disc. At first, these are very small, and only to be discovered in the erect image; but they increase, become confluent, and involve ultimately considerable areas. Their subjects are usually in fair health, free from evidence of kidney-disease, elderly (or, at any rate, past middle age), and almost always there is a history of vague disorders of the nervous system, slight transitory paralysis, etc. The conditions were in one instance found in several members of one family.

I conclude with mention of research by another physician whose ophthalmological observations are thoroughly trustworthy. Dr. Stephen Mackenzie\* has drawn attention to spontaneous visible pulsation of the retinal vessels in connection with aortic regurgitation. He pointed out that, though described with much completeness by Dr. Otto Becker,† and referred to by some ophthalmic writers, the condition did not appear to have met with general attention at the hands either of oculists or physicians. He gave eight cases, with detailed observations as to the condition of the heart and vascular system, all showing pulsation in the retinal arteries, or in both the arteries and veins. He pointed out that the phenomenon was generally most marked where the radial pulse was most typical of aortic regurgitation, and where the left ventricle was markedly hypertrophied. Secondary dilatation of the mitral orifice did not necessarily preclude it. He showed that where there was a doubt as to the rhythm of a murmur, or where pulmonary sounds interfered with auscultation of the heart-sounds, the ophthalmoscope might have diagnostic value, and gave a case in illustration of this point.

Dr. Stephen Mackenzie has also (*Medical Times and Gazette*, March 3rd and 10th) described retinal hæmorrhages in connection with purpura. Rue had (*Union Méd.*, 1870, No. 48) previously described hæmorrhagic retinitis in connection with purpura. Dr. Wickham Legg (*St. Bartholomew's Hospital Reports*, 1875, p. 64) has recorded retinal hæmorrhage observed by Mr. Vernon in a case of purpura.

\* *Medical Times and Gazette*, May 1st, 1875.

† Graefes *Archiv*, 18 Band, Abth. 1, p. 280. Dr. Becker alludes to the previous description by Quinke (*Bonn. Anz.*, 1868, No. 34, and 1870, No. 21). Dr. Fitzgerald (*BRITISH MEDICAL JOURNAL*, December 2nd, 1871) described one case where pulsation was visible in the arteria centralis retinae.

TESTIMONIAL TO MR. H. M. JAY.—Mr. Henry M. Jay, M.B., has been presented with a handsome timepiece by the officers of the Chippenham Union Workhouse, on the occasion of his resigning the post of medical officer to that institution.



## EASTBOURNE AS A HEALTH-RESORT.

*Part of an Address delivered at the Annual Meeting of the South-Eastern Branch.*

By BRANSBY ROBERTS, M.D., President of the Branch.

..... I WILL, with your permission, rapidly pass in review the general history and rise of this place, and then endeavour to discover the grounds on which it has become such a favourite health-resort (for I prefer that term to watering place); as I believe that, in the mind of *paterfamilias* at any rate, this aspect of the question has much, very much, to do with the answer to his question, Where shall we go? For many years, then, it has been a favourite locality with the few; but it was not till about twenty years back that, under the fostering and liberal enterprise of the present Duke of Devonshire, it first began to spring into note. Once visited, it rapidly made its way in public estimation, and as accommodation was provided, so rapidly was it occupied. People discovered that they rapidly got well here; and when this fact became patent, and was accompanied by the pleasant adjuncts of a pretty town and fine scenery in the neighbourhood, can we wonder that, during certain summer months, the accommodation has never yet been equal to the demand?

I will now proceed in my endeavour to trace this success to its proper source; and in sketching out, superficially it is true, the deficiencies in constitution and diseases which it seems most fitted to relieve and repair, we shall learn, I think, how important, even in the most healthy locality, are the artificial adjuncts of good drainage and proper, as well as ample, water-supply. The soil (chalk and green sandstone) on which Eastbourne is built, is perhaps one of the most favourable that can well be conceived. From its porous nature it not only provides a remarkably dry surface, but rapid decomposition of any deleterious matter takes place in the chalk; and the water which permeates the chalk filters subsequently through the sandstone, and affords one of the best, as well as the most agreeable, drinking waters in the kingdom. Thus we possess two of the great necessary elements towards health—a good soil and pure water. Let us now see how we stand in reference to the third, viz., air. The prevailing winds are west and south-west, and a glance at a good map (or better still, one which I hope many of my hearers to-day will enjoy for themselves, from the top of the hill approaching Beachy Head) will show that these winds are mostly marine; this it is which affords us such an equable temperature, modifying the summer heat, so that we hardly know the meaning of the word sultry, and giving us a mean winter temperature, which is a source of surprise to many who have not investigated the subject.

For example, the mean temperature in January was :

	1867.	1868.	1869.	1870.	1871.
The extreme range .....	36	32	43	40	35 deg.
The rainfall .....	43	27	27	25	25 in.
	4.2	3.5	3.2	2.8	2.6 in.

The most trying season of the year is the spring—a period at which I consider all seaside places in this country are relatively cooler than inland, owing to the fact that the sea having been parting with its caloric to the neighbouring atmosphere all the winter, and having a slower absorbent rate than the land, it follows that the sea at that period is much cooler relatively than the land, and consequently the atmosphere in its neighbourhood is cooler also. In addition to this general cause, no doubt our being open to the east and north makes the spring months here the most trying.

We will now pass on to another constituent of air, which we may say is essential, but of which we can only speak in general, not in particular, terms—I mean ozone. You will, I think, support me when I say that much remains to be investigated with regard to this important element; but we do know that no atmosphere is healthy which does not contain it in certain quantities, that the air of large towns does not contain it in any appreciable quantity, and that in impure atmospheres it does not exist. All I need, therefore, say on the subject is that (as might be supposed from its marine situation) the air is well charged with ozone. I have now touched upon the three main points, of the air we breathe, the water we drink, and the soil we live on. But this is not enough, for we know that however healthy a spot may be while sparsely inhabited, no sooner does the population increase than the circumstances are largely changed; and where people congregate in large numbers, they would soon vitiate the soil, contaminate the water, and spoil the air, did not man step in and make use of that intelligence with which he has been endowed by a

wise Creator, so as to provide means by which the vitiating ingredient may be got rid of. And although, on theoretical grounds, the plan adopted here, that of carrying the sewage into the sea, may not approve itself to the minds of all as the best, yet, in the present state of knowledge, and situated as this place is, doubtless it is the best practically. At a cost, then, of £35,000, one moiety of which was provided by the liberality of the Duke of Devonshire, a complete system of drainage was provided, and the sewage was conveyed to the out-fall at Langney Point, two and a half miles from the town, and, what is of still more importance, a point from which the sewage, by the action of the tides, is always carried out to sea, so that none flows back to contaminate the beach.

Having thus passed briefly in review the natural and artificial advantages possessed by this place, I may shortly sum up the whole by stating that we enjoy a moderately temperate climate of a bracing character, a good soil, and plentiful supply of water, accompanied by those more subtle (as acting through the mind) but necessary adjuncts to recovering health, viz., pleasant scenery and healthy amusements. I will now pass on to consider the diathesis and diseases which seem most benefited by a sojourn here, as well as of a few who had better stop away.

I need hardly say that, in a short address like the present, it is impossible to do more than touch upon the subject in the briefest possible manner. I shall therefore content myself by narrating mainly the results of my own personal experience. First, then, I would state broadly that almost all forms of disease originated by or engrafted on a strumous diathesis are or can be more favourably treated at the seaside than inland. We have something on our side here which our neighbours inland do not possess, and for which no skill on their part can quite compensate: I mean the marine atmosphere, which is always insensibly acting on the patient, stimulating the organs to increased activity, promoting absorption of lowly organised tissues, and change everywhere, thus promoting appetite, increased appropriation of material and improved vital energy of all organs. In this way, I believe, are the great and marvellous changes which we sometimes observe in the poor strumous child effected; the pale wasted cheek becomes imbued with a healthy colour, the eye brightens, appetite returns, the general functions become natural, swollen joints disappear, irregular deposits amongst the soft tissues vanish, and the child in time becomes strong, no visible trace of his former delicacy remains. What has been done here? I believe a great work, a life saved, and suffering—how great!—avoided. Secondly, cases of phthisis, if taken early, are generally much benefited; and I have watched many which have apparently quite recovered, have lost all cough, gained flesh, and have remained for many years well, without any physical signs indicative of their past dangerous condition. In the latter stage of the affection, I believe, as a rule, that the air is too stimulating; but the varieties of phthisis are so many that this rule is by no means absolute. I well recollect the case of a young woman, who was sent back here, as it was supposed, to die shortly (with a large cavity in one lung, and suffering from diarrhoea and hectic), who gradually improved, and after two years became, as she thought, so well as to deem any precaution superfluous, and, recklessly neglecting the advice given her, paid the penalty by bringing on a relapse of her former disease, from which she died. The climate is not favourable to cases of asthma generally, and I have been compelled to send many away. Some few do well where the disease is clearly attributable to debility and want of tone, especially in the aged and infirm; but, as you are well aware, this is a capricious complaint, and it is sometimes difficult to trace the spasm to its real exciting cause.

As we can readily imagine, from the dry and porous nature of the soil and consequent absence of damp, cases of rheumatism are not very frequent and generally do well.

Typhoid is almost unknown.

Scarlatina, though not unfrequently introduced into the place (for, like other seaside places of repute, we are very liable to the importation of zymotic diseases, many patients being sent for change when they would be much better still confined to their beds), rarely spreads, and even measles, that most contagious and infectious of all the class, frequently dies out. Why is this? The answer, I believe, is that in addition to a very efficient sanitary inspection, and adopting every precaution to prevent the spread of the disease, we have plenty of wind, which, being fully charged with ozone, acts as the best disinfectant and destroys the germs of the disease.

I must not omit to allude to the nervous class of diseases (excluding cases of insanity and asthma) for the treatment of which the climate seems especially favourable; all forms of neuroses do well, especially those to which women are liable, both at the commencement as well as at the close of their menstrual life. The medium position which we



occupy between the very sharp and bracing climate of the northern seaports and the relaxing ones of the extreme south, appears especially suitable to such cases; they exist generally in women of somewhat feeble tone, who require bracing and tonic treatment, but are, at the same time, incapable of bearing cold.

Before I conclude, let me touch upon a very important point; important to all, but especially so to those who, like myself, practise in health-resorts. We are frequently appealed to for advice and counsel, both by patients and lodging-house keepers, when attending cases of a contagious nature. Sometimes the friends of the patient are anxious to hush up the nature of the illness in order to avoid expense and trouble; next, the lodging-house keeper is greatly tempted to join in the same petition; for once let it be known that illness of a contagious character (such as scarlatina) has occurred in any house (whatever precautions may have been taken, however carefully the house and its inmates may have been disinfected) naturally that house is liable to be shunned for a time, perhaps for a whole season, and to some beginners, who have commenced on borrowed capital, this means beggary, or at the best a hard struggle for many years to repair the loss thus unwittingly and innocently incurred. The doctor is appealed to. Need I say that he has an obligation to his patient? True, but I hold that he has also an obligation to society, an obligation to mankind, to lessen disease, to prevent its spread as far as lies in his power; an obligation so binding, so imperative, that the lesser one becomes absorbed, almost lost, in the greater. I consider, therefore, that his duty is plain, to impress strongly on the householder that the other inmates should be at once informed of the nature of the illness, and that suitable precautions should be immediately adopted to limit, and prevent if possible, any further extension of the disease. I do not think it should be imperative on the medical attendant to inform the Sanitary Authority of the nature of the case; but I would make it compulsory on the householder (having been so informed by the medical attendant) in order that in all cases proper means of disinfection should be employed. Such precautions would go a long way towards stamping out some forms of zymotic disease, I do not say entirely, as cases will occur of so slight a character as to be indistinguishable, and which are yet focus points of fresh contagion.

Gentlemen, I have now, in a very imperfect manner, passed in review the sanitary aspects of this place, the basis on which they rest, and the cases which can be most conveniently and best treated here. You will have observed that I omitted to mention a large class who come to the seaside to recruit an exhausted brain and enfeebled body; these luxuriate in that fresh air, change of scene, and quiet which are here afforded them, and return once more strengthened and nerved to that eager battle of life which we see going on all around us. In conclusion, I can only thank you most sincerely for the kindness with which you have listened to this address, and express the hope that, in view of the many attractions provided by the local committee, I have not already detained you too long.

### ON HIP-DISLOCATIONS.

By WALTER RIVINGTON, F.R.C.S. Eng., M.S. Lond.,  
Surgeon to the London Hospital.

PROBABLY it was a fortunate circumstance that, when Mr. Morris wrote his paper on "Dislocations of the Thigh", he was unaware that Professor Fabbri had anticipated the views with which his name will be associated; for if he had known that Fabbri had demonstrated some years ago at St. Bartholomew's Hospital the mode of occurrence and reduction of displacements of the head of the femur, he might have been induced, in the revulsion of feeling which is occasioned by the discovery that some inconvenient predecessor has stolen our best thoughts, to withhold his very valuable and (so far as he is concerned) original paper from the Royal Medical and Chirurgical Society, contenting himself with a less efficacious channel for the publication of his investigations. The result would have been that, notwithstanding the citations from Fabbri which Mr. Holmes has made in his work on the *Principles and Practice of Surgery*, a large proportion at least of the practical surgeons of the day would have known little or nothing of Fabbri, but still be quoting Bigelow as the ultimate authority on the subject.

A copious and careful paper like that which Mr. Morris brought before the Royal Medical and Chirurgical Society was greatly needed to elucidate the principles which underlie the manipulations commonly employed in the reduction of dislocations at the hip. We knew all about the ilio-femoral or Y-ligament of Bigelow, and the questionable distinctions which he has drawn between dislocations above and dislocations below the obturator tendon. We knew that flexion

relaxed the Y-ligament, and that in the subsequent movements of reduction the motion of the head of the femur was controlled by the tension of that ligament, but we did not know exactly the *rationale* of "abduction" and "rotation outwards", to use the terms according to their ordinary application; "abduction" for the movement of the shaft of the femur outwards from the middle line of the body, and "rotation outwards" for a movement round an axis drawn through the head and lower end of the femur. The latter movement some replace by one of circumduction, both the terms "rotation outwards" and "circumduction", and the movements themselves, being often loosely applied. With all our knowledge, however, it must be confessed that both teachers and students were rather hazy in their ideas of the meaning of each step in the process of reduction, as well as in regard to the part of the capsule which suffers rupture and the positions of the limb most favourable to displacement.

Our authorities teemed with Bigelow and were innocent of Fabbri. Bigelow was quoted with approval where his opinion was doubtful and his advice hazardous. His opinion that in certain cases difficult of reduction the obstacle to reduction is the torn capsule, and his directions for tearing the capsule further to facilitate reduction, have been adopted by eminent surgeons. Apart from the probable error of the opinion, it was by no means satisfactory to be inculcating freedom of manipulation upon students and house surgeons with the avowed object of rupturing untorn portions of the capsule. The scientific mind, sympathising with Hamlet's advice to the players, revolted from the idea of "sawing the air too much" with the patient's limb, and mindful of the not very remote danger of rupturing the sciatic nerve, preferred in the most obstinate cases to "use all gently and to beget a temperance which should give" the reduction "smoothness". Whilst we are encumbered by these difficulties and drawbacks, Mr. Morris opportunely appears, and traversing independently the ground already occupied by the Italian professor, lays down certain definite and precise propositions which, if established beyond controversy, remove all haziness and obscurity from the subject. I say, if established beyond controversy; because one or two of Mr. Morris's propositions appear to me to be drawn in too rigid terms and to need some qualification. Having seen only the abstract of his paper in the journals, I am not in possession of the evidence on which he bases his conclusions, and cannot form an opinion as to the exact extent to which the evidence supports his canons; but the impression produced on his audience, the observations of others, and my own experience, would lead me to concur in his propositions so far, at least, as to admit that he has correctly described one mode, and a frequent mode, in which dislocations of the head of the femur occur and the manipulations necessary for their reduction. As at present advised, however, I am not prepared to admit, without exception, his doctrines: 1. That all displacements at the hip, without fracture, occur during abduction of the limb; 2. That the capsule is ruptured always at the lowest part; and 3. That there is one primary dislocation at the joint, all the other varieties being secondary thereto.

1. Do all the displacements of the head of the femur occur during abduction? There is not the slightest doubt that on the cadaver it is comparatively easy, or rather comparatively less difficult, to produce dislocation by abducting the femur. On abduction, the ligaments may be heard to crack at the outset of the manipulation; on adduction, they do not yield until this movement is combined with rotation inwards, and even then displacement is not readily effected. Experimenting on a subject recently, I succeeded in effecting dislocation during adduction, but not until I had divided the muscles attached to the trochanter major. The head of the femur then escaped through the capsule posteriorly without rupture of the ligamentum teres. On the other hand, I was able, without interference with any structure, to dislocate both femora on to the dorsum during or subsequently to abduction by flexion and rotation inwards. The number of my trials is not sufficient for dogmatic assertion, but enough to show that dislocation is more readily effected during or after abduction. On the other hand, I think it safe to conclude, that though greater force is requisite to effect displacement during adduction, there is really nothing absolutely to prevent displacement without fracture occurring whilst the limb is adducted. The greater strength of the capsule at the part where the head impinges during adduction and the greater resistance of the muscles (especially during the continuance of rigor mortis) in this movement, make the dislocation difficult to the manipulator; but in the living subject, with relaxed muscles and exposure to force far superior to any which can be applied by an operator on the cadaver, what is there to hinder displacement during adduction? The conditions under which the femur is displaced in the living subject are scarcely comparable to those under which the stiff limb of the dead subject is manipulated. In getting out of a railway carriage a man falls on his side on the plat-



form with his head towards the engine and one of his legs towards the carriages; the moving carriage pressing against his leg displaces his femur during flexion of the hip-joint. Would it matter in this case whether the limb were adducted or abducted? What would prevent displacement under such circumstances during adduction of the limb? (*Lancet*, 1872, vol. i, p. 10.) That displacements do occur during adduction has been the prevailing opinion of surgeons; and though they may have been mistaken as to the position most favourable to displacement, we can scarcely dismiss their observations as unworthy of consideration. During the discussion on Mr. Morris's paper, Mr. Maunder adduced the views of Malgaigne in favour of displacement during adduction. Taking down Dupuytren on "Diseases and Injuries of Bones", I find a case in point at page 369: "*Dislocation of the Left Thigh reduced after a lapse of thirty-one days.*—Pierre Guilleminot, aged 21, a labourer of spare habit, whilst wrestling with a companion, was thrown on his left side, the corresponding leg and thigh being carried forwards and *strongly adducted*" (the italics are mine) "so as to cross the leg and thigh of the opposite side. The left femur was thus placed obliquely between the body and the ground; the outer side of the lower part resting on the ground, and the upper part supporting the weight of the body; and by the leverage thus obtained the head of the bone was dislocated upwards and backwards." Are we recklessly to throw such a case overboard because it does not fit in with our cadaveric manipulations? I trow not.

2. Is the capsule always ruptured at the lower part opposite the thyroid notch? Mr. Holmes, in speaking of dislocations produced on the dead subject, says, "In all forms of dislocation the capsule is freely torn away, though to a variable degree, from the rest of the acetabulum, but the upper and outer part of the capsule and the ilio-femoral ligament representing the two branches of Bigelow's Y-ligament remain untrunked." (*Op. cit.*, p. 184.) Mr. Callender tells us that "the violence which causes the dislocation and which forces the bone through the capsular ligament ensures also that the latter should be torn to pieces". (*Lancet*, 1868, vol. i, p. 343.) Sir Astley Cooper found in a dissection of a dislocation on the dorsum ilii that the "orbicular" (by which, I presume, he meant the capsular) "ligament was entire at the superior and anterior part only, and it was irregularly lacerated throughout the remainder of its extent". (*Treatise on Dislocations and Fractures*, p. 60.) In dissecting a dislocation on the pubes, he found the capsular ligament extensively lacerated. Mr. Syme found the capsular ligament extensively torn close to the edge of the acetabulum in dissecting a dislocation into the sciatic notch. Hamilton says "that in some cases the capsule being completely, or almost completely, torn away, the muscles offer the only resistance". On the dead subject, I found that by manipulations not very powerful, which effected the dorsal displacement, I had torn away the capsule from the margin of the acetabulum for more than half its circumference, and had ruptured the obturator internus gemelli pyriformis and smaller glutæi. The subject was a man advanced in years. These observations appear to be sufficient to show that it is unsafe to indulge in too rigid generalisations on conditions which admit of considerable variety, and that it must be quite impossible to localise rupture of the capsule to one small part in all cases. At the same time, I quite think that where the capsule is torn only to a limited extent, the seat of the rupture will be in the weak region indicated by Mr. Morris, although it is not clear that he is absolutely correct in affirming that the rent will be at the lowest point of the acetabulum below the head of the bone. My colleague Mr. McCarthy has reported in the *Lancet* of 1874 two cases of dissection of dorsal dislocation, and he found the rent posteriorly in each case. "The most posterior part" of the capsule are the words used in describing the position of the rent in the second case, which was uncomplicated with fracture.

3. The third proposition of Mr. Morris, that there is only one primary displacement downwards, and that the varieties of hip-dislocation are secondary thereto. If the capsule can be so freely lacerated behind, it is not necessary for the head of the bone to descend before it ascends on to the dorsum or passes back to the sciatic notch or some neighbouring position. Cases occur, in which it is difficult to reduce the dislocation by manipulation, but which yield readily to extension. Such a case occurred in my own practice at the London Hospital. The displacement was backwards, the so-called sciatic displacement. The patient was put under chloroform, and I tried manipulation as recommended by Mr. Morris, and failed. Mr. Hutchinson and Mr. Couper each took a turn with the same result. I then applied a jack-towel to the limb, placed my bootless foot in the perinæum, and slipping the towel over my head and shoulders made steady traction. Reduction was speedily effected. It is possible that part of the rim of the acetabulum was injured, but that would not have prevented the success of manipulation. Most likely the rent was behind, and in our manipu-

lations we brought the head too low or opposite the spot indicated by Mr. Morris, and therefore failed to effect reduction.

Before demurring to Mr. Morris's conclusions, I should have preferred to see his paper, for possibly he may have anticipated the points which I have raised, and explained them in such a manner that they may support rather than invalidate his views; but inasmuch as the discussion on his valuable paper has been extended beyond the area of the Royal Medical and Chirurgical Society, and Mr. Morris is engaged in strengthening his position, I think it as well to put before him the points which have occurred to me, and may occur to others, after reading the abstract of his paper, and comparing his views with their knowledge and experience of the dislocations which he has done so much to elucidate. These points I will put in the form of propositions.

1. On the dead body dislocation of the head of the femur may be effected with comparative facility during or after abduction, but with difficulty during adduction of the limb.

2. There is nothing absolutely to prevent dislocation of the head of the thigh-bone from occurring in the living subject during adduction of the limb.

3. Experiments on the dead subject cannot be made the complete test of the mode of occurrence of dislocations in the living subject.

4. In the living subject the capsule is often lacerated at once so freely that the head of the bone can escape either downwards, backwards, or backwards and upwards; and, therefore,

5. There is no reason why the head of the bone should pass primarily downwards before reaching the dorsum or the sciatic notch.

6. In the living subject, the capsule seems to be ruptured as frequently behind as below.

#### CASE OF OVARIOTOMY PERFORMED UNDER SPRAY: PEDICLE TIED IN SECTIONS WITH ANTISEPTIC LIGATURES.

By GEORGE V. HEATH, M.D.,  
Senior Surgeon to the Newcastle-upon-Tyne Infirmary.

OVARIOTOMY is now so frequently performed, and is so often successful, that I have not hitherto thought it worth while to place any case on record; but, as the present operation was done after the antiseptic method, which, I believe, is not generally adopted in ovariotomy, and the result has been more than usually successful, I think a short account of the case may be sufficiently interesting to justify its publication.

The patient, Mrs. K., aged 54, married but not a mother, was a tall thin person, who for several years had suffered from an ovarian tumour. On February 23rd, the girth round the belly measured forty-eight inches. She was then tapped, and forty-two pints of viscid liquid withdrawn. After the tapping, the swelling entirely disappeared, with the exception of a hard mass as large as a cricket-ball, firmly fixed at the right hypochondrium. The cyst rapidly refilled, and, on April 14th, the patient's size was nearly as large as before the tapping. I considered the case a favourable one for the radical proceeding. After consultation with Dr. Bourne, and the patient being desirous of undergoing the operation and sanguine of recovery, ovariotomy was done on that day in the following manner.

The temperature of the bedroom having been raised to 60 deg., the patient was placed upon a table, and anæsthesia produced by chloroform and kept up by ether. The administration of these agents was undertaken by Dr. Hope, and carried out in his usual careful and efficient manner.

I was assisted by Dr. Bourne of North Shields, the patient's usual adviser; by my friend Dr. Barron, and by Mr. Williamson, the senior house-surgeon of the Infirmary. A steam-spray was placed upon a raised platform in front of, and about four feet from, the patient's belly, so that the finer particles of the spray only should fall upon the wound. The skin of the abdomen was washed with the one to forty solution of carbolic acid, in which the instruments and sponges to be used, as well as the hands of those engaged in the operation, were immersed. Towels wrung out of the same solution were placed beneath the patient and over the lower part of the belly and the vulva. Antiseptic guards of new flannel were also provided, to be used in the way hereafter mentioned.

The incision, of medium size, was made in the usual way, and, the cyst having been exposed, a small opening was made in it before commencing its separation from the peritoneum, and about a third of the contents allowed to escape. The cannula was then introduced, and the sides of the opening held firmly around. The hand was next passed between the cyst and the peritoneum. Extensive adhesions



existed both to the omentum and the intestine; they were, however, readily broken down by the finger, except at one part, where the cyst was closely attached to the right bend of the colon. Great care was required in separating the attachments at this point.

As the tumour was gradually detached, it was being drawn out of the belly and its contents evacuated. The pedicle was broad and short, but thin; it was divided by the fingers into four portions thicker than the rest; each of these was firmly tied low down with a medium sized antiseptic silk ligature, the ends of which were cut short and the sections of the pedicle divided about half an inch beyond the ligature. Each section, after division, was found to contain a single blood-vessel. But little blood was lost during the operation. A small quantity of bloody liquid was sopped up out of the pelvic basin with an aseptic sponge after the removal of the cyst. The sides of the wound were brought together with fine sutures of antiseptic silk. The usual antiseptic dressings were then laid over the wound and belly, the wet clothing, etc., removed, and the patient, dry and clean, lifted to the bed and placed upon a tailed bandage, the dressings being fixed after the removal to bed. Consciousness returned about ten minutes after the removal to bed.

The steam-spray played upon the wound during the whole period of the operation and subsequent dressing. The flannel guards were used, so as to prevent any exposure of the abdominal cavity during the operation, to absorb the superfluous spray, and to prevent the antiseptic liquid from entering the bag of the peritoneum.

The operation occupied half an hour from the commencement of the anaesthesia to the completion of the dressing. Half an hour after the return of consciousness, a suppository of opium and belladonna was administered, and, half an hour later, a small enema of beef-tea, which was ordered to be repeated every three or four hours.

At 6 P.M., the patient was perfectly comfortable; there had been no sickness nor pain. Pulse, 98; temperature, 99 deg. The urine had been drawn. The enemata had remained.

April 15th. The patient had passed a good night. There was no pain or sickness. Pulse, 99; temperature, 99 deg. Urine was passed voluntarily; enemata were retained. The wound looked closed; the dressings were hardly stained; the belly was flaccid; there was no tenderness, except at the right hypochondrium, where the bend of the colon felt thick. The enemata were continued.

It is unnecessary to give the daily details of the case. The patient's progress to recovery was uninterrupted. The temperature never rose to 100 deg., nor the pulse above 100, and that only twice, when the patient was somewhat fatigued by the dressings; for the pulse usually ranged from 90 to 98, and the temperature from 98.3 deg. to 99.4 deg. Fourteen days afterwards, the pulse and temperature were for the most part normal. For three days, nourishment was given by the rectum, a teaspoonful of warm milk and water only being occasionally taken into the stomach; afterwards, liquid food was swallowed in small quantities at a time until the end of the first week, when fish was allowed and, by degrees, more solid food. On the sixth day, the bowels were moved naturally, and every two or three days afterwards either naturally or with the aid of warm water injections. On the seventh day, two stitches were taken out, and the remainder on the tenth day. The wound was dressed with antiseptic dressings—at first every second, afterwards every third or fourth day—and healed almost entirely by the first intention.

Tenderness over the right bend of the colon remained for two or three days, and considerable thickening could be plainly felt in the wall of the colon, apparently, at my last visit to the patient, on May 9th, when I found her out of bed, dressed, and walking about her room.

It would be unreasonable to say that the recovery in this case was owing to the antiseptic treatment, seeing how often patients recover after ovariectomy, where only ordinary precautions against septic infection are employed. The patient was a good subject for operation: spare in frame, of a calm disposition, cheerful, and sanguine of recovery. The tumour also consisted of a single cyst with but a small amount of more solid matter. Making every allowance for these favourable circumstances, I think the antiseptic precautions adopted may, however, fairly be credited with the immunity from fever, and with the smooth steady passage of the case to recovery, undisturbed by any unpleasant symptoms. The partial evacuation of the cyst before its separation from the abdominal wall seems to diminish the risk of the contained fluid entering the peritoneal cavity, whilst the ligature of the pedicle in sections low down is likely to favour the retraction of the cut ends and their envelopment in lymph.

In conclusion, I think it only right to express my obligations to the nurse, Miss Stanton, for her extremely careful and intelligent services to my patient.

## SURGICAL MEMORANDA.

### CARBONATE OF LIME CALCULUS EXPELLED FROM THE BLADDER OF A FEMALE.

ON November 4th of last year, I was summoned to attend a young married lady of delicate constitution with her first child. The pains were, previously to my visit, feeble and irregular. Upon examination, the os uteri was found to be fairly dilated, and easily made so by steady pressure with the finger; the edges of the os were extremely thin; the vagina was relaxed, cool, and moist. Liquor amnii had escaped. The presentation was natural; the head well down in the pelvic cavity. She was highly nervous and feeble. After my arrival, the slight pains which she had experienced entirely ceased, and manifested no signs of any recurrence. Nourishment (milk with brandy) was freely administered at stated intervals. There was, in fact, complete uterine inertia, without hæmorrhage. After waiting a reasonable time, in order to recruit her exhausted condition, I deemed it advisable to effect delivery, without further loss of time, with the aid of the forceps, as it was evident that nature was not equal to the task. The head was quickly brought down to the os externum, where it was permitted to remain for some minutes. The patient throughout was incapable of aiding in the least. A dose of ergot was given with sal volatile in brandy and water; the blades of the forceps were reapplied, and delivery of a viable full-grown child effected. After waiting the usual time of twenty minutes without any manifestation of uterine pain, a second dose of ergot was had recourse to, previously to any attempt at withdrawing the placenta, which was accomplished in about fifteen minutes, under the influence of slight uterine action. Nothing but a natural discharge ensued.

For some days she remained weak and helpless. The urinary excretion was scanty and passed with difficulty. The lacteal secretion was only slight on the fourth day, and became totally suppressed after two days. Her recovery was tedious, although a liberal regimen with quinine were prescribed. After a month's careful watching and steady nursing, she was, when retiring to rest, suddenly seized with inability to pass urine, owing to experiencing some obstruction, with bearing-down sensations, at the neck of the bladder, which at the time were regarded in the light of nervousness by her friends. At her solicitation, the husband, however, called upon me late in the evening and requested to have some medicine, when a mixture of bicarbonate of potash with spirit of nitrous ether and tincture of hyoscyamus was prescribed. On visiting her next morning, I found that, after taking two doses of the mixture, the bladder was enabled to evacuate its contents; and at the same time a calculus of pure carbonate of lime was passed into the urinal, with immediate relief to the patient. After this, she progressed satisfactorily, and, up to the time of her removal from the neighbourhood, had no return of the vesical symptoms.

The case is interesting, as I should say calculi composed purely of chalk are rare, not having met with a similar concretion, although I have in my possession several varieties of stone which I have removed by the operation of lithotomy. The calculus weighed upwards of forty grains, being friable, smooth, and white; its length was one inch; its width was half an inch.

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### RARE CONDITION OF THE KNEE-JOINTS IN A CHILD.

A. L., AGED 7 months, brought to the National Orthopædic Hospital on May 14th, is suffering from a condition of the knee-joints such as has not, I believe, been previously described. When the limb is extended, the bones entering into the formation of the right knee-joint are in their normal positions; but, on flexing the leg on the thigh, the tibia is rotated outwards, and partial lateral dislocation of the bone occurs in the same direction, the patella remaining in place. On again extending the leg, the dislocation is reduced with a loud snap, which, when the act of extension is quickly performed, is distinctly audible. In the left knee-joint, the same condition is present, but not so well marked as in the right. The child, a strong and muscular one, is, the mother says, in the habit of flexing and extending the legs with considerable force.

The production of the dislocation is, in my opinion, to be ascribed to the laxity of the crucial ligaments, which are unable to resist the action of the biceps during flexion of the joint, when this muscle is in the most favourable condition for exerting its power. Whether this weakness of the ligaments has been produced solely by



the strong kicking power of the child, or whether there was originally any defect of development, is a point which one can hardly decide.

In order to limit the movements of the joints, knee-caps stiffened on the outside with whalebone were ordered, and have effected considerable improvement.

F. R. FISHER, F.R.C.S.,

Surgeon to the National Orthopædic Hospital.

## REPORTS

OF

### MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

#### HOSPITAL NOTES.

GUY'S HOSPITAL (DR. MOXON).

*Spinal Sclerosis.*—A tradesman's clerk aged 21, with red hair and fairly intelligent appearance, complains of unevenness of gait in walking and difficulty in speaking. He has suffered from these paralytic symptoms during the last seven years. His speech is defective, he is slow in getting out his words and in forming the sounds, but he speaks without any want of intelligence. The movements of the tongue in the mouth present no abnormalities to the eye, and the power of the labio-glossal muscles, as indicated by the power to blow out a candle at a distance, presents no defect. In walking, the body swaggers; there is ataxia, but not complete "locomotor ataxia". In standing, the feet are widely separated, he cannot stand with his eyes shut, and says to attempt to do so makes him giddy. There is no muscular tremor, such as is seen in lateral spinal sclerosis. He has no difficulty in urinating. The eyes present no abnormalities in movement or ophthalmoscopic appearances. There are no dysæsthetic sensations of "girdling", etc., and no numbness. An elder brother is said to be similarly affected in a greater degree; another brother, aged 17, was seen; he usually stands with feet separated, and is unable to do so with his eyes shut; his gait is defective, but not so much so as the patient's. A sister is also said to be ataxic. There is no blood-relationship between the parents. There is here an absence of all cerebral symptoms; probably there is sclerosis confined to the spinal cord, and most probably in the posterior column. The prognosis of ordinary spinal sclerosis is, however, hardly warranted here. The treatment consists of tonics and cod-liver oil.

*Cervical Chorea, or Muscular Tic.*—An elderly man presented a curious lateral oscillation of the head and neck, but no general paralysis agitans; he also complained of want of sleep. This has been his condition for three years. Dr. Radcliffe's method of hypodermic injection of arsenic was tried, five minims of liquor arsenicalis being injected in the neck. This produced no good effect; and troublesome local boils and suppurating sores resulted, which have been healed with difficulty. This plan Dr. Moxon has tried in three similar cases, in all with a like unsatisfactory result, and now considers the plan useless and unsafe. Bromide of potassium has much benefited the patient; the muscular movement is less, and sleep is now good.

*Partial Paralysis of the Legs.*—A middle-aged man complains of tight girdling around the loins and difficulty in walking. He walks with difficulty, the muscular power of the legs being much diminished. He has been the subject of progressive muscular atrophy in one arm for two years, indicating long-standing changes in the cord. Just before admission, he was thrown from a cart and alighted on his head; the weakness of the legs followed. He has no difficulty in micturition now, though the history shows he had incontinence at first. This fact would be thought by some to be incompatible with genuine paralysis, were he appealing to a jury "for damages in a railway case". It appears, however, that the paralysis of the legs has resulted from the accident, and there is no reason to suspect malingering.

*Epilepsy.*—A girl aged 14 has been liable for several years to bouts of epileptic fits, and for such was admitted. An ice-bag to the spine was first used, but without effect. She was then put on bromide of potassium, half a drachm three times a day, without relief; the dose was then raised to one drachm three times a day, and the fits ceased. They have not returned on subsequently reducing the dose.

*Pleurisy.*—On the physical diagnosis of the effusion, Dr. Moxon remarked that the tactile vocal fremitus is an uncertain guide; it may partially persist with effusion; it may be absent from other causes. Effusion in the left pleural cavity may easily displace the heart towards the median line; but when on the right side, a much larger effusion is necessary to push over the heart, although, on the contraction result-

ing from subsequent absorption, displacement is greatest in right-sided pleurisy. If, with effusion, the temperature remain above 102 deg. or 103 deg. Fahr. for some days, it is generally purulent. In cases of phthisical consolidation of an apex, there may be pleuritic effusion, which subsequently becomes absorbed and closes up.

*Cardiac Jaundice.*—A man aged 21 presents the signs of tricuspid regurgitation. The liver is pulsatile, heaving and pulsating in the epigastrium synchronously with the ventricular systole. He is moderately jaundiced, and the stools present an excess of bile, which seems to indicate excessive secretion. Were the jaundice due to catarrh or oedema of the ducts, or to inspissation of bile resulting from defective hepatic circulation, no such excess of bile would appear in the stools. The same thing has been observed in a few other cases.

*Typhoid Fever.*—A man aged 20, was admitted in the second week of an irregular attack of continued fever. He had no rash; the temperature oscillated irregularly from 99 deg. to 103 deg. Fahr., generally higher in the morning. During the fourth week of his illness, the fever subsided and the patient began to convalesce. Solid food was now allowed, and shortly afterwards the patient relapsed, with a typhoid rash on the abdomen (which was absent in the primary attack), diarrhoea, furred tongue, and slight bleeding from the nose. The temperature was again highest in the morning, reaching 103 deg. Fahr.; this gradually came down the second week of the relapse. The first attack was not characteristic of typhoid; the relapse was completely characteristic. This favours the doctrine of the possibility of the generation of typhoid *de novo*. A sort of incubation during the first illness seems to have perfected the poison, which was thus able to develop a regular form of the disease in the relapse.

GUY'S HOSPITAL: OUT-PATIENTS (MR. DAVIES-COLLEY).

*Cyst of the Upper Jaw.*—A man twenty-four years of age, presented a fluctuating swelling of the size of a walnut on the right side of the face half an inch below the orbit. In the mouth, the tumour projected along the outer margin of the gum; it was fluctuating and not painful. This had been noticed during the last two and a half years, and had been lanced twice, when "stuff like coffee-grounds" is said to have been evacuated, but the wound was not kept open. Adjacent to the tumour was a carious bicuspid which had not been tender, but the man had some face-ache three years ago, *i.e.*, before the formation of the cyst. The canine tooth was absent on this side, the lateral incisor being in contact with the bicuspid, and there was no history of its extraction; possibly then the cyst may be dentigerous. There was no discharge from the nose or other sign of disease of the antrum. A seton was then passed through the cyst from the mouth by means of a curved needle, and a clear slightly yellow mucoid fluid was evacuated. A crater of bone was then felt surrounding the cyst at its base. Probably the adjacent carious tooth will have to be extracted. A radical measure would be to lay the cyst freely open and stuff it with lint. A finger in the cyst would enable the diagnosis to be confirmed.

A young woman came under treatment a month ago with a mucous cyst of the upper jaw of two or three years' growth, producing considerable deformity. It had previously been lanced two or three times. A seton was inserted and tied in; clear mucoid matter exuded, suppuration followed; a carious tooth adjacent was then extracted. The patient is now free of all trouble but a depression in the maxillary bone.

*Polypus growing from the Septum of the Nose.*—A girl aged 15, had been troubled with obstruction of left nostril and epistaxis for four months. This was found to be due to a pedunculated polypus growing from the septum. In January it was removed under chloroform, and now there is no sign of disease. Polypus growing from the septum is very rare; this one measured a little over half an inch by one-third; it was very vascular, and ulcerated on the surface. Structurally it consisted of a large number of vessels and adenoid tissue, with many lymph cells.

*Nævus.*—An infant presented a nævus in the centre of the upper lip. A month ago this was injected with pure carbolic acid (liquefied by heat). At present the surface is slightly irregular, in a few places too vascular, and these points may have to be touched with the actual cautery. The nævus, however, is cured, and that without scar or irregularity in the outline of the lip. Mr. Davies-Colley usually excises nævi, especially those occurring in parts where the skin is loose, as on the trunk; the margins of the wound then come well together and direct union usually follows; on the lip, however, this would produce a deformity.

*A Ganglion of the Wrist* had been three times dispersed by pressure, and had re-formed. A fortnight ago, it was laid open under carbolic spray, and stuffed with carbolic gauze to excite a little inflammation. This had been removed within four days, and no suppuration



followed. The wound is healed and the ganglion apparently cured. Mr. Davies-Colley has treated many cases thus without any ill results; but usually the gauze is left in one to two weeks.

*Primary Chancre on the Lip.*—A young woman had, in some inexplicable manner, contracted a hard chancre on the lower lip. It presented an indurated base, with thickening of the whole lip. There were mucous tubercles adjacent to the primary sore, also superficial ulcers on the tongue and tonsils. No cutaneous rash had followed, perhaps because the patient had been treated with mercury from the first. A similar case of primary chancre on the lip gave a history of having "been scratched by a cat".

*Excision of the Hip-joint.*—A child whose hip was excised eighteen months ago was carried into the room, with an extension splint *in situ*. The apparatus used was a modification of De Morgan's arrangement, consisting of a lateral splint on each side of the body, interrupted at the hip, the two splints being firmly connected by iron bars passing under the body. The splints were strapped to the body, and loosely bandaged to either leg. Extension was then made by a cord attached to the foot, passing over a pulley at the end of the splint to a spring at its outer side.

*Necrosis of the Superior Maxilla, following Small-pox.*—A girl, six years old, contracted small-pox three months ago. A month from the onset, two teeth fell out and the breath became foul. About an inch of the alveolar process necrosed, became exposed, and was taken away with the greatest ease. Such a form of necrosis may follow after exanthemata.

## COUNTY ASYLUM, LANCASTER.

### CASES OF TUBERCLE OF THE BRAIN AND TUBERCULOUS ULCERATION OF INTESTINE.

FOR the report of these cases, we are indebted to A. HARBINSON, M.D., Assistant Medical Officer.

**CASE I. Tubercle of the Brain.**—Tubercle is the most frequent tumour of the brain, but the form in which the deposit is found appears to be a matter of some uncertainty. In Reynolds's *System of Medicine*, it is stated that "the grey translucent form of tubercle is rarely, if ever, met with in the brain." Lebert says he has seen it rarely, and Rokitsky believes that there are some rare cases which prove that tubercle in the brain does, in part at least, commence in the grey translucent form, for portions of a tuberculous mass are sometimes found in that state." The tubercles in the present case I look upon as in a transitional state, grey, and growing at the circumference, and just beginning to assume the yellow form in the centre.

The patient, a woman aged 50, was admitted in 1865 for melancholia. She was a jealous, exacting, feeble-minded person, fond of being noticed and subject to depression, but without any delusions. In this state she continued until the time of her death, on January 22nd, 1877, never having evinced any symptoms of coarse organic brain-disease. She was of a very scrofulous diathesis; had glandular abscesses of the neck in her youth, and again within the last few years; had caries of the hip-joint for ten years past, and a similar affection of the ankle-joint, which began in April 1874. The immediate cause of death was phthisis of right lung, the upper lobe of which formed one huge ragged cavity. On *post mortem* examination (omitting other details), there were found in the brain four small tumours from the size of a hemp-seed to that of a pea, situated in the hemispheres—two in the convolutions of the right frontal lobe, one in the left hippocampus major, and one in the left occipital lobe. The first two were located (as is usually the case) in the grey substance, coming close to, but not projecting on, the surface. The last was altogether in the white matter, immediately beneath the grey. They were round in shape, more consistent than the brain-material, and in colour something between that of the grey and white substance.

A bit taken from the centre of the tumour in the fresh state could, by a little manipulation, be broken up in a drop of water on a glass slide. This, under the microscope, was seen to have no binding material, nor oil-globules, but to consist entirely of cells, with the exception of a small number of solid-looking, highly-refracting particles, which afterwards were found to take up colouring matter readily. The cells were pale in colour, with their cell-walls of an irregularly rounded form, uneven in outline, rather smaller in size than coloured blood-corpuscles, and containing several granules each. On holding up a prepared section against the light, the round outline of the tumour could be beautifully seen, deeply coloured by carmine, and contrasting with the less intense staining of the mass of the tumour on the one hand, and the brain on the other. In all the specimens, a more or less defined capsule could be seen surrounding the tumour, having in some

places an areolar, in others a retiform arrangement, and terminating abruptly towards the tumour, but becoming gradually lost in the brain-substance. The interspaces of this soft-looking fibrous tissue were filled by clear, non-nucleated, non-granular cells, rounder, brighter, more highly coloured, and rather smaller than those inside the capsule. They were disposed in rows, in clusters or irregularly, sometimes extending for a considerable distance into the brain-substance. Inside the capsule the structure was very uniform, consisting of very closely packed cells similar to those examined in the fresh state. In "grey tubercle there are few molecules, and the corpuscles are so compressed together as to be scarcely distinguishable" (Hughes Bennett). In the absence of symptoms during life referable to the pathological appearances, it may be inferred that the tumours were of recent date, from the late rapid progress of lung- and bone-disease, and from the microscopic examination of their structure. That they were in a very early stage of degeneration may be supposed, not only from the probably recent date of their formation, but also from the vital, active character of the circumference, the slightly altered appearance of the closely packed cells in the interior, and the absence of *débris*.

**CASE II. Extensive Tuberculous Ulceration of the Intestine with few Symptoms during Life.**—A. S. S., aged 27, was admitted, in May 1868, for secondary dementia, with maniacal outbursts and a tendency to violence. She became phthisical early in 1876, and had much subsequent excavation of the lungs. In August last she had a slight attack of diarrhoea, which continued for a week; but, beyond this, there was no apparent disorder of the bowels, which were moved daily or every other day, until the day before her death, when she was purged five times. She died on January 31st, 1877.

*Necropsy.*—The head was normal. The lungs were much indurated and riddled throughout with various-sized cavities, most of which contained thick yellow pus. On opening the bowel, it was found very extensively diseased. Scattered over the whole of the large intestine, from a point a little above the rectum, were found sixty-seven ulcers, exclusive of a mass extending continuously over the caput caecum coli. In the small intestine, it was impossible to reckon the number of ulcers; for, besides Peyer's patches generally being affected in this way, a great many ulcers, from the size of a pin's head to that of a halfpenny, were scattered about irregularly, and fifteen bands of ulceration, three-eighths of an inch broad, extended circularly around the intestine, while a sixteenth band passed half round the calibre of the gut, from the mesenteric attachment to the free border. The ileum was affected in its entirety, and the jejunum to within four feet and a half of the pylorus. The mesenteric glands were infiltrated with yellow tubercle, and lines of the same, probably in connection with the lymphatic vessels, were seen on the inner surface of the intestine—in one instance forming a circle one-third of an inch in diameter—inside which the intestine appeared healthy. There were no granulations on, or inflammation of, the peritoneum, although many of the ulcers encroached on that membrane. The transverse and descending colon (as often occurs in the insane) was uniformly contracted to half an inch in diameter.

The points of interest in the case are:

- The large amount of ulceration present;
- Its occurrence in the jejunum, where, according to Niemeyer, it is rarely found;
- The absence of any marked diarrhoea during the progress of the disease, and in spite of the ulcerated condition of the large intestine. "When the large intestine is free from ulcers, and consequently from catarrh, the fluid contents of the intestine entering them become of normal consistence, so that consistent stools are passed during life" (Niemeyer). In connection with this, the occurrence of the contracted colon is worth noting, as giving a possible clue to the explanation of the phenomena, on the ground of the diminution in calibre causing retardation in the passage of the contents and thus affording greater facilities for their absorption.

**BRADFORD.**—The medical officer of health states that there was a considerable improvement in the health of the borough; that the birth-rate in 1876 was 39.2, the death-rate from all causes 23.9, and from zymotic diseases 3.7, per 1,000 inhabitants; the latter of which contrasts favourably with the rate for twenty-one large towns. The population is estimated at 173,723; the number of births registered being 6,787, and of deaths 4,141. The percentage of deaths under one year to births was 17.6, against an average of 19.4, and to total deaths 30.4, both of which are high. The large infant mortality is said by Mr. Butterfield to be caused by the feeding of infants on sops, arrowroot and water, etc. The death-rate amongst illegitimates was 28.8, against 16.7 of legitimate children under one year. The zymotic mortality was caused chiefly by measles, scarlatina, and diarrhoea. The list of sanitary work performed during the year is satisfactory.



## REVIEWS AND NOTICES.

LECTURES ON ORTHOPÆDIC SURGERY AND DISEASES OF THE JOINTS. By LEWIS A. SAYRE, M.D., Professor of Orthopædic and Clinical Surgery in Bellevue Hospital Medical College, New York. London: J. and A. Churchill. 1876.

LECTURES ON ORTHOPÆDIC SURGERY. By B. E. BRODHURST, F.R.C.S. London: J. and A. Churchill. 1876.

WE had intended ere now to recommend Dr. SAYRE'S book to our surgical readers. From Dr. Sayre's claim to write as an authority on orthopædic surgery, from the fresh and original style in which the lectures are written, and in spite of certain blemishes—such as a very dogmatic way of stating opinions which are occasionally founded on rather hasty reasoning, and a claim to far greater success in the treatment of some diseases than we think will be allowed by the test of time—this book is one that will well repay careful reading, for it is replete with large experience and original thoughts.

In the chapter on the Etiology of Deformities, the author includes perfect and long-continued rest amongst the causes of acquired deformities of joints. In England this has been disputed. Mr. Hilton used to teach that in the treatment of joint-diseases by long-continued rest the healthy joints would undergo no material change. We notice that, in the recently published edition of *Rest and Pain*, the editor has drawn attention to cases brought forward by Sir J. Paget and Mr. Butlin, in which ankylosis of healthy joints followed on long-continued rest. Dr. Sayre strongly supports this view, and at p. 42 will be found a case in point.

In Lecture iii will be found three cases of interest; double paralysis of the quadriceps extensor, paralytic talipes equino-varus, and paralysis of the lower extremities; being met with in three children, and due in each case to congenital phimosis causing constant genital excitement and undue nervous irritation. This subject has lately attracted a good deal of attention in America.

In his remarks on talipes, the author believes that nearly all cases of congenital talipes are of a paralytic nature (any spasm in such cases being secondary), as opposed to the opinion usually held in this country that most of the congenital cases are spasmodic in nature, and the non-congenital due to the paralysis of infancy. Holding the above belief, Dr. Sayre recommends most strongly the method of Mr. Barwell, which, however, we think he overrates when he speaks of it as one that "will make almost as great an advance in orthopædic practice as did the suggestion of Stromeyer of subcutaneous tenotomy".

To decide the question "Is tenotomy to be resorted to in a given case?" the author writes: "The contracted part being placed and carefully retained as nearly as possible in its normal position, make point-pressure with the end of the finger upon the parts thus rendered tense, and if such pressure produces reflex contractions, that tendon, fascia, or muscle must be divided, and the point at which the reflex spasm is excited is the point where the operation should be performed."

We cordially agree with Dr. Sayre when he insists on the importance of commencing the treatment of congenital talipes as soon as possible after birth, and also where he lays down a most important rule, that where mechanical apparatus is needed only that should be chosen which "permits as far as possible the natural motion of the parts involved in the deformity". But where he teaches that after tenotomy the parts should be restored at once as nearly as possible to their normal position, we should differ from him on account of the risk run of the entrance of air and unhealthy suppuration.

In the chapter on Diseases of the Ankle-joint, Dr. Sayre thinks the mischief usually traumatic in its origin, and due to a "blood-blister", i.e., an effusion of blood beneath the synovial membrane or between the cartilage and the bone, over-irritated by want of rest and so suppurating. As to treatment, the author says he does not excise this joint, a transverse incision being necessary which involves much necessary damage to the vessels and muscles—an observation, however, which leaves out of account the operation brought forward by Mr. Hancock and Mr. Lee. Dr. Sayre accordingly treats these cases by removing subperiosteally the bones that are carious, leaving in oakum setons soaked in Peruvian balsam, which as they are drawn through, fresh oakum being twisted on from time to time, draw out entangled in their fibres the debris of carious bone. As the discharge diminishes, the setons are reduced in size, and finally withdrawn, the wound encouraged to close, and passive movements commenced. The results are apparently very good, but the cases are few and incompletely reported; thus in one, where the patient was aged 27 at the time of the operation, nothing is said as to the whole duration of the case, nor how long the setons were left in. In

two other cases, which recovered with movable joints and in which the success had been submitted to the test of twenty years, the setons were required for ten or eleven months, though, as these patients were children, this loss of time was not so important. Both in these cases and in many of those of knee-joint disease, after the carious bone has been removed but before the articular surfaces are soundly healed, or in cases where it is hoped that no operation will be required, the author recommends a method of treatment which he says combines rest, extension, and compression of the joint; the instrument employed consisting of jointed bars which embrace the limb and can be elongated by a screw, while the patient is able to get about on crutches.

In the account of Diseases of the Knee-joint, we are glad to see puncture of the joint recommended when the absorption of the fluid is slow, on account of its removing the tension from the lymphatics and enabling them to absorb the remainder. We have always thought highly of this step, for it removes the tension from the stretched and already perhaps softening ligaments, and thus removes one risk of further mischief in the joint. In treating advanced cases of so-called "white swelling", the author mainly relies on an instrument by which he claims to give here, as in the ankle-joint, rest, compression, and extension. Of this he writes: "Extension is especially important here, for the reason that, even where the tendons are not inflamed, the irritation produced by the inflammation within the joint invariably excites reflex action, the muscles contract, and thereby increase the compression upon the already suffering tissues within the joints, and if continued produce serious deformities. In looking over Sir B. Brodie's works, I find he recommends positive rest, and that is all: but you may do this, you may rest the joint in splints, but you do not do all that is required: you may keep the limb perfectly still, and locked up in every conceivable way, and yet you do not overcome the tendency of the muscles to contract: you do not prevent the reflex action. The result is, the diseased surfaces are brought into contact, the pain is continuous, and the parts pressed upon undergo interstitial absorption. But when you give extension to these limbs thus locked up by disease, you will give the patient instant relief. I have been very successful in the treatment of this class of cases, and I attribute my success, in a great measure, to the fact that extension has been made a leading feature of my treatment." Thus nothing is said about tenotomy.

It seems to us that Dr. Sayre and such authorities as Mr. Hilton in this country go on diametrically opposite principles. No one can read these pages without being struck by the ingeniousness of the author's theories and the ability with which he applies his treatment, but what as regards the final result of these advanced cases of so-called "white swelling"? Does Dr. Sayre, in his attempt to obtain a movable joint, get permanently better results than those obtained by the method of absolute rest as advocated by Sir B. Brodie and Mr. Hilton? It seems to us that the disease is far less likely to recur in those cases which are treated by absolute rest so as to secure good bony ankylosis in the joints of the lower extremity.

We are much disappointed in the account of Excision of the Knee-joint. There is no mention of the sort of cases in which the operation is required, and no comparison of the value of this operation when weighed with amputation.

To contrast with the above meagre account, one hundred pages are given to Diseases of the Hip. The views of the author on the pathology of this affection, its treatment by his cuirass, and his method of excision, are so well known that we need not refer to them here. In a table of fifty-nine cases of excision, which is published at page 314, we notice one in which the patient was aged 32 at the time of the operation, and recovering with an useful and movable joint, was heard of a year after the excision engaged in active practice: in another case, the child, aged four months at the time of the operation, recovered with perfect motion and no shortening. Dr. Sayre takes great credit to himself for rejecting the theory that scrofula is at the root of hip-joint disease; he is perhaps not aware that it was long ago set aside in this country by Mr. Hilton and Mr. Holmes. The following passage is a good specimen of the writer's vigorous naturalistic style. "Childhood is the age of restless activity, and out of the hundreds of cases in which I have taken the trouble to trace their history, I have found that the immense majority, I may safely say seventy-five per cent., have occurred in the most vigorous, robust, wild, harum-scarum children, those who take their chances of danger, who run races, climb over fences, jump out of apple-trees, kick their playmates downstairs, ride down balusters, and are generally careless and reckless. On the other hand, the adult does not place himself in the position in which he can receive so many blows or falls as the active child does; and, furthermore, he immediately notices the effect of his injury and takes precaution against its development into serious injury; the child, however, knows nothing of results, and, unless the pain from the injury is great, will probably



fail to complain of it and soon forget it altogether.....The sickly scrofulous child, who clings to his mother's apron, does not run the risk of getting hurt as do these active restless children; consequently the majority of cases occur among the active and robust."

With regard to the remainder of this book, we would refer our readers to the chapter on Diseases of the Spine, the account of which is especially original, while the treatment and instruments employed are equally ingenious; in fact, the writing throughout the book is strikingly fresh and vigorous. We hope that in a future edition some subjects now neglected will receive proper attention, notably disease of the elbow and wrist-joint and psoas abscess; while many of the drawings, more particularly several of those in chapters 27 and 28, may well be "improved off the face" of this valuable, interesting, and original book.

The lectures of Mr. BRODHURST are already known to the profession, having for the most part appeared in one of the medical journals. The alterations in this, the second, edition are but few. The chapters on ankylosis will be found amongst the most interesting. The illustrations are admirable.

NAVAL MEDICAL SCHOOLS OF FRANCE AND ENGLAND, WITH OBSERVATIONS ON THE NAVAL HOSPITALS OF TOULON. Reported to the Bureau of Medicine and Surgery. By RICHARD C. DEAN, Medical Inspector, United States Navy.

THE above is the title of a well got-up and beautifully printed Report, of ninety-two pages, by the Medical Inspector of one of the squadrons of the United States Navy which lately visited our shores. Dr. DEAN was specially instructed by the Bureau of Medicine and Surgery of the Navy Department, with the view to improve the Medical Department of the Navy, to obtain accurate and detailed information relative to the military medical schools and hospitals of the most advanced nations of Europe. Dr. Dean was furnished with a general letter, addressed by the Department of State to the Ministers and Consuls of the United States in Europe. Thus armed, he had no difficulty in obtaining free entrance to all the schools and hospitals of Cherbourg, Brest, L'Orient, Rochefort, and Toulon. In England, every facility was afforded for like inquiries. Dr. Dean visited Netley, and spent some days there; but when he was beginning to grow familiar with the place, its organisation, and management, he was suddenly recalled to the flag-ship *Congress* by a telegraphic order, which obliged him to depart abruptly, and to leave much of his task unfinished.

With regard to Dr. Dean's observations on the French Naval Hospitals, we can only afford space for his description of the mode of conducting the examinations for admission into the French Navy, and for promotion. Our author may well say that the method "is a very complex one", and "that it could scarcely have been devised out of France".

The proceedings are all directed by an unseen hand, which uses the examiners only as its instruments. The examining board, or "jury of competition", as it is called, is composed of four members and "an alternate or substitute", the junior member acting as secretary. The four members are: a medical director, who presides; a physician-in-chief, who is a professor in the school where the examination is held; two professors, taken from the other two schools. The "alternate" is taken from the school where the examination is held. The names of the examiners are drawn by lot, and sent to the Préfet Maritime, who sends them to the Minister of Marine. If one of the jury be a relation of a candidate, "even to the fourth remove", he must give place to the "alternate".

The questions are prepared in secret conference by the juries in each school, and are sent to Paris to the Minister of Marine. This great person mixes all the questions from the different schools, and a Commission, composed of the Superior Medical Council and the Director of the Archives of Naval Medicine, makes a selection from the number. The questions chosen are placed in closed envelopes, "sealed, signed on their folds by the members of the Commission, and addressed by the Minister of Marine to the Préfet Maritime (!) of the port where the examination is to be held". The Préfet transmits them to the president of the jury, "but not till they have assembled". At the examination, the Commander-in-Chief of the station presides. The breaking of the seals of the questions is a great formality; and it is only after a great many ceremonies with numbered balls drawn from urns, that the examination begins. We have greatly abridged Dr. Dean's description; but, even when thus cut down, our readers will be reminded of the nursery rhyme of the "house that Jack built". When Dr. Dean, as well he might, expressed surprise at this complicated machinery and suspicion of the good faith of every one concerned in the preparation and custody of the questions, he was informed, "in a reply more

idiomatic than satisfactory, that the thought did not come to any person to believe that the secret would not be guarded as to the tenor of the questions chosen, but a secret could be surprised; and, in a word, a secret being capable of being violated, this possibility made it necessary to adopt a method of keeping it that should be unattackable"! The whole thing is a curious specimen of that "organisation" on which our neighbours pride themselves, and which, when brought into contact with it, provokes the contemptuous wrath of simple-minded and less suspicious Britons.

Turning to the education of medical officers for the public service in England, Dr. Dean gives, at length and from official sources, a complete account of the history of the Army Medical School, going back to the battle of Camperdown, and John Bell's well-known observations on the necessity for a school of special instruction in military surgery; giving also, in outline, Robert Jackson's scheme for such a school; and finally, the reasons which weighed with the Royal Commission that inquired into the health of the army, in advising the establishment of the school as it now exists at Netley. Dr. Dean speaks in flattering terms of the system of teaching pursued at Netley, which he minutely describes. Our readers will perhaps be amused at the personal sketches he gives of the professors, so unusual in grave official documents in this country; sketches which will recall the personal description often given by the interviewing contributors to New York newspapers, and which are highly relished by our cousins. We must, however, do Dr. Dean the justice to observe that he leaves the colour and cut of the Netley professors' "pants" unsung.

Surgeon-General Longmore, C.B., is described "as an officer of prepossessing personal appearance and manners, an agreeable as well as an instructive lecturer, whose discourses bear evidence of the widest experience and research, and whose opinions are evidently the result of much philosophic thought. The numerous orders and medals worn by him attest the appreciation of his merits by his Government".

Surgeon-General Maclean, C.B., is thus sketched: "He is an officer in the prime of life, and of a commanding stature and presence, with a countenance strongly indicative of his Scottish origin. His lectures are forcible and eloquent, and enriched by the gathered incidents of a vast and varied experience, especially in India; and are delivered with the peculiar but impressive accent of that northern race which has ever held a foremost place in the ranks of the medical profession."

Professor Aitken is described as "a modest and unassuming man", and, from his retiring manners, Dr. Dean infers that, "unlike his military colleagues, he has always led a life of seclusion and study". Our author was greatly struck by Dr. Aitken's lectures on pathology, "which are replete with learning, and would be a high honour even to the School of Edinburgh", where, adds Dr. Dean, "from his characteristic accent, one might fancy they were delivered".

At the time of Dr. Dean's visit, the lamented Parkes was in failing health. In common with all who ever looked into the beautiful and intellectual face of that bright ornament of the medical profession, he was charmed "with the quiet dignity of the sweet and gentle face that attracts everybody to him"; and does justice to the worth and character of a man "to whom the world owes much", and who at his death "was lamented by the whole nation".

It will thus be seen from the above extracts that the surviving professors of the Army Medical School, in this little work, enjoy a privilege extended only to a few of "seeing themselves as others see them".

Dr. Dean concludes his Report by contrasting the methods of training in France and at Netley; and, while expressing himself in terms flattering to the French system, adds: "As to the relative value of the instruction received, I am inclined to believe that perhaps that obtained at Netley is more directly practical, and attains in a more complete manner its special object, that of training the candidate in the actual duties of his prospective position. It is more limited in the subjects embraced; but it is well adapted to its purpose, and, like most things in England, is marked by the absence of non-essentials, by solid and substantial utility, and unostentatious thoroughness."

Dr. Dean thus advises his Government in the last sentence of his Report: "I for one am not ashamed to declare that I believe a special training in the Schools of either France or England would greatly enhance the value of my services to the Government, both in peace and war. Moreover, knowing all that I know of the three services, I deem it my duty to say, in concluding this Report, that such a school would be of immense advantage to the navy of the United States, and that the absence of any such place of special training for the service is a defect that cannot be remedied too soon."

We commend this passage to the consideration of the small financial reformers who, little more than a year ago, were prevented at the eleventh hour from destroying the Army Medical School.



## REPORTS OF SOCIETIES.

## OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, MAY 2ND, 1877.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

*Apparatus for Uterine Injections after Delivery.*—Dr. ROBERT BARNES showed for Dr. BERNARD of Londonderry an apparatus for facilitating the injection into the uterine cavity after labour of water or perchloride of iron. It is made of India-rubber, and consists of a band which passes over the operator's hand. It carries a tube on the palmar aspect, which divides into three branches, so as to distribute the injection.

*Pessary.*—Dr. BARNES exhibited for Dr. SCOTT of Canada a pessary for prolapsus uteri.

*Fibroid.*—Dr. WILTSHIRE exhibited for Dr. HORNCastle a specimen of fibroid tumour of the uterus. The case was thought to be one favourable for enucleation, but operative interference was declined. At the *post mortem* examination, the uterus was found adherent to the surrounding parts, and the tumour lodged in a capsule, out of which it could have been easily enucleated.

*Ascitic Fetus.*—Dr. GALABIN showed an ascitic foetus, which presented a great obstacle to delivery. Besides the ascitic fluid, the abdomen contained a tumour, which turned out to be the bladder greatly distended.—The PRESIDENT requested Dr. Galabin and Dr. John Williams to examine and report upon it.

*On a New Mode of Treating Certain Cases of Retroflexion of the Unimpregnated Uterus.*—Dr. JAMES BRAITHWAITE read a paper on this subject. The plan of treatment advocated is applicable to cases in which Hodge's pessary failed, and consisted in dilating the canal of the uterus by means of sponge-tents. Then a wire threaded with an India-rubber ball is so arranged as to occupy the uterus, vagina, and sulcus between the buttocks. The uterine portion of the wire, which is limited by a button on its proximal extremity, is covered by India-rubber tubing, and bent so as to maintain the uterus in ante-flexion. When the wire is introduced, the India-rubber ball should be pushed up to the button and inflated, and the external part of the wire be so bent as to occupy the sulcus between the buttocks. The instrument cannot escape, nor enter further into the uterine cavity, nor get out of position. The instrument should be worn for four days, during which period the patient should remain in bed. Ergot should be administered. When the instrument is removed, a Hodge's pessary should be introduced. The author had cured the retroflexion in four cases which he had treated by this means.—Dr. PRIESTLEY said that some years ago Dr. Moir had recommended the dilatation of the uterus by sponge-tents in cases of persistent retroflexion of the unimpregnated uterus and the insertion afterwards of an intra-uterine stem with an oval-shaped bulb half way up, corresponding to the bend in the retroflexion. He could not say what results had been obtained by the method, but Dr. Braithwaite's plan was the same so far as the dilatation of the uterine cavity was concerned, although the latter part of the process was different.—Dr. BARNES was slow to resort to internal until external means had failed. Hodge's pessary rarely failed. All internal supports, however ingenious, must cause a certain amount of chafing; they also fix the uterus. The organ should not be fixed. When all other means had failed, intra-uterine supports might be tried. Before introducing a Hodge's pessary, the displacement should be reduced.—Dr. GRAILY HEWITT thought the instrument ingenious and carrying out a necessary principle of treatment of flexion, viz., flexion in the opposite direction. He had done this by means of the sound. This, with the introduction of a modified Hodge's pessary and the prone or semiprone position, usually proves successful. There were some cases where the difficulties of treatment were almost insuperable, owing to adhesion of the uterus posteriorly, thinning of the uterine wall at the point of flexion, the chronicity of the flexion, and the hardness of the uterine tissue. He preferred, if possible, the avoidance of intra-uterine stems in retroflexion.—Dr. ROUTH said the instrument presented many points of ingenuity. Some of them were not new. The pessary was not of the full length of the uterus, and by this means irritation of the fundus was avoided. Dilatation by tents he had practised for many years; but, instead of using sponge-tents, he employed laminaria bent into the shape of the uterine cavity. This instrument fastened behind like Dr. Priestley's, and, unlike Sir James Simpson's, the ball on the stem was new. There are some cases irremediable. No instrument can effect a cure, and certainly not in four days. It had been said that stems caused inflamma-

tion. He thought this was favourable in some cases, and in some essential to cure. He had used Dr. Muirhead's instrument with good result.—Dr. MEADOWS was entirely opposed to the views expressed by Dr. Barnes and Dr. Graily Hewitt. The uterus was not thinned on the concave but on the convex side of the flexion. He had seen Hodge's pessary inefficient and injurious. The uterus was often retroflexed when a Hodge's pessary was worn. A too mechanical view was taken in the treatment of flexion, though mechanical treatment was of great value, and stems were the most efficient form of it. He did not agree with Dr. Routh that inflammation was favourable to cure.—Dr. BANTOCK was surprised to find that retroflexion was still treated by means of Hodge's pessary. The instrument was of use in retroversion, but of no use in retroflexion. Stem-pessaries alone could effect a cure. Stems did not give rise to uterine contractions or hypertrophy. The effect of introducing a small bougie into the uterus was to cause relaxation, so that a larger one could be introduced next day. Retroversion with ante-flexion is very difficult of cure, and cure can be effected by stem alone.—Dr. GALABIN had found the Hodge's pessary and the use of the sound for reposition effectual in retroflexion except in rare cases. Cases of ante-flexion presented greater obstacles. This was because the pressure of the intestines was greater in the posterior than the anterior surface of the uterus.—Dr. ROGERS had often found Hodge's pessary inefficient. He used leeches, douche and counterirritants. He had used stems extensively and with good effect. They required careful watching, and, should inflammation set in, leeches, etc.—Dr. HEYWOOD SMITH insisted upon the necessity for constitutional treatment and for depleting the uterus before having recourse to mechanical means. The treatment of out-patients was much less satisfactory than that of in-patients, because the former were deprived of rest.—Dr. E. J. HICKS felt uncertain whether or no flexions produced results; the general state, local inflammation, and congestion should be attended to.—Dr. MURRAY considered that pessaries were used much too frequently. He had known many pelvic pains referred to displacement when the uterus was in normal position. He had found Hodge's pessary and intra-uterine stems of great value. He had seen no ill effects arise from the stem-pessary, and he had always been able to introduce them without dividing the os uteri, as some had advocated, both to allow of its passage into the uterus and also to assist in curing the displacement.—Dr. WYNN WILLIAMS did not recommend stems in retroflexion, but chiefly in ante-flexion. He recommended reposition of the uterus by the sound, and the introduction of a Hodge's pessary while the sound is in the uterus.—Dr. WILTSHIRE thought the Hodge's pessary efficient if properly used. Stems were efficient but dangerous. He recommended the use of the sound and the prone position.—Dr. BEIGEL lamented the want of pathological knowledge. He had examined five hundred uteri *post mortem*, and found flexion only ten or twelve times, and no change whatever in the uterine wall, no thinning or microscopical change. The sound could not be introduced in some cases because the canal is closed. Inflammation of the uterus did not favour the cure of flexions. Irritation of the uterus set up inflammation. The only means of cure was a stem.—The PRESIDENT said it was remarkable in what different lights the uterus was regarded. By some it was looked upon as universally sympathetic; while others looked upon it as an organ which would stand any amount of maltreatment. He could not reconcile these views. Sydenham said it was the duty of those who practise medicine to find out indications for treatment, rather than special remedies for this or that condition. The great point to aim at with regard to flexions of the uterus was to distinguish the different classes of these displacements, and lay down rules when treatment should not be adopted because unnecessary or not beneficial. Great ingenuity had been shown in devising mechanical contrivances, but this may lead to mischievous practice. It should be remembered that the Society should lead the medical profession in a particular branch. The results of Dr. Braithwaite's work was hardly such as to be encouraging. There are some cases which are found out accidentally and do not require treatment; in others, the suffering is connected with congestion. Others again do not bear mechanical treatment because of the presence of adhesions. Virchow showed that thinning of the uterine wall took place in the concave side of the flexion, and brief treatment could not cure such a condition. Then, a condition found so rarely *post mortem* as flexion, according to Dr. Beigel's observations, cannot be of very great importance. Stems are objectionable because of the risk of inflammation. The great principle of treatment should be not to do harm if good cannot be done.—Dr. BRAITHWAITE stated that the treatment described by him should be followed in exceptional cases only. Hodge's pessary was usually efficient, but in some rare cases it failed, and recourse must be had to stems. Cure was not effected in four days, but the uterus was placed in position for recovery.



## MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

WEDNESDAY, APRIL 4TH, 1877.

J. D. GILLESPIE, M.D., President, in the Chair.

*Analysis of Elbow after Injury of Arm.*—Mr. ANNANDALE showed a young man whose arm had been drawn between two hot calendars, by which the soft parts were greatly lacerated and the elbow-joint opened. When he came under Mr. Annandale's care, there was ankylosis at the elbow and one long cicatrix on the front of the forearm, causing great flexion of the fingers. Mr. Annandale excised the joint, removing about six inches of the bone, in the hope of also relieving the flexed fingers, but without success. He, therefore, dissected up the cicatrix. In the after-treatment, extension was applied to the fingers by means of weights. He had now perfect use of the elbow-joint and a useful hand.

*Femoral Hernia: Radical Cure.*—Mr. ANNANDALE showed a man who had a large reducible femoral hernia of the size of a closed fist, which came down constantly. He made an incision somewhat above and parallel to Poupart's ligament, so as to reach the neck of the sac and ligature it with catgut. The operation was performed above four months ago, and since that the patient had been going about without any truss or band. This was the first case known in which a successful radical cure of a reducible femoral hernia had been accomplished.

*Excision of the Os Calcis.*—Mr. ANNANDALE also showed a young woman, whom he had previously exhibited, as showing the result of the excision of the os calcis. There was almost perfect movement at the ankle-joint.

*Miners' Nystagmus.*—Dr. ARGYLL ROBERTSON showed a patient suffering from miners' nystagmus. The case differed from ordinary cases, inasmuch as when the patient looked at an object on the horizontal plane, or slightly below it, the eyes were fixed; whereas, when the object was above the horizontal plane, oscillation of the eyeballs took place. Another peculiarity was that jerking of the head also caused the oscillation. He attributed the movements brought about, when the object was above the horizontal plane, to the more rapid fatigue caused by the muscular effort necessary for the convergence of the optic axes and the change in accommodation. He thus thought that, if he could stimulate the power of accommodation, he would remove one of the leading causes of this muscular fatigue. He had, therefore, been trying the application of a single drop of the active principle of the Calabar bean; and, so far as he could judge from the limited trial made, there had been some slight improvement.

*Arteritis Obliterans.*—Mr. HAMILTON showed a preparation from one of the arteries at the base of the brain in a male patient, who suffered from constitutional syphilis. The case was recently communicated to the Pathological Society of London by Dr. Davidson, in the discussion on visceral syphilis. Staining in perosmic acid brought out the appearances better than any other reagent. The lesion was identical with that described by Heubner and Friedländer, consisting in an inflammatory thickening of the intima, in which blood-vessels were abundantly developed. The new formation never underwent atheromatous degeneration. In this instance, the material which produced the thickening was arranged in several successive layers. The inner layers did not seem to be outgrowths from the epithelioid lining, but were evidently due to inflammatory hyperplasia of the intima itself. They were presumably more recent, and hence much less organised deposits than the outer, which were fibrous in their nature. The inner elastic lamina and the muscular layer were almost quite unaltered; but in some parts of the adventitia there was a very abundant cellular infiltration. The vessels to the naked eye were thickened, their lamina very small, and the coats had a grey gelatinous consistence. In no place were yellow atheromatous patches found. At certain intervals in their course, there were little nodular swellings, probably accounted for by the infiltration here and there of the adventitia.

*Channel Polypus.*—Mr. HAMILTON showed a preparation procured through the kindness of Dr. Underhill. It was removed from the interior of the uterus. When first detached, it presented an extremely soft velvety surface, from which numbers of channels filled with mucus, and of the calibre of a crow-quill, ran into the substance of the tumour. It measured about two inches in length. Sections showed that the basis of the tumour consisted of a fibro-cellular material, in which were numerous blood-vessels. The channels were, in all probability, enormously dilated follicles of the uterine mucous membrane, as they, in every instance, were lined with a perfect layer of columnar and ciliated epithelium, and could be seen of normal size and in all stages of dilatation. The tumour was evidently similar to that described by Dr. Oldham in *Guy's Hospital Reports*.

*Myeloid Sarcoma of Femur.*—Mr. HAMILTON showed a tumour en-

tirely composed of enormous giant-cells, containing from thirty to one hundred round or oval-shaped nuclei. These were embedded in a matrix composed of granular material, blood-vessels, and small round sarcomatous cells.

*Small Round-celled Sarcoma.*—Mr. HAMILTON showed a specimen removed from the tongue of a male patient. It was about the size of a small walnut and of fleshy consistence. It was made up of comparatively small round cells, highly nucleated, and infiltrating the surrounding muscular tissue.

*Miliary Aneurisms of the Brain.*—These, also exhibited by Mr. HAMILTON, were two in number, and were removed from the brain of a girl aged 18, who died from cerebellar hæmorrhage. They lay quite superficially over one of the corpora striata. They were fusiform in shape and were distended with blood. The vessels generally throughout the brain, even to the minutest capillaries, were in an advanced state of fatty degeneration.

*Miners' Nystagmus.*—Dr. BYROM BRAMWELL showed a case of miners' nystagmus. The patient, aged 49, was admitted to the Newcastle Infirmary under Dr. Bramwell's care, on January 31st of the present year, complaining of dimness of vision and oscillation of the eyeballs. The trouble was of six months' duration. It commenced gradually without any apparent cause. Eighteen months before the date of his admission, he commenced to use the Davy lamp; before that, he worked with a candle. He thought the glare of the lamp hurt his eyes. The oscillation was very marked. It was increased by any sudden movement, when he became excited, and was always worse in the dark. His general health was and always had been good. The fundus, as seen by the ophthalmoscope, was healthy. This was the fifth case of this disease which Dr. Bramwell had met with.

*Malformed Heart.*—Dr. BYROM BRAMWELL showed a malformed heart. There were only two segments to the aortic valve, the third being represented by a depression situated below and between the two large ones. There was only one coronary artery. A polypoid vegetation, three-eighths of an inch in length, was attached to the free margin of one of the large segments. The heart closely resembled Fig. 3 in Dr. Peacock's 8th Plate, *Malformations of the Heart*. The patient, a man aged 46, was admitted to the Newcastle Infirmary under Dr. Bramwell's care, on February 26th, 1877, suffering from Bright's disease. The heart was somewhat hypertrophied (its weight after death being one pound two ounces). There was a loud double aortic murmur, and a well marked Corrigan's pulse. The patient died from uræmia on March 15th.

*Atrophy of the Heart.*—Dr. BYROM BRAMWELL showed an atrophied heart. The patient, a female aged 45, married, the mother of several children, died after a lingering illness, under Dr. Bramwell's care, from cancer of the pylorus. The heart weighed only 2 oz. 12 drs. 11 grs. (avoirdupois). When in health, the patient was well nourished, though never fat. Her height was five feet four inches.

*Tumour on the Exterior of the Heart.*—Dr. BYROM BRAMWELL showed a tumour of the size of a hen's egg, situated on the exterior of the right ventricle. The patient, a female aged 32, died suddenly a few days after delivery. The chest was only examined; nothing abnormal was found, except the cardiac tumour. The heart itself was healthy. The patient had suffered for some years from dyspnoea and palpitation. On microscopical examination, the tumour was found to consist of cells, blood-vessels, and fibrous tissue; the cells, which were round and angular in shape, generally contained a well marked nucleus. The cells were about twice the size of a white blood-corpuscle.

*Ankylosis after Fracture.*—Mr. ANNANDALE showed a pathological specimen from a case of injury to the elbow, of one year's standing, where he had excised the joint for ankylosis. The operation was difficult. It was found that the humerus had been fractured above the condyles, and the upper fragment driven down and ankylosed to the front of the radius and ulna by bony union. It was interesting that such should take place between smooth surfaces of bone.

*Operative Treatment of Internal Hemorrhoids.*—Mr. ANNANDALE read a paper on the operative treatment of internal piles. After indicating the class of cases in which operation was advisable, he considered the various methods advocated for their removal. The use of nitric acid, of a heated probe, or of caustic, he believed to be plans that should not be followed. The two methods generally adopted were by ligature or Smith's clamp and cautery. In using the ligature, he believed it to be a good plan to snip the mucous and submucous coverings at the base of the pile before applying it. While the ligature undoubtedly gave good results, it yet had the disadvantages of: 1. Causing irritation for two or three weeks; 2. Causing confinement to bed; 3. Leaving sores tedious in healing; 4. Being followed by suppuration, sinuses, etc.; or by 5. Pyæmia. When the clamp and cautery were



used, the patient left his bed on the third or fourth day instead of the eighth, as in the ligature, and the pain at the time of the operation was much less. Then, in addition, the pile was at once removed, and the resulting sores healed more quickly. There was no risk of hæmorrhage, if the cautery were used at a black heat; and he had only had one case of pyæmia. Three of his patients had been previously operated on by the ligature, and they all declared that the pain, when the clamp and cautery were used, was much less than they had experienced from the ligature.—Dr. JOHN DUNCAN had hitherto been content with the ligature, but he believed it would be useful to experiment with the plan detailed. He believed that the cautery caused less pain than the ligature; but, by many good surgeons, cautery wounds, like burns, were found more liable to be followed by secondary hæmorrhage when the slough separated. He did not believe that it would be ultimately shown that there would be less risk of pyæmia, in the case of vascular tissues, when the clamp and cautery were used, than when the ligature was employed. Both occluded the vessels for a time, and in both there was a risk of pyæmia coming on later.—Dr. CADELL could endorse Mr. Annandale's conclusions from his personal experience, and from his having seen Mr. Smith operate. The clamp and cautery were quite as efficient as the ligature, cured more rapidly, and was less difficult of application. Pain was only felt when the heat was transmitted through the clamp to the surrounding tissues. Sometimes it was difficult to apply the clamp when the pile was sessile.—Mr. CHIENE was satisfied that, with the clamp and cautery, there was less pain at the operation and when the bowels were moved. He had not yet had experience on the point of pyæmia, and he could not bear out Mr. Annandale's remarks as to the speedy healing.—The PRESIDENT thought it probable that, in regard to the time of healing, the clamp and cautery gained a certain number of days, viz., the seven or eight days the slough caused by the ligature took to separate. He did not think sufficient stress had been laid by Mr. Annandale on the fact that operation was often employed when constitutional treatment might have been effectual. In some cases, he had found mild laxatives of great use. From what he had seen, he was inclined to favour the clamp and cautery as being more rapid and less liable to be followed by pyæmia.—Dr. BRUCE had tried nitric acid in one case of piles with a most unsatisfactory result. He had seen cases where the ligature was employed followed by a great deal of pain and strangury. Other things being equal, he would recommend his patients to have their piles removed by the clamp and cautery rather than by the ligature.—Dr. CARMICHAEL had often been astonished at the rapidity with which large piles in pregnant women disappeared after delivery.—Mr. BELL said that, as to the time after the operation of ligature during which the patient was confined, his experience did not bear out what Mr. Annandale had said. If the patient were well prepared, the time was short. He himself had never had a bad case; but he had seen two, one in Mr. Syme's practice. Success in using the clamp and cautery depended more on the dexterity of the operator than was the case with the ligature. He, therefore, thought that, as a general rule, the ligature would suit most people better than the clamp and cautery.—Mr. ANNANDALE replied.

*Infecting Chancre.*—Dr. CADELL read a paper on the varieties of infecting chancre. After defining the term infecting chancre, and criticising Mr. Hutchinson's statement that "dualism was dead", Dr. Cadell went on to give the varieties of infecting chancre. These were: 1. The true Hunterian chancre, with its hard edges and cup-shaped cavity; 2. A nodule, with an erosion or only desquamating; 3. Ricord's parchment induration; 4. Multiple herpeticiform eruptions. In all these there were induration, long incubation, scanty secretion, and general adenitis, followed by constitutional syphilis.—Dr. JOHN DUNCAN believed that the typical form of syphilis was a circular neoplasm, modified by the tissues in which it might come about. Thus, in the skin the manifestation was a circular papule. Here, again, it was modified by locality, by intermingling with external irritants, by the constitutional condition of the recipient of the poison, and so on. Applying these general observations, it might be said that syphilis was a single poison, and its first manifestation had a typical form modified by locality, viz., a circular papule modified into the shape of the Hunterian chancre in some cases, the desquamating nodule in others, or the chancroid erosion of Ricord when in mucous membrane. It was also modified by admixture with other poisons, viz., in the unhealthy constitution of those in whom it occurred. Indeed, it might be so modified that the type was not recognisable, as in phagedæna, although followed by constitutional disease. Unfortunately, there was one modification causing a difference of opinion, arising from a difference in word, in fact, and in the interpretation of fact. The dispute as to fact was from the occurrence of the soft chancre, i.e., a sore of a purulent character, immediate development, and power of autoinoculation.

The question was: Does syphilis follow a soft sore more frequently than it does a gonorrhœa? He thought it did. He did not forget the explanation given by Dr. Cadell, that the two poisons were mingled. He was not prepared to say that this was always the case. The interpretation of facts was still more difficult. Was it to be supposed that the lymph of the soft chancre and hard chancre were more frequently mingled than that of the hard chancre and gonorrhœa, or that the former two were in some way connected? Mr. Hutchinson's theory was that the syphilitic poison, being mingled with inflammatory products, gave a *tertium quid*, which might give the virus of the soft chancre.—Remarks were also made by Mr. CHIENE, Mr. ANNANDALE, the PRESIDENT, Dr. A. G. MILLER, and Dr. CADELL.

## LIVERPOOL MEDICAL INSTITUTION.

FEBRUARY 15TH, 1877.

JAMES TURNBULL, M.D., President, in the Chair.

### *Tricuspid and Mitral Obstruction associated with Hepatic Pulsation.*

—Dr. GLYNN showed a heart, the seat of tricuspid and mitral obstruction. The tricuspid orifice only admitted the end of the thumb; the mitral, the tip of the little finger. The aorta and pulmonary artery, with their valves, were healthy; the left ventricle normal in size; the auricle dilated and hypertrophied; the right ventricle much hypertrophied; the auricle enormously hypertrophied and dilated. The hepatic veins were much distended; the liver was greatly enlarged. There were embolic infarctions of the liver, lungs, and brain. The patient was a collier aged 30, who had never had rheumatic fever. His earlier symptoms had been breathlessness on exertion, hæmatemesis, epistaxis; the later, anasarca, cough, orthopnea. On admission, he was very cyanotic and generally anasarcaous. Dyspnoea was constant; the veins of the neck distended, pulsating slightly; the heart's apex was not much displaced. The liver pulsated very forcibly. Systolic thrill was limited to the heart's apex; presystolic murmur was usually present at the apex, sometimes absent. A murmur was occasionally heard at the end of the sternum, not continuous with any sound. The pulse was small, very irregular. Tracing showed a secondary wave, probably due to a second ventricular contraction. Death occurred suddenly from cerebral embolism.

*Cases of Punctured Wound of Chest.*—Dr. WOLLASTON exhibited two specimens. The first was taken from the body of a Greek sailor, who had been stabbed in the street, and was brought to the Royal Southern Hospital, where he died fourteen hours afterwards. The wound had been inflicted with a narrow-bladed dagger, which had passed downwards and inwards between the second and third ribs of the right side, a little external to the cartilage, through the middle lobe of the right lung and into the right auricle. A *post mortem* examination showed the pericardium filled with clotted blood; the right lung collapsed; and the right pleural cavity containing twelve ounces of fluid blood. The external wound was half-an-inch in length.—The other specimen was from a child aged 2, who died in the Southern Hospital after being stabbed in the right side with a table-knife. The knife had passed between the eighth and ninth ribs, missed the lung, perforated the diaphragm, and penetrated the liver to the depth of about half-an-inch. No internal hæmorrhage had occurred; but the child, who was suffering from scarlatinal dropsy at the time of the injury, died on the third day from pleuropneumonia.

*Vesical Calculi.*—Dr. ALEXANDER showed two calculi, which he had removed from patients in the Liverpool Workhouse Infirmary by lateral lithotomy. Both were composed of oxalate of lime, and each weighed a little over an ounce; but they were different in appearance; one being homogeneous in structure, and covered by a comparatively smooth layer of crystals; the other presenting the more usual rough spinous surface, with "knotted-oak" centre. The symptoms had been very slight, and, as Dr. Alexander pointed out, exemplified the statement by Bryant, that "these mulberry calculi give rise to less bladder-irritation than the smoother forms; possibly they roll about less".

*Successful Results of Excision of Hip-Joint.*—Dr. RAWDON brought before the meeting two children upon whom he had performed excision of the hip-joint, in one case four years, in the other six years ago. They ran about the room with the greatest ease, without any artificial support. In one case especially, the result was extremely satisfactory, there being only half-an-inch of shortening; in the other, there was nearly two inches difference between the two sides. Dr. Rawdon said that the operation was in both cases only performed as a *dernier ressort*, and that at least one of the cases showed that growth of the bone had not been hindered by the procedure.

*Successful Tracheotomy for Diphtheria.*—Dr. CRABB (Bebington) gave an account of a case which had recently occurred in his practice.



The patient, a boy aged 4½, had been suffering for ten days from a "sore-throat"; and, for a day or two before the operation, the tonsils, fauces, and posterior part of the pharynx had become covered with false membrane. Under treatment, matters appeared to be going on satisfactorily, until suddenly great dyspnoea supervened. Dr. Crabb was hurriedly sent for, and, on his arrival, found the child moribund. He at once opened the trachea, and, after the use of artificial respiration by Silvester's method for a quarter of an hour, natural breathing was re-established. After the operation, the child was placed in a steam-chamber. Some trouble was caused for a few days by glandular swelling in the neck, and by profuse viscid secretion, with shreds of membrane constantly blocking the tube; but the case ultimately made a good recovery; the tube was removed on the eleventh day. The urine was found to contain albumen during the greater part of the illness; at the time of the operation, the quantity amounted to one-fourth in bulk.

*Cases of Ruptured Urethra.*—Dr. CAMPELL related the particulars of three cases occurring recently, under his care at the Northern Hospital; and drew particular attention to the advantage of an early incision into the perineum in such cases. In the first two cases, a catheter was passed into the bladder and tied in; and, there being no external bruising and very little fulness in the perineum, no incision was at first made. But in both cases the temperature ran high, and constitutional symptoms appeared; and perineal incision was performed, on the third day in one instance, on the fifth day in the other. There was a very slight amount of perineal swelling at the time of operation, and only a very small quantity of very fetid sanguineous fluid and urine was let out; but in each case the grave symptoms were almost immediately relieved, and the patients did well; although one of them made a tedious recovery in consequence of the occurrence of epididymitis and abscess both of the cord and of the testicle. In the third case, the perineum was incised immediately after admission. The temperature was a little elevated next day, but soon fell, and the patient recovered rapidly, without any severe symptoms.

*Cases of Spina Bifida treated with Iodo-Glycerine Injection.*—Dr. CORMACK read the notes of two cases of this affection treated by him at the North Dispensary. The first case occurred in an infant brought to him twelve hours after birth. The child had been a breech-presentation, and the tumour, being mistaken for the bag of membranes, had been ruptured by the midwife in attendance. Leakage was going on when seen by Dr. Cormack, who sealed the opening with a lint-pad and tincture of benzoin. Four days later, the opening closed and the swelling having increased, the tumour was tapped, but only a portion of its contents (two drachms) was withdrawn, and a drachm of iodo-glycerine solution injected (linimentum iodi 5j; glycerini 3ij). The opening was sealed, and the whole of the tumour painted over with collodion; after which a pad and bandage were applied. For eight hours afterwards, the child appeared drowsy, vomited a little, and refused the breast. Next day, it appeared well; the tumour was somewhat collapsed towards its centre. On the third day, the swelling was more diminished; the child seemed well, but had occasional twitches of the muscles of the spine and upper extremities. After this, steady recovery ensued; dressings of lint and tincture of benzoin were used for ten days, and afterwards benzoated zinc ointment. A fortnight after the operation, the swelling had disappeared, and a mere fissure which leaked slightly was left; and, three weeks later, this closed, and the child was dismissed cured. The second patient was brought to Dr. Cormack forty-eight hours after birth; but here there was complete loss of power in the lower extremities. The tumour was situated in the lumbo-sacral region, and the integument at the centre was so thin as to be transparent. It was tapped at its base, half-a-drachm of pale straw-coloured serum was drawn off, and half-a-drachm of iodo-glycerine solution injected (iodi gr. x; potassii iodidi gr. xxx; glycerini 3j). The case was dressed as in the previous instance; but, before the dressing was completed, the sphincters were relaxed, the temperature fell, the surface of the body became livid, and the child seemed moribund for fifteen minutes, after which it rallied. Next day, the child appeared well; but there had been a few clonic spasms of the upper extremities. The tumour felt consolidated. For ten days afterwards, the swelling diminished; and, at the end of this period, consolidation appeared perfect, except in the centre of the swelling, where fluctuation could be felt. Into this part, therefore, some more of the injection was thrown, when, immediately, convulsions, followed by intense collapse, ensued, and death occurred in half an hour. A post mortem examination of the swelling (nothing further was allowed) showed that it had been converted into a coarse fleshy mass, with a central sac about the size of a hazel-nut, evidently undergoing recent contraction. This sac had a smooth glistening lining, and communicated with the spinal canal. The sac and the substance of the tumour were filled with venous

blood, which kept welling up during the examination. The laminae and spinous processes of the lumbar and sacral vertebrae were absent, as also was the spinal cord below the twelfth dorsal, where it seemed to burst forth into a leash of nerves which lost themselves in the substance of the tumour. Dr. Cormack attributed the fatal result to two causes, shock and venous hæmorrhage; one of the meningo-rachidian veins, in all probability, having been wounded.—In the course of the discussion which took place, Dr. BARR said he had seen Dr. Morton operate on several of his earlier successful cases, and doubted whether the treatment was desirable where nervous structures were intimately involved in the tumour.—In reply to Dr. Cameron, Dr. CORMACK said that, in this fatal case, a certain amount of power seemed to be appearing in the lower extremities after treatment.

## REPORTS AND ANALYSES

AND

### DESCRIPTIONS OF NEW INVENTIONS

IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

#### A TWO-WHEELED BROUGHAM.

A TWO-WHEELED brougham cab, specially designed to meet the requirements of medical practitioners, has been registered by Messrs. Brainsby and Son, coachbuilders, of Peterborough. There are many minor points in which this cab has advantages over the ordinary brougham-fronted hansom, but the great convenience of ingress and egress, the comfortable motion, the even balance, and the general compactness of the vehicle, all depend on the novel mode of hanging, by which the cumbersome side-springs are dispensed with, and space gained where it is most required. The cabs are built with or without a hind seat for the driver; in the latter case the horse being driven from the inside. The weight of the carriage with the back seat is only a little over six hundredweight, the draught is easy, and we have the testimony of Dr. Walker of Peterborough, for whom the first of these cabs was built, that it runs so easily as to allow the passenger to read without difficulty, either by daylight or lamplight. One of these cabs was exhibited in the gallery of the Agricultural Hall, at the recent horse-show, and was much approved and admired.

#### NEW MEASURING INSTRUMENT.

THE Wealemefera, or watch-guard pendant measuring instrument, in general appearance much resembles a small lady's watch, from one side of which projects a small wheel. In using the instrument, the projecting wheel is run along the line to be measured, and the length thus traversed is recorded upon the dial-plate by a travelling hand, which indicates units and fractions of an inch, and is capable of measuring up to twenty-five feet.

This appears to be one of the most convenient instruments for measuring the head, chest, or limbs, etc.; it is of English make, and is sold by Mr. Stanley of Great Turnstile.

## COLUMN FOR THE CURIOUS.

THE following singular death-notice is from the Waco (Texas) Examiner: "Died—At the residence of Major W. W. Downs, on Third street, Monday, August 7, at 10.30 o'clock P.M., Captain D. J. Downs, of voluntary abstinence from strong drink."

AN OLD RECORD OF HYDROPHOBIA. —The following is taken from the County Journal for December 9th, 1732.—Died on Monday, about five o'clock in the afternoon, Mr. Whittaker, at his apartments in the Tower. About seven weeks ago he was bit in the hand by a Mad Dog, and being Timorous of the Consequences that might attend it, he went down twice to be Dipt in the Salt water, and continued very well until last Sunday, when he assured many of his Acquaintances that he should die next day Raving Mad. Accordingly there were ten or twelve persons attending him all day, who tied him down to his Bed with a Cord, and yet he still retained his senses so far as to request all the Persons about him to put on Two Pairs of Gloves each for he should certainly bite them. A short time before he died, he barked ten or twelve times exactly like a dog.



## BRITISH MEDICAL ASSOCIATION: SUBSCRIPTIONS FOR 1877.

SUBSCRIPTIONS to the Association for 1877 became due on January 1st. Members of Branches are requested to pay the same to their respective Secretaries. Members of the Association not belonging to Branches, are requested to forward their remittances to Mr. FRANCIS FOWKE, General Secretary, 36, Great Queen Street, London, W.C.

## BRITISH MEDICAL JOURNAL.

SATURDAY, JUNE 30TH, 1877.

### PUBLIC HEALTH (METROPOLIS) BILL.

THE chief objects of this Bill are the transference to the Local Government Board of the sanitary powers hitherto possessed by Her Majesty's Privy Council and by the Secretary of State; the consolidation of the various Nuisances Removal and Sanitary Acts; the extension to the metropolis of a few clauses of the Public Health Acts, which were not in force there; the giving new powers to the Metropolitan Board of Works to make by-laws for the regulation of cow-sheds, dairies, and the prevention of injury to health by building on dust-shoots and other refuse; and lastly, the addition of new powers to a central authority, viz., the Local Government Board, as regards the erection of hospitals for the treatment of the sick, and the prevention of epidemic diseases.

The steps by which the Local Government Board has obtained its present powers in Poor-law and sanitary matters, until it is now proposed that it shall be the sole central controlling authority for these important subjects, are somewhat instructive; and it seems to us that it is quite time that the manner in which it has hitherto performed its duties should be fully discussed in Parliament before such important additional powers are conferred upon it. We may say for ourselves that it has not earned the confidence of the medical profession, as it has almost habitually appointed barristers to positions for which medical men were best suited. The transference to one authority of the powers for the prevention of disease, possessed at present by Her Majesty's Privy Council and by the Home Secretary, cannot but be beneficial; but we would much prefer that a Minister of Public Health should be appointed, who would be able to give his time to that great subject, freed from the immense amount of other work which now lies within the department of the Local Government Board.

The powers proposed to be conferred on the Local Government Board are very large; as not only are all those hitherto possessed by the Privy Council and Home Secretary transferred, but additional authority for controlling the local sanitary authorities is given, so that the guardians of local self-government are at once on the alert. The Metropolitan Board of Works, although it is proposed by the Bill to extend the already ample list of Acts they have partly or wholly to administer, have directed that a circular letter be sent to the vestries and district boards, warning them "that this Bill involves an attempt towards centralisation in the matter of local government, which, if sanctioned by the legislature, may be of serious consequence", "as it may subject them, under certain circumstances, to be superseded in the discharge of their functions by another authority to be appointed by the Local Government Board". Thus, by Clause 22, the Local Government Board would be empowered to direct a police-officer to take proceedings if a local authority have made default in doing their duty as regards nuisances, and he may recover his expenses from the local authority, if the costs be not paid by the person proceeded against, so that, if he failed, he would be entitled to his costs. There is also a far more important clause than this, viz., the 54th, which

enacts that the Local Government Board may, if they think fit, by order authorise or require two or more authorities to act together for the prevention of epidemic diseases, and may prescribe the mode of such joint action and of defraying the costs thereof. There are also important provisions as regards hospitals in Clauses 56 to 64, which would add to the authority of the Local Government Board, but would also give a new power to the local authority to recover the costs of the treatment and maintenance of non-paupers in a hospital. The Local Government Board may also direct any local authority (Clause 65) to provide a mortuary, and also to make by-laws for its management, the charges to be made for its use, and for the burial of those removed to it. By Clause 85, if complaint be made to the Local Government Board that a vestry or board has not done its duty as a sanitary authority, the Board may, after due inquiry, order the duty to be performed in a limited time, and, if necessary, apply for a writ of mandamus.

In respect to the simply consolidating clauses, we have in nearly all instances compared them with the originals, and find the language, when altered, to be clearer, and the arrangement to be good. There is but little difficulty in finding what is required; but it is to be regretted that the consolidation is imperfect, as the sanitary sections of the Metropolis Local Management Act and Amendment Acts, of the Bakehouse Regulation Act, of Michael Angelo Taylor's Act, and others, are not incorporated. There are also many valuable additions to the means for removing nuisances, such as the power (Clause 13) to obtain a penalty at the time of making the first order from a person neglecting or omitting to abate a nuisance, which cannot be done at present; the extension of the right of taking proceedings for the removal of nuisances by an inhabitant of the district to any owner of property, so that the owner could proceed against his tenant if he created a nuisance on his premises, and may obtain an order from a magistrate for its removal. The right of taking out a summons against a person residing in one district who may cause a nuisance injurious to the inhabitants of another district is extended to offensive trades, so that a local authority would be authorised to proceed in a similar manner as if the offensive trade were carried on in their district. It is also proposed that the local authority shall have power to destroy infected clothing and pay for the same; that any person in a common lodging house affected with an infectious disease may be removed to a hospital by the local authority on the certificate of any duly qualified medical practitioner; that a shop or inn be deemed a public place as regards the exposure of a person suffering from an infectious disorder, so that any one so exposed, or the person in charge, may be fined £5 for the offence; and also any one letting a house in which a person suffering from an infectious disease has been within six weeks will incur a penalty of £20 for making a false answer if questioned by any one negotiating for the hire of the house. There are also facilities given in other clauses for the removal of nuisances, such as the service of notices by post by a prepaid letter even when the person lives within the district, the signature of the surveyor or inspector of nuisances being a sufficient authentication of a notice for the removal of a nuisance; and other matters which our space forbids us to enumerate.

It is also proposed to give to the Metropolitan Board of Works power to prevent the erection of buildings on sites which have been rendered foul or injurious by the deposit of house-refuse or other offensive matter, until the same shall have been rendered harmless or have been removed from the proposed site; also to make by-laws with respect to the water-supply, drainage, and ventilation of cowsheds and dairies; for the cleanliness of milk-shops and of vessels for containing milk for sale; for protecting milk against infection or contamination; and with respect to the situation and structure of dairies and cowsheds erected and intended to be occupied after the passing of the Act.

We cannot conclude without expressing our opinion that the session



is too far advanced for the Bill to pass, especially as the local authorities have not had sufficient time to consider its provisions and express their opinion as to individual clauses as well as the general tendency of the Bill.

### HOME HOSPITALS.

A LARGE and well constituted meeting was held on Wednesday last, at the Mansion House, under the presidency of the Lord Mayor, with the assistance of a large number of influential representative persons of various professions, in pursuance of a plan which has already received the emphatic approval and endorsement of nearly the whole of the leading members of the medical profession in London, and of a very large number of eminent persons amongst bankers, merchants, clergymen, and lawyers in the City of London. The meeting was called to consider the advisability of establishing an Association for the following purposes:

1. To provide hospital treatment, skilled nursing, a convalescent institution, and other accommodation for the benefit of all classes when attacked by illness who can afford to pay, and for the assistance of the medical profession generally.
2. To provide, furnish, maintain, and regulate such buildings with fittings and conveniences for the benefit and comfort of patients and others.
3. To co-operate with the managers of the present hospitals supported by private charity, with the object of preventing the abuse of hospitals by people who can afford to pay for their treatment.
4. To provide for the assistance of the medical profession, and for the benefit of the public, a well-regulated hospital, to which the former can send, with confidence, private patients who can afford to pay adequately for the accommodation which they require, and in which the patients will have the advantage of being treated by their own doctor.

Upwards of two hundred of the best known members of the profession, including the Presidents of the Royal Colleges of Physicians and Surgeons and of the General Medical Council, Sir Thomas Watson, Sir William Gull, Sir James Paget, Mr. Busk, Dr. Quain, Dr. W. Farr, Dr. Priestley, Dr. Ralfe, Mr. Callender, Dr. Bridges, Dr. Greenfield, Mr. Mac Cormac, Mr. Hilton, Mr. Holmes, Mr. Pollock, Dr. Maudsley, Mr. Maunder, Dr. Harry Leach, Dr. Murchison, Dr. Meadows, Mr. Probert, Mr. Oscar Clayton, Dr. Chambers, Dr. Cheadle, Mr. Le Gros Clark, Dr. Norman Kerr, Mr. Arthur Norton, Dr. G. O. Rees, Dr. Rolleston, Dr. Sieveking, Dr. Brodie Sewell, Dr. James Wakley, Mr. John Wood, Dr. Wilks, Mr. Wordsworth, and Dr. Burney Yeo, had expressed their conviction that the above scheme, if under proper regulations, will be of great service to the profession, in treating a numerous class of cases in respect to which great difficulties at present often arise in the course of medical practice, and that it deserves to meet with the general support of the public and the profession. This thesis was supported at the meeting by many highly influential speakers, of whom the most representative, as being at once one of the most cautious and thoughtful of public men, was Mr. John Walter, M. P., who moved the first resolution. A great number of leading lawyers, and many bankers and merchants, have hastened to express their sense of the value of such institutions for a large class of persons, who, in the metropolitan population of nearly 4,000,000 of persons, are placed in circumstances above the class for whom charitable accommodation can properly be made available in hospitals; but whose lodgings or whose straitened homes are incapable of affording to them the comforts and special appliances, the skilled nursing, and regular attention, which are necessary in cases of sickness, both for themselves and for the proper carrying out the orders of their medical attendants.

As the plan was developed by successive speakers, it appeared that those who have thus far taken a most active part in considering the subject had not entertained any large or extravagant ideas either as to building, management, or extension of the scheme beyond its natural

and obvious limits; and it will be seen from the names of those who have been appointed on the Provisional Committee, that all possible care is likely to be taken to free the projected Homes from all abuse or encroachment upon the sanctities of home or the privileges of the profession. It is not proposed to attempt to follow, as one speaker said, counsels of perfection in erecting vast edifices or carrying out particular doctrines of hygiene or of hospital construction. It is desired to meet a practical want felt by the public and by the profession in a simple and practical way. It is probable, therefore, that any Home Hospitals that may be opened in different quarters of London, will be modest and unassuming institutions, adaptations of some existing buildings suitably fitted, each provided for its sole staff with trained nurses and with a resident medical officer. The cottage hospital system will be pursued according to the views expressed at the Mansion House in respect to the staff, that is to say, the only authorised medical attendant provided by the Association will be the resident medical officer, and the patient will in all cases be under the immediate attendance and direction of his own medical practitioner, who will have the direction of his case. If the patients desire the services of any consulting practitioner, it will be for himself or his own medical attendant to name such consultant, as is the practice in private houses; nor will anything be done to affect the interests of the hospital on the one hand or of the private medical practitioner on the other. These at least are the views expressed by Mr. Burdett in the opening explanation which he gave, and these are the views which were endorsed by subsequent speakers and by the meeting at large, and which will, no doubt, mainly influence the Provisional Committee in their further proceedings.

Whatever can be said in the way of pointing out difficulties and obstacles in carrying out the projected scheme ought certainly to be very publicly and clearly stated, and those who come forward to point out such considerations at the outset of the enterprise render a very acceptable service. In this sense, therefore, the observations which were addressed to the meeting from the body of the hall by a well-known physician and accomplished practitioner, Dr. Glover of Islington, were very much to the point and should be gratefully welcomed. All these objections, however, were based upon a misapprehension, that it is an object with those who favour the institution of a certain number of home hospitals to remove all the well-to-do sick from their homes and place them in institutions. There is here, of course, an obvious misapprehension, or at least an oratorical exaggeration. The only service which such institutions can render is to those who have either only chambers or lodgings in London, or whose home accommodation is quite inadequate to the strain of the requirements of injury or disease. According to the almost unanimous verdict of the medical profession in this matter, according to the very strong opinion of a large number of laymen likely to be well informed, there are a vast number of persons in London to whom such institutions will be of great benefit. It is, of course, an open question whether they will be in any sense financially remunerative; but, if they should be well filled, there seems no reason to doubt that they can be made to return a moderate interest on the money expended. If the Association for founding them be organised, as proposed, on the model of the various Industrial Dwellings Associations, it is quite possible—and, indeed, we believe that it is a fact—that many persons would be willing to give large sums towards the founding of such institutions for the benefit of clerks and men who are engaged in public offices, lawyers, curates, small tradesmen, etc., without being very anxious for any return. On the other hand, people now are generally agreed that, if such Associations can be placed on such a basis as to afford a moderate return for the capital invested, the organisation of which we speak affords the best prospects of multiplying the institutions to the necessary extent, and for securing at once their economical management, their general extension, and



their permanent maintenance under satisfactory conditions. Thus far, Mr. Burdett may be congratulated on having secured for his proposition a very large amount of influential support, and on having launched it under the auspices of persons so highly placed, so well informed, and so seriously thoughtful, as to afford fair promise that the institutions of which they approve, and to the inauguration of which they have lent their aid, will have great chances of a largely useful and prosperous career.

THE prizes at St. Thomas's Hospital will be distributed by the Lord Bishop of London on July 16th, at 4 P.M.

UNIVERSITY COLLEGE HOSPITAL has just received a donation of £1,000 from Major Dennis Moriarty, of Plymouth, in aid of its funds.

DR. ORD, Senior Assistant-Physician, has been appointed Physician to St. Thomas's Hospital in the vacancy caused by Dr. Peacock's retirement.

DR. WILLIAM PLAYFAIR has been appointed Consulting Physician to the Evelina Hospital for Sick Children, in the room of Dr. Arthur Farre, who has resigned his appointment.

IT is reported that one hundred and twenty-one soldiers have been suffering from trichinosis at Diedenhofen, in Germany. Most of them, however, have recovered after long and severe illness.

DR. ALLCHIN, Senior Assistant-Physician, has been appointed a physician to the Westminster Hospital, in the place of Dr. Basham, resigned; and Dr. A. Hughes Bennett has been elected Assistant-Physician.

DR. HUMPHRY has been appointed to represent the University of Cambridge at the four hundredth annual commemoration of the foundation of the University of Upsala, which will be celebrated in September next.

A MEETING of the Sanitary Institute will be held at the Royal Institution, Albemarle Street, on Thursday next, when Dr. Richardson will deliver an address on the Future of Sanitary Science. M. Chevalier and Dr. De Pietra Santa will be present on behalf of the Société de Hygiène of France, and will receive the diploma of the Sanitary Institute.

THE Senate of the London University, at their meeting on Wednesday last, decided by a majority of five not to postpone giving medical degrees to women till all the other faculties were open to them. Eleven members voted for delay, sixteen against it, Sir W. Gull and Sir James Paget voting in the majority.

At a largely attended public meeting held on Monday, it was stated that the clinical work of the Women's Medical School will henceforth be carried on in wards of the Royal Free Hospital. The staff of lecturers in the school includes lecturers in the leading metropolitan medical schools.

THE body of Mr. Walter Hugo, a medical student of Charing Cross Hospital, was found last week in Hyde Park, and a *post mortem* examination proved that death was caused by prussic acid. At the inquest there was no evidence to show where the poison was obtained and how administered.

WE learn that great dissatisfaction is felt throughout the Army Medical Department at the entire neglect of the medical element in the recent batch of C.B.s. The authorities, we believe, maintain that the medical department has its share of honours. This, however, appears to be by no means the correct view; for quite recently two K.C.B.s and two C.B.s have died in the medical department, and the vacancies have not been filled up from that, but from other departments.

THE Queen has been graciously pleased to confer a pension of £100 a year on the widow of the late Dr. H. W. Rumsey, F.R.S., at the recommendation of the Earl of Beaconsfield.

ON Wednesday last, H.R.H. the Duke of Cambridge presided at the distribution of prizes to students of the medical department of King's College.

THE distribution of prizes for the sessions of 1876 and 1877 took place at Charing Cross Hospital on Wednesday, June 27th the Right Hon. the Earl of Wharnccliffe in the Chair.

A BOHEMIAN paper, the *Koruna Ceska*, reports from Podiebrad that a child, six weeks old, having been laid on the grass by its mother while she was engaged in field-labour, a lizard crept through its open mouth into its stomach. It is further stated that, after medical treatment, the animal was discharged dead *per anum*. The medical contemporary from which we quote rightly suggests that a professional report of so incredible a case would be desirable.

THE excellent speech of Dr. Cameron on moving the rejection of the Cruelty to Animals Bill of Mr. J. W. Holt in the House of Commons on Wednesday, May 2nd, has been reprinted by Cornelius Buck, of 23, Paternoster Row, in the form suitable for circulation, and may be obtained by those persons who desire to read or furnish their friends with a succinct exposure of the absurdity of the proposed legislation and a brief statement of some of the benefits which have resulted to the art of healing from the practice of experimental research.

THE annual death-rate for London for last week was 17.9 per thousand. The annual rate of mortality, according to the most recent weekly returns, in Calcutta was 26; in Bombay, 61; Paris, 25; Geneva, 31; Brussels, 24; Amsterdam, 27; Rotterdam, 32; the Hague, 24; Copenhagen, 24; Stockholm, 35; Christiania, 33; Berlin, 30; Hamburg, 28; Dresden, 24; Breslau, 37; Munich, 43; Vienna, 29; Budapesth, 40; Rome, 22; Naples, 26; Turin, 27; Venice, 23; Alexandria, 45; New York, 24; Brooklyn, 18; Philadelphia, 17; and Boston, 19.

At Lambeth, Mr. Chance took occasion in the course of the day to mention that he had paid a visit to the St. James's Home for Inebriates at Kennington, and he wished publicly to state the satisfaction he felt on inspecting the place. He found many of the offenders who had been brought before him there as inmates and conducting themselves in a creditable manner. There was one woman in the Home who had been more than one hundred times charged at Lambeth Police-court with drunkenness, and other persons were housed and fed who had been a number of times charged at that court. He considered that the institution was performing a great public good, and deserved the support of the benevolent.

WILLIAM HOPKINS, a milk-seller, was a few days ago fined twenty shillings and costs in the Marylebone Police-court for refusing to sell some milk to Mr. Clifford, one of the sanitary inspectors of Paddington. The proceedings were taken under the seventeenth section of the Food and Drugs Act, and it says that "if any officer, inspector, or constable as described by the Act shall apply to purchase any article of food or any drug exposed to sale, or to sale by retail on any premises or in any shop or stores, who shall tender the price for the quantity which he shall require for the purpose of analysis, not being more than shall be reasonably requisite, and the person exposing the same for sale shall refuse to sell the same to such officer, shall be liable to a penalty not exceeding £10".

#### CHILDREN'S HOSPITAL, BIRMINGHAM.

THE new infectious department of the Children's Hospital, Birmingham, was opened on the 18th instant. The new buildings consist of a reception-ward twenty feet square; a croup-ward twenty feet square;



and two fever-wards, the dimensions of each being forty feet by twenty feet. The reception-ward and the croup-ward will each contain four beds, and the two fever-wards will be furnished with ten beds each. The buildings also comprise a laundry and washhouse; a house for the accommodation of nurses, having a common dining-room and four dormitories; and there is likewise a mortuary.

#### ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following official notice has been issued.

"*Royal College of Surgeons of England*, Lincoln's Inn Fields, London, W.C., June 22nd, 1877.—Notice is hereby given that the following are the names of the eligible Fellows who are candidates for seats in the Council of this College at the ensuing election on Thursday, the 5th of July next, at 2 o'clock P.M.

- |   |                        |
|---|------------------------|
| "1. John Gay, Finsbury Place South, E.C.  | } Retiring from the    |
| "2. John Eric Erichsen, Cavendish Place, W.   | } Council in rotation. |
| "3. William Adams, Henrietta Street, W., nominated by John Wiblin, Southampton; Edward Lund, Manchester; James F. West, Birmingham; T. R. Jessop, Leeds; Thomas Bryant, Upper Brook Street, W.; Jonathan Hutchinson, Cavendish Square, W.                                       |                        |
| "4. William Scovell Savory, Brook Street, W., nominated by Reginald Harrison, Liverpool; Edward Lund, Manchester; J. W. Hulke, Old Burlington Street, W.; Arthur E. Durham, Brook Street, W.; Henry Power, Great Cumberland Place, W.; Christopher Heath, Cavendish Square, W.  |                        |
| "5. Timothy Holmes, Great Cumberland Place, W., nominated by Cesar H. Hawkins, Grosvenor Street, W.; George W. Callender, Queen Anne Street, W.; John Wood, Wimpole Street, W.; Thomas Bond, Parliament Street, W.; Charles H. Allfrey, St. Mary Cray; Thomas Simpson, Lincoln. |                        |
- "EDWARD TRIMMER, Secretary."

#### THE SEAMEN'S HOSPITAL, GREENWICH.

THE second report of the Seamen's Hospital, Greenwich, has been drawn up by Mr. W. Johnson Smith, the senior resident medical officer. During the past year two thousand one hundred and eighty-six patients were admitted. The large number of cases of dysentery and scurvy treated in this hospital give value to its experience of these diseases. Sixty-two fresh cases of dysentery were admitted, with a mortality of eight; in only one fatal case was there hepatic suppuration: observation appears to show that dysentery is becoming more prevalent and more severe amongst merchant seamen. Thirty cases of scurvy were treated last year, as compared with one hundred and one cases in 1865; one case proved fatal a few hours after admission; in the remaining cases recovery rapidly followed upon the use of an appropriate diet. A considerable increase has occurred in the number of seamen under treatment for enteric fever: about half the cases had served recently in small English coasters: thirty cases were received, with a mortality of four. The experience of this hospital in erysipelas and pyæmia is worthy of remark. In 1856, the hospital was transferred from the old *Dreadnought*, which was supposed to be "saturated with a septic poison", to a new ship, with the result of a speedy and marked reduction in the number of cases of erysipelas; with regard to pyæmia the change was not so marked. Removal to the Greenwich Hospital has proved more satisfactory, erysipelas being absent from the death-returns of last year, and only three cases of pyæmia were contracted in the hospital. The small mortality from pyæmia is attributed mainly to the use of the antiseptic method in the general practice of the surgical wards. Statistical tables giving experience on these points are appended to the report, and are well worthy of study.

#### THE VICTORIA DWELLINGS FOR ARTISANS.

ON Saturday, June 23rd, the first buildings of the Metropolitan Artisans' and Labourers' Dwellings Association, now named, with Her Majesty's approval, the Victoria Dwellings Association, were declared open by the Earl of Beaconsfield. The object of the Association is to provide healthy and comfortable homes for artisans, more especially for the class termed labourers and persons earning small wages. The buildings inaugurated on Saturday are erected on land belonging to the Association immediately adjoining Battersea Park. They are built in

flats, as nearly fireproof as may be. Each tenement in the artisans' dwellings and each block of four rooms for those of the labourers are entirely separated from others by an open-air space, so that in case of fever and smallpox there would be little danger of the epidemic spreading. The drains are so arranged as to prevent the possibility of escape of foul air from the sewers into the dwellings, and the sinks in the tenements are all trapped. Each tenement has a constant supply of fresh water, the use of a wash-house, a coal-bunker, and dust-shoot, and generally great care has been taken to insure to the tenants all the advantages of the best known sanitary appliances. The artisans' dwellings are self-contained, that is to say, within the outer door, which opens on to a general staircase, are all the conveniences required by a family except the wash-houses, which are detached from the building. These tenements contain, in most cases, three good rooms, viz., kitchen, bedroom, and sitting-room, which can be used also as a bedroom. The labourers' blocks are so divided that the rooms can be let singly, or in twos, threes, and fours. By this arrangement tenants will be enabled to occupy additional rooms as their families increase or as their circumstances improve. The rentals for these rooms will be less than those which are now too often paid for habitations totally unfit for occupation. The Earl of Beaconsfield, in opening the buildings, pointed out that the health of the people ought to be the first duty of statesmen, and he recommended all those who were proud of the empire to which they belonged, and which their fathers created, to assist the movement for improving the dwellings of the people. Lord Beaconsfield mentioned that the Queen, who takes a deep interest in the movement, commanded him to express a wish that her name should be associated with these improved dwellings, and that in future they should be called the "Victoria Dwellings for Artisans".

THE HARVEIAN ORATION AT THE ROYAL COLLEGE OF PHYSICIANS. ON Wednesday last, June 27th, the Harveian Oration at the Royal College of Physicians was delivered by Dr. Sieveking. The Chair was occupied by the President, Dr. Risdon Bennett, and there was a good attendance, including, among others, Lord Denman, Sir T. Watson, Sir G. Burrows, Sir W. Jenner, Sir J. Fayer, etc. The orator vindicated the claims of Harvey as the true discoverer of the circulation of the blood, the merit of which had been last year publicly ascribed by the Italians to their countryman Andrea Cesalpino. He referred also to the recent discovery in the British Museum of Harvey's notes of lectures; and to the donation of books, etc., to the College by Dr. Arthur Farre. At the close of the address, the President announced that the Baly gold medal had been awarded to Dr. Ludwig of Leipsic.

#### THE CUMBERLAND LAKES.

ATTENTION has recently been called to the proposed conversion of Thirlmere Lake into a reservoir by the Manchester Corporation. There is a very widespread feeling that, in view of the great value to the nation at large of the beauties of Cumberland and Westmorland, it would be something worse than folly to impair in any way, except in a case of absolute need, the loveliness of the lake district; and the statement is being assiduously circulated by the promoters of the Manchester scheme and their friends, that the scenery will not be injured by the proposed works. The final plans of the engineers have not yet been formally submitted to the Corporation; but the semi-official communications which have appeared from time to time in the local prints leave no room for doubt that, however sincerely the plea may be urged by the Water Committee, no person capable of appreciating what is distinctively lovely in the little valley would admit it. Those who have visited Thirlmere will remember the quaint little straggling village of Nythbury, with its quiet farms lying between the two steep hillsides; the pretty windings of the Keswick coach-road along the eastern bank; and the little rocky headland of the western shore, crowned with dwarf oak and fir and mountain oak, and rich in hyacinth or foxglove and fern; while those who have explored the whole length of the valley, and stood where Raven Crag, frowning above, throws a



bold spur half-way across the lake, and the little St. John's beck receives its waters, know that there is hardly a lovelier scene in Great Britain. If the plans of the Corporation be carried out, all this beauty is doomed. The foot of the lake is to be the site of a large embankment, destined so to raise the level of the water as to submerge the indentations of the western shore, drown out the inhabitants of the little village, flood the southern end of the valley, and bury the most charming part of the road. It will, moreover, be manifestly impossible to maintain the maximum level in the comparatively dry summer months, and the general effect when the water is lowered and a belt of decaying vegetation exposed to the sun, or stony embankment laid bare, may be easily imagined. The example of Loch Katrine is quoted to show that a lake does not suffer by being utilised as a reservoir. But the two cases present no analogous circumstances; as, owing to the enormous supply available in the Scotch lochs, little, if any, change in the natural features of the scenery was necessary. Under these circumstances, and bearing in mind that there are still in the north large gathered grounds unappropriated, we are not surprised to hear that a strong opposition will be made to the scheme. The importance of preserving all the beauty we can in our crowded little country is being increasingly felt by thoughtful persons; and the citizens of Manchester cannot wisely attempt to ignore such a tendency, enforced, as it is, not only by sentiment, but by common sense.

#### HOSPITAL SUNDAY.

"J. R. W." MAKES a suggestion as follows in the *Times*:—"As a preacher in a London church where no mean sum is annually collected, I make bold to suggest that it would be a politic step for the hospital authorities to throw open—with whatever restrictions might be necessary—their noble institutions for public inspection on a few occasions immediately prior to the recurrence of each Hospital Sunday. The wards of a hospital would be a strange surprise to many of the affluent; while the sight of so much suffering relieved, so many sick made whole, would be more eloquent than the preacher's exhortation."

#### COFFEE-TAVERNS.

WE are sorry to see, from the brief published reports of the conference held last week at Grosvenor House on public-houses without drink, that many persons present appear to have deduced from the speeches the conclusion that "in most instances where success has been obtained, it seems to have been founded upon a small capital and very much under the management of working men". The facts are precisely the opposite; it might almost be said that in no instance has any success been obtained under such circumstances; certainly, if any such instance exist, it is exceptional. The only circumstances under which success has been obtained has been where, as in the case of the Liverpool Company and the London Coffee-Tavern Company, coffee-taverns have been organised as a strictly commercial undertaking, carried on with scrupulous regard to the probability of a fair return for the investment, without any intervention whatever of working-men as managers, which is almost invariably fatal to success in such undertakings.

#### CORONER'S COURTS.

THE Council of the Social Science Association has presented the following resolutions to the Secretary of State for the Home Department.

"1. That, in the opinion of this Council, parliamentary inquiry into the mode of appointment, the office, duties, and jurisdiction of coroners is imperatively demanded.

"2. The Council draw attention to the fact that the office of coroner is one of high antiquity and great utility; that it has been the subject of much and intricate legislation, and has come in process of time to be attended with inconveniences in respect to the constituency by which the coroner is elected, the manner of election, the abolition of a standard of qualification, the mode of remuneration, the procedure and place of holding the courts, as well as many points relating to functions, procedure, and responsibility. The Council are of opinion that,

in consequence of various social changes since the time of the original creation of the coroner's office, the expediency of retaining the coroner's jury either at all or at least in its present form, the existing relations of the coroner to the justices of the peace, and the provisions for the use of expert witnesses, have become matters demanding fresh and special arrangements.

"3. That the question of inquiry into the cause of fires is one of urgency, and should be considered in regard to the appointments, duties, and functions of coroners.

#### SMALL POX AT ORSETT.

THE outbreak of small-pox at Orsett, Essex, to which we referred last week, still continues, three or four fresh cases having occurred on Tuesday, making about forty in all, but several have been of a mild type. One of the nurses at the Union Hospital has been attacked; and most of the patients, it is ascertained, have not been vaccinated.

#### AID FOR THE SICK AND WOUNDED.

THE steam-ship *Belle* of Dunkirk, Captain Fowler, sailed on Saturday from the Royal Arsenal, Woolwich, for the Black Sea, with an ambulance hospital train for the relief of the sick and wounded in the war. Three ambulance-wagons, of the government pattern, fitted with stretchers and stores complete, and bearing the Geneva cross of neutrality, were amongst the goods embarked at Woolwich, having been issued with a great number of blankets, sheets, and camp equipage from the Ordnance Store Department, and paid for by the society. The medical officers who are to accompany the expedition will join the ship in the Channel. Several long trains of railway ambulance carriages have arrived in Bucharest from the Red Cross Societies of Germany. A large Russian hospital has been established at Pitesti. Ambulance trains will be placed on the line of railway between Giurgevo and Bucharest.

#### VIVISECTION.

THE first annual meeting of the Association for the Total Suppression of Vivisection, was held last week at Willis's Rooms, Sir H. D. Wolff, M.P., in the chair, who said that the Bill of 1876 was both objectionable in principle and defective in operation. Among the speakers were Mr. Hardcastle, M.P., Mr. Holt, M.P., and the Rev. Canon Baynes, who moved: "This meeting records its gratitude to Mr. Holt for the important services he has rendered, and pledges itself to use all available measures to support the Bill Mr. Holt has promised to introduce with the same object next year." With the passing of this resolution, the proceedings terminated.

#### THE PUBLIC HEALTH (METROPOLIS) BILL.

A DEPUTATION from the Metropolitan Asylums Board, consisting of Earl Stanhope, Mr. Galsworthy, Dr. Cortis, Dr. Proudfoot, Mr. Barringer, Sir E. H. Currie, Dr. Brewer, Dr. Sedgwick, and Mr. W. F. Jebb (the Clerk), had an interview on Saturday with Mr. Sclater-Booth (with whom was Mr. Lambert), at the office of the Local Government Board, to ascertain how far their functions as a sanitary body were affected by the Public Health (Metropolis) Bill now before Parliament.—Mr. Galsworthy said the Board they represented could not understand the sixty-fourth clause of the Bill, which stated that the managers of an asylum district "may" contract with any local authority for the reception in any hospital belonging to, or under the control of, such Board any person suffering from disorder or infectious disease in that district. Was the clause compulsory, and how were they to enforce it? If they waited for the vestries to go to them, in some cases that would not be till the outbreak of an epidemic. The vestries ought to be compelled to contract with the Asylums Board.—Mr. Sclater-Booth said it was not proposed to make the Asylums Board the sanitary authority for the whole of the metropolis. Such a proposal in the Bill would prevent its passing. Still, he thought that in cases where they were asked to undertake the duty, the Asylums Board would act in a patriotic manner. He thought with the fifth hospital which the Asylums Board would shortly have at its disposal, that



they had little ground of alarm at not being prepared for the future. He believed that all vestries would be ready to contract with the Board for the accommodation of patients. They would not be so short-sighted as to neglect such a precaution.—At the close of a short discussion on points of detail, Mr. Slater-Booth said he doubted whether public opinion would approve any legislation which looked forward to hospital treatment for all classes of society. At any rate, it was too premature to think of a Bill with such a tendency at present.—The Association then withdrew.

#### THE HUNTERIAN MUSEUM.

IN his annual report to the Museum Committee, Professor Flower states that during the collegiate year 7,936 persons signed their names in the visitors' book, being 1,443 in excess of the previous year; and that the Museum had been opened on several occasions on Saturday afternoons to members of various scientific associations and working men's institutes, when short explanatory lectures were given upon some portion of the collections. The large additions about to be made to the Museum are now on view in the theatre of the College, and will remain so until next Thursday.

#### CASES OF POISONING BY ACCIDENT.

ON June 23rd, Mr. Bedford held an inquest on Mr. John Joseph Sibley aged 62, an auctioneer and valuer, residing at Clifford Street, St. James's. The son, Mr. Edmond Sibley of Peckham, deposed that the deceased came to him on the preceding Wednesday in a very depressed state. The widow stated that the deceased came home on Wednesday night at 11 o'clock, complaining of being unusually tired. At 12 the witness heard groans, and found the deceased in great agony on the bed. An emetic was speedily given him. On one corner of the mantelpiece was kept a small phial, containing a liniment, which witness used to relieve pain, labelled "poison," and there was a bottle containing brandy on the other end of the mantelpiece. It was thought that the deceased mistook the poison-phial for this one. Medical testimony showed that the deceased died from poison in the liniment (of belladonna and camphor), and the jury returned a verdict of "death by misadventure".—Mr. W. L. Donaldson held an inquiry on Saturday, at the London Hospital, into the circumstances attending the death of Catherine Watson. The mother received from the hospital two packets of powder, which were labelled with instructions for application, but she was unable to read them. She administered one of the powders, and the child became worse, and died next morning. Mr. Rees, house surgeon, said death was caused by an overdose of mercury acting on a weak body, and he was of opinion that if the powders had been administered according to the instructions given death would not have taken place. The jury returned a verdict of accidental death.—The same coroner held an inquiry respecting the death of John Christian Wintz, aged 64, a cooper in the employ of Hanbury, Buxton, and Co. The deceased, who was ill, took by mistake a dose of soldering fluid, from the effects of which he died. The jury returned a verdict to the effect that the death of Wintz was caused by self-poisoning by misadventure.

#### THE MANCHESTER FLOWER MISSION.

THE *Manchester Guardian* says: The first year's work of the society bearing this title has just been concluded, and the committee have issued an interesting report containing information which will, no doubt, tend to assist them in the future. When the mission was instituted only twenty-two bouquets could be distributed. The workers of the mission have since met every Thursday morning in the Association Rooms, Peter Street, and during the twelve months under review they have distributed 17,418 bouquets in weekly numbers varying from 22 to 798, the number of distributions being dependent upon the extent of the supply. Contributions of flowers have been received not only from Manchester and all parts of Lancashire, but also from Cheshire, Cumberland, Hants, Herts, Kent, Surrey, and Westmorland, and it is

gratifying to note that the contributors include all branches of society, rich and poor alike. The institutions to which the flowers have been sent are the Royal Infirmary, the Salford Infirmary, St. Mary's Hospital, the Hospital for Incurables, the Eye Hospital, the Lock Hospital, the Southern Hospital, the Manchester and Salford work-house infirmaries, and the medical mission-rooms of Dr. Meacham and Dr. Dobbie. Many of the contributions have also found their way to the cottages of the sick in various parts of the city. The committee acknowledge the valuable assistance of many contributors, who have accompanied the bouquets with texts of Scripture written or printed upon small cards. For gifts of flowers and of legibly written texts the committee invite the continuous support of friends, as it is by these aids that a way is agreeably opened for soothing and instructive teaching.

#### METROPOLITAN MEDICAL RELIEF.

SIR CHARLES TREVELYAN has now published the pamphlet on *Metropolitan Medical Relief*, which he circulated privately amongst those who were present at the reading of his paper at the Society of Arts on April 17th. It contains, in addition to the paper and the appendices which accompanied it, a full report of the discussion to which it gave rise. Any one who is interested in the subject of hospital abuse will find it a very valuable and very cheap shilling's worth, for it contains all the best information upon the subject, together with the opinions of many eminent men, such as Sir Rutherford Alcock, Sir William Gull, Dr. Acland, Mr. T. Holmes, and others. As the difficulties connected with out-patient relief are being discussed in various parts of the country, we have no doubt that there are many who will be glad to obtain a copy of this pamphlet.

#### THE PUBLIC HEALTH.

DURING the week ending Saturday, June 23rd, 5,428 births and 3,228 deaths were registered in London and twenty-two other large towns of the United Kingdom. The mortality from all causes was at the average rate of 21 deaths annually in every 1,000 persons living. The annual death-rate was 22 per 1,000 in Edinburgh, 21 in Glasgow, and 25 in Dublin. The annual rates of mortality per 1,000 last week in the twenty English towns, ranged in order from the lowest, were as follow: Portsmouth, 13; Hull, 16; Brighton, 17; Newcastle-upon-Tyne, 17; Plymouth, 17; Norwich, 18; London, 19; Leicester, 19; Leeds, 20; Bristol, 21; Sheffield, 21; Bradford, 21; Sunderland, 22; Nottingham, 22; Wolverhampton, 22; Manchester, 25; Liverpool, 25; Birmingham, 25; Oldham, 28; and Salford, 30. In London, 2,270 births and 1,271 deaths were registered. Allowing for increase of population, the births were 11 and the deaths 76 below the average numbers in the corresponding week of the last ten years. The annual death-rate from all causes, which in the three previous weeks had been equal to 21.3, 21.1, and 19.4 per 1,000, further declined last week to 18.8, a lower rate than has prevailed in any week since October last. The 1,271 deaths included 44 from small-pox, 42 from measles, 14 from scarlet fever, 7 from diphtheria, 35 from whooping-cough, 22 from different forms of fever, and 46 from diarrhoea. Thus to the seven principal diseases of the zymotic class 210 deaths were referred, against 236, 220, and 218 in the three preceding weeks. The 42 deaths from measles showed a considerable decline from the numbers in recent weeks, but included 21 in East London. The 46 fatal cases of diarrhoea, including 24 of infants under one year of age and 15 of children aged between one and five years, considerably exceeded the numbers in recent weeks, but were slightly below the corrected average weekly number. The fatal cases of small-pox, which in the six preceding weeks had slowly but steadily declined from 78 to 55, further decreased to 44 (a lower number than in any week since the beginning of November last), of which 19 were certified as unvaccinated and 13 as vaccinated; in the remaining 12 cases the medical certificates did not contain any information relating to vaccination. The 44 deaths from small-pox included 13 of children under five years of age, each of whom was certified to



have been unvaccinated. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily declined from 964 to 796 during the four preceding weeks, had further declined to 726 last Saturday, and the admissions of new cases during the week were but 93, against numbers declining from 254 to 145 in the five previous weeks. In Greater London, 2,735 births and 1,498 deaths were registered, equal to annual rates of 32.7 and 17.9 per 1,000 of the population. At the Royal Observatory, Greenwich, the duration of registered sunshine in the week was 67 hours, out of the 116.2 hours that the sun was above the horizon.

## SCOTLAND.

THE Edinburgh City Parochial Board have agreed to increase the salary of one of their medical officers, Dr. Cappie, by £20 *per annum*.

IN the Sheriff Court, Falkirk, on June 18th, Dr. Nash, senior, of Slamannan, was fined two guineas for committing an assault upon his son Dr. Nash, junior, with a stick on a public road.

OPERATIONS are going on for introducing a supply of water to the village of St. Fillans, well-known to tourists in Perthshire. The Baroness Willoughby D'Eresby is to defray the whole cost of the undertaking.

THE annual meeting of the Directors of the Dundee Royal Lunatic Asylum was held last week. The annual report showed the institution to be in a very satisfactory condition. There was a surplus of income over expenditure of £450. In regard to the erection of the contemplated new asylum, it was stated that the directors hoped to be in a position to accept tenders in a very short time.

ON Wednesday, the 13th instant, Dr. Patrick Heron Watson, before leaving the Royal Infirmary, Edinburgh, was presented with a testimonial signed by upwards of three hundred students of the Edinburgh University and Medical School, supporting his candidature for the Chair of Clinical Surgery, and setting forth his numerous accomplishments and valuable labours, which dated as far back as the war in the Crimea.

### ANDERSON'S COLLEGE, GLASGOW.

THE annual meeting of the trustees of Anderson's College was held on June 22nd. Dr. Fergus stated that this was the first meeting of the institution as Anderson's College (having previously been known as the Andersonian University), and, speaking for others as well as for himself, he thought it a good opportunity for bringing before the managers and trustees, and the general public, the subject of the endowment of chairs. There were certain theoretical branches which were not self-supporting, particularly in connection with medicine, and which, he thought, should be endowed. He thought they should approach the Town Council, and ask if they would give a sum towards the College. The Chairman stated that the movement for endowment was not a new one, but it had been hindered for want of money.

### THE EDINBURGH ROYAL MATERNITY CHARITY.

THIS Charity, which has run a chequered existence of thirty-two years, during which its changes of *locale* have been frequent and inconvenient, is about to be provided with a permanent and suitable home, the want of which has hitherto cramped its energies and very materially interfered with its success, both as a hospital and as a school for the teaching of midwifery. Than its present abode, for instance, it is impossible to conceive one less suited to such a purpose, one small single dwelling-house being all the space available for patients, nurses, doctors, and establishment. Previously to being transferred to St. John Street, it was accommodated for awhile in the George Watson's Hospital Buildings, and remained there until they were required for incorporation with the new infirmary. For the past two years, energetic appeals have

been made to the public to come forward and help the institution, which, under all these drawbacks, was doing valuable and successful work, to obtain premises which would be at once permanent and suitable. As a result of these efforts, a site at the corner of Laurieston Park and Laurieston Place has been obtained; and plans having now been prepared, the erection of the new hospital will be proceeded with immediately. The whole sum required for the purpose of building and furnishing the hospital has not yet been obtained, as shown by the following figures. The cost of the whole institution is estimated at £10,500, viz., £3,500 for site, £6,000 for building, and £1,000 for furnishings; while at the date of the last annual meeting of contributors, the available funds had only reached the total of £7,389, of which £3,000 has been contributed by the Simpson Memorial Committee, and £2,000 is the balance of the sale of a previous place of abode of the Charity, the Chapel House. The remainder has been the result of public subscriptions. The subscription of the Simpson Memorial Committee was given on the condition that the name of Sir James Simpson should be connected with the institution, which will accordingly be called "The Edinburgh Royal Maternity and Simpson Memorial Hospital". The building to be erected under this name will be three storeys in height, with attics. By a tasteful adaptation of the domestic Gothic style of architecture, an effective façade facing Lauriston Place will be obtained. The general design will be a main central block, flanked by two wings. On the ground floor, the main building will be occupied principally by various rooms and offices, and will also contain two small delivery wards, each containing three beds, which will communicate with two large wards occupying respectively a large portion of the area of the wings, each being 48 feet by 24, and affording space for ten beds. On the upper floor, there will be provided, in the wings, two wards of still larger size than those just mentioned, each measuring 70 feet by 24, and capable of holding fifteen beds, accompanied, as in the flat below, by small delivery wards. To each of the four large wards, there will be attached sculleries, bath-rooms, and other conveniences. The attic flat will be laid out as a dormitory for nurses. The new hospital will, it is expected, be ready for occupation in about a year.

### THE GLASGOW MATERNITY CHARITY.

THE has been some excitement in the public mind during the last week or so regarding an alleged "extraordinary affair in the Glasgow Maternity Hospital", the matter having been made the subject of sensational paragraphs and announcements in one of the Glasgow newspapers. So far as we can learn the circumstances, they are somewhat as follows. A woman was delivered of her third illegitimate child in the Maternity or Lying-in Hospital, and the child died three days after birth. As the woman was believed to bear rather an indifferent character, it was thought proper to examine the body of the child; but, unfortunately, the consent of the mother does not seem to have been obtained for this proceeding. An examination or dissection of the body was made in the Maternity Hospital; and in addition the body was sent to the Royal Infirmary, to be investigated by the pathologist there. The pathologist received it at a time when he was too busy to examine it, and so delayed the investigation till next day; but, for the better preservation of the parts, he removed the head and placed it in preservative fluid. Meanwhile, the woman had been dismissed from the Maternity Hospital for unruly conduct, and had gone to the police and laid before them a complaint of ill-treatment of herself and child. The Procurator-Fiscal ordered an examination of the child's body, and the medical men appointed for that purpose unfortunately made their visit at the time when the child's head was in preservative fluid. It was at this stage of the proceedings that the newspaper was allowed to get hold of the matter, and it will be readily understood that there was sufficient material to make up a highly sensational story. Considering the character of the woman concerned, we believe that the allegation of ill-treatment against the hospital will turn out to be ill-founded; but we cannot but admit that various irregularities seem to have occurred in the disposal of the body of the child. It is stated



that the woman paid a small sum for the interment of the body; but, instead of giving it decent burial, it was examined without the mother's consent, and removed to another place for further investigation. We believe that the pathologist at the Royal Infirmary thought that the body was unclaimed, and that he was at liberty to make a full examination of it; but it was very unfortunate that he dismembered it in a way that was likely to strike the popular imagination. The whole of these actions were done in perfect innocence; but, on the assumption that the child died from ill-treatment, it will be seen that the mode of disposal of the body is capable of the most sinister interpretations. This action of the newspaper is in the strongest manner to be reprobated. Before it was allowed to get into their hands, the matter had already been taken up by the proper legal authority, and it should have been left there till such time as it was ripe for publicity. The newspaper certainly obtained a large increase of circulation; but the effect of the narrative, as put by them, will be to raise an unjust prejudice against hospitals; and medical men are aware how difficult it is to eradicate such prejudices from the public mind.

## IRELAND.

THE Kingstown (No. 1), Carrick-on-Suir, and Silvermines (Nenagh) Dispensary Districts are vacant.

THE engineer of the Irish Local Government Board is at present preparing plans for an extended scheme for supplying Wicklow with water.

### DUBLIN BRANCH.

THE first meeting of the Council of this new Branch was held in the College of Physicians on Monday last; the President of the Branch, Dr. Hudson, in the chair. Nineteen gentlemen were elected members of the Association, and ninety-three members of the Association were elected members of the Branch. The President, the Rev. Dr. Haughton, Dr. McClintock, and Mr. William Stokes were appointed representatives of the Branch in the Council of the Association.

### HOSPITAL FEES.

A MEETING of the physicians and surgeons of the Dublin clinical hospitals was held on the 22nd instant, to consider the propriety of increasing the hospital fees. After some discussion, a committee, composed of the honorary secretaries of the medical boards of the various hospitals, was appointed to ascertain particulars as to the fees in other clinical hospitals, etc., and to report to an adjourned meeting.

### ST. MARK'S OPHTHALMIC HOSPITAL.

AT a specially convened meeting of the Board of Governors of this institution held last week, it was moved by the Rev. Samuel Haughton, M.D., F.T.C.D., seconded by George Hornidge Porter, Esq., Surgeon to the Queen, and resolved—"That the Board of Governors of St. Mark's Ophthalmic Hospital, having learned of the lamented death of Mr. Wilson, senior surgeon to that institution, desire to place on record an expression of their deep regret, and of their sense of the very great loss which the hospital and the public have sustained in his premature death". Mr. Wilson has, we understand, bequeathed a sum of £7,000 to this hospital, subject only to a life interest to two female relatives. Mr. Richard Rainsford, M.B.Dubl., and F.R.C.S.I., Ophthalmic and Aural Surgeon to the Adelaide Hospital, Lecturer on Ophthalmic and Aural Surgery in the Ledwich School of Medicine, and Junior Surgeon to St. Mark's, has been appointed Senior Surgeon to the hospital in the room of the late Mr. Wilson.

### ROYAL COLLEGE OF SURGEONS.

WITHIN the brief space of nine days, death has caused two vacancies in the Council and professional staff of this College. With one exception, Mr. Wilson and Dr. Cronyn were the junior professors; but neither could be more deeply regretted than they are, both by their

colleagues and the profession in this city at large. There will be now three vacancies on the Council to be filled at the next election. In addition to those gentlemen whose names we mentioned as candidates last week, we hear that Mr. E. W. Collins, one of the surgeons to Jervis Street Hospital, and Mr. Elliott, surgeon to the Whitworth Hospital, have also signified their intention of coming forward. There are already several candidates for the chair of midwifery, among whom are Dr. W. Roe, Obstetric Surgeon to the Coombe Lying-in Hospital and Examiner in Midwifery in the College; Dr. T. More Madden, ex-Assistant Physician Rotunda Lying-in Hospital; Dr. A. V. Macan, Obstetric Physician to the City of Dublin Hospital and ex-Assistant Physician to the Rotunda Lying-in Hospital; and Dr. J. R. Kirkpatrick, an Examiner in Midwifery in the College of Surgeons, and also an ex-Assistant Physician to the Rotunda Hospital.

### THE IRISH LOCAL GOVERNMENT BOARD.

WE are informed that recently a dispensary medical officer was called upon to send in his resignation by the Irish Local Government Board because, at the request of a contemporary, he furnished them with copies of three letters addressed by the Local Government Board to the Board of Guardians of his Union, the secretary of his committee, and to himself. They were official and public documents read at meetings open to the press. They were forwarded to our contemporary without comment. Disrespect to the Local Government Board was neither implied or expressed; and although, on the explanation and protest of the officer in question, the demand was withdrawn, yet the attempt to terrorise medical officers and to interfere with the long-standing privileges of the press cannot pass unnoticed. It is even a question of doubt whether the Local Government Board were acting legally in pursuing the course they did.

### DEATH UNDER CHLOROFORM.

WE regret to have to record a death from chloroform which occurred at Mercer's Hospital on the 25th instant. The patient was an intemperate man, a waiter and billiard-marker, aged 27. He was in the hospital for eighteen days during this month with what was considered to be chronic synovitis of the left knee-joint. During this period, frequent examinations of the heart were made by the surgeon under whose care the man was, but no cardiac or arterial disease was detected, or were there any symptoms or physical signs of any organic lesion sufficient to contraindicate the employment of chloroform. He left hospital on the 20th instant, and was readmitted on the 23rd; and it was then considered advisable to fire the affected joint. Accordingly, on the morning of the 25th, after having given the man, who was rather nervous and excited, an ounce of undiluted whiskey, chloroform was administered by the experienced chloroformist to the hospital (the apothecary), by means of a Skinner's inhaler. Very soon, the patient began to struggle, and within three minutes was under the influence of the anæsthetic. Almost simultaneously, and before any operative steps were taken, a peculiar change in the man's expression was noticed; the face became livid, and at the same moment it was reported that the pulse had become very weak, and then that it had stopped. The tongue was immediately drawn forward, the face and chest slapped with wet towels, a stimulating enema given, and nitrite of amyl held to the nostrils, etc. Artificial respiration by Silvester's method was at once commenced, and vigorously carried on for an hour and fifty minutes; but, although a few gasps and inarticulate sounds occurred, no sign of returning life appeared to reward the persevering efforts which were had recourse to for his restoration. An inquest was held on Wednesday; and the jury, having heard the medical evidence, returned a verdict that the deceased "died whilst under the influence of chloroform, in consequence of fatty disease of the heart". The *post mortem* examination revealed an advanced stage of fatty deposition upon, and degeneration of, an enlarged heart. There was also a layer of fat on the pericardium, and old pericardial adhesions. The walls of the heart were pale and flabby; that of the right ventricle was thinner



than normal. The cavities were dilated and empty. The valves were perfectly healthy, but the aorta was atheromatous. The lungs were extremely congested, and the base of the right hepatised and bound down by firm adhesions. The apices of both contained numerous nodules of caseous matter, which in several places had softened into small vomicae. The liver, kidneys, and spleen were enlarged and congested. There was chronic gastritis and inflammation of the mucous membrane of the ileum. The coroner and jury and the legal adviser of the deceased's widow expressed their opinion that the chloroform was properly administered, and that no blame was in any way attributable to any of the staff of the hospital.

### HOSPITALS FOR THE WELL-TO-DO.

THE Lord Mayor presided at a public meeting, held on Wednesday, June 27th, at the Mansion House, to consider the propriety of establishing an Association to provide Homes in various districts for private patients who can afford to pay for the accommodation.

Memorials in support of some scheme for meeting this want had been signed by Dr. Risdon Bennett (President of the College of Physicians), Mr. Prescott Hewett (President of the College of Surgeons), Dr. Acland (President of the General Medical Council), Sir W. Gull, Sir T. Watson, Sir J. Paget, and upwards of two hundred other medical men; by the Duke of Northumberland, Lord Lawrence, the Bishops of London, Winchester, and Guildford, Cardinal Manning, Lord Justice Amphlett, Baron Pollock, Sir Sydney Waterlow, M.P., Mr. Bulwer, Mr. Collins, Mr. Gorst, Mr. Grantham, Mr. Watkin Williams, the Rev. J. E. Kempe, the Rev. J. T. Rowsell, the Treasurers of Guy's, St. Bartholomew's, St. Thomas's, St. Mary's, King's College, and the London Hospitals, and many other well-known persons.

Among those present were the Earl of Bessborough, Mr. Walter, M.P., Mr. T. Blake, M.P., Sir Rutherford Alcock, Sir Francis Hicks, Dr. Risdon Bennett, Mr. Ernest Hart, Dr. Burney Yeo, Dr. Corfield, Monsignor Capel, Sir R. Wilbraham, Mr. F. D. Mocatta, Mr. H. C. Burdett, Canon Miller, Mr. Clifford Wigram, the Rev. R. J. Simpson, Mr. Jonathan Hutchinson, Mr. Harry Leach, Dr. George Owen Rees, Mr. W. Mac Cormac, Mr. Edwin Saunders, Dr. Berkart, Mr. Ernest Turner, Dr. Heywood Smith, Dr. Glover, Mr. F. Fowke, etc.

The Duke of Northumberland sent an apology, but accepted a place on the Provisional Committee. Dr. Quain was unable to attend through an affection of the eyes, but had requested Dr. Risdon Bennett to take his place. Letters of approval and regret had also been received from Sir W. Jenner, Dr. Andrew Clark, Mr. Erichsen, Dean Stanley, Mr. T. Brassey, M.P., and others.

After some preliminary observations, the LORD MAYOR called upon Mr. HENRY C. BURDETT to explain the objects and aims of the Home Hospital scheme.

Mr. JOHN WALTER, M.P., moved, Dr. RISDON BENNETT seconded, and Sir RUTHERFORD ALCOCK, K.C.B., and the Rev. Canon MILLER, D.D., supported, the following resolution:

"That it is desirable to establish an Association with the object of providing hospital treatment, skilled nursing, convalescent institutions, and other accommodation much needed at present, for the benefit of all classes who can afford to pay for such advantages, when attacked by illness."

The resolution was carried, after some observations by Dr. GLOVER, with three dissentients.

The next resolution was moved by Monsignor CAPEL, seconded by Mr. JONATHAN HUTCHINSON, and supported by Mr. F. D. MOCATTA and Mr. ERNEST HART:

"That the Home Hospital Association will render material public service by co-operating with the managers of the present hospitals supported by endowments or private charity, in preventing the abuse of such hospitals by people who can afford to pay for their treatment, and by providing for the benefit of the public and for the assistance of the medical profession, well-regulated hospitals and convalescent institutions, to which the latter can send with confidence patients willing to defray the cost of the accommodation which they require and cannot otherwise obtain."

The following resolution was moved by Sir FRANCIS HICKS, and seconded by Mr. THOMAS BLAKE, M.P.:

"That the following be appointed a Provisional Committee with full power to take such steps as they may consider desirable to carry out the objects embraced in the foregoing resolutions: The Duke of Northumberland, D.C.L.; Sir Rutherford Alcock, K.C.B.; Frederick

Cleeve, Esq., C.B., R.N.; John Eric Erichsen, Esq., F.R.S.; Ernest Hart, Esq.; Sir Francis Hicks, Treasurer of St. Thomas's Hospital; E. H. Lushington, Esq., Treasurer of Guy's Hospital; Dr. Quain, F.R.S.; Albert G. Sandeman, Esq.; George Stanley, Esq.; Clifford Wigram, Esq.; Henry C. Burdett, Esq."

Mr. CLIFFORD WIGRAM, Director of the Bank of England, moved a vote of thanks to the Lord Mayor.

### CHAIR OF PHYSIOLOGY IN ABERDEEN.

PROFESSOR OGILVIE-FORBES has sent in his resignation of the Chair of Institutes of Medicine in the University of Aberdeen to the University Court; and we hear that Dr. Stirling, of the University of Edinburgh, one of the most distinguished, energetic, and highly accomplished of British physiologists, will be a candidate for the post. Dr. Stirling worked for two years with Ludwig in Leipsig, doing there original work of high character. He has taught practical physiology to very large classes in Edinburgh University, under direction of Professor Rutherford; the number this session is over one hundred and thirty. He has held this post three years. Among his original communications in German and English journals, with which all physiologists are well acquainted, are, "The Summation of Electrical Stimuli applied to the Skin"; "Structure of the Cutis of the Dog"; "Changes produced in the Lungs by the Embryos of *Ollulanus Tricuspis*"; "On the Extent to which Absorption can take place through the Skin of the Frog". He has contributed many others to the *Journal of Anatomy and Physiology*, and prepares for that journal the excellent reports on physiology. The chair is under the patronage of the Crown.

### MEDICO-LEGAL CASES.

PROCEEDINGS UNDER THE MEDICAL ACT: CARPENTER v. HAMILTON. THIS was an appeal case, tried in the Exchequer Division of the High Court of Justice, before Mr. Baron Cleasby and Mr. Justice Hawkins. Mr. Bompas, Q.C., and Mr. Finlay appeared for the appellant; Mr. Besley and Mr. Tickell were counsel for the respondent. Mr. Knox, one of the Metropolitan police magistrates, had declined to commit the respondent under sec. 40 of the Medical Act, 1858, for wilfully and falsely pretending to be, or taking or using the name or title of a physician, doctor of medicine, etc. It appeared that the respondent exhibited in his shop, 404 Oxford Street, a large diploma in gold frame, purporting to be of the Metropolitan Medical College of New York, bearing date 1862, but of the validity of which, beyond the production, he gave no further proof. He also styled himself to a witness and the world substantially as Dr. John Hamilton, Doctor of Medicine of the Metropolitan Medical College of New York. The respondent's name did not appear on the *Medical Register*. Mr. Bompas's contention was that no person can practise in this country unless he is registered, and that by using the above title the respondent falsely pretended that his name was on the *Register*. The argument of the respondent was that the Medical Act was not prohibitory of practice, but merely imposed disabilities in the shape of not recovering fees. Some people voluntarily refused to be registered and these could not recover their fees; besides there were some who could not be registered, viz., those who possessed foreign qualifications and had not practised in England before 1858. This was really a question of fact for the magistrates, whose decision should not be disturbed.—The COURT adopted this view and dismissed the appeal, thinking the decision of the police magistrate conclusive on the question of fact.—Mr. Justice HAWKINS desired to express no opinion as to what might happen if a fresh summons were taken out.—Mr. BESLEY applied for costs, and Baron CLEASBY said they must be granted, as this was a case where a man had been acquitted and there had been an appeal.

### DEVILLE v. THE HARROGATE IMPROVEMENT COMMISSIONERS.

ON Wednesday last, Mr. Justice Lopes delivered judgment on the rule obtained by Dr. Tius Deville against the Harrogate Improvement Commissioners, to show cause why a verdict should not be entered up for the plaintiff for £25, for which a verdict was taken by consent in an action at the last York Assizes, judgment being at the time reserved for the consideration of certain points of law. An account of the trial was given in the *BRITISH MEDICAL JOURNAL* for March 10th. In giving judgment on Wednesday, Mr. Justice Lopes, after reviewing the facts of the case, said that in his opinion Dr. Deville could not be removed from the office of Medical Officer of Health without the sanction of the Local Government Board, and that he was entitled to the sum of £25 for which he sued. Judgment was given accordingly, costs being allowed against the defendants.



## THE HARVEY TERCENTENARY MEMORIAL.

It is proposed, as is generally known, to signalise the approaching three hundredth anniversary of Harvey's birth by the erection, at Folkestone, of a statue of the famed English physiologist. Subscriptions for this purpose have been received from all classes, amounting to about £520, whilst a further sum of £400 has been promised. These sums are not adequate to permit the Committee to carry out the work proposed in an efficient manner, though they evince the interest generally taken in it, and are sufficient to assure the Committee of success. Amongst the subscribers are many noblemen and Members of the House of Commons and of various scientific bodies; and the two largest subscriptions have been given by Lord Derby (the Chairman of the London Committee) and Baron M. de Rothschild. The members of the medical profession have not been behindhand with their donations; but we notice that the sums received and promised are principally given by men whose names are always to the fore. The great bulk of the profession has not yet testified its interest in this matter, although a circular has been at one time or another forwarded to almost every medical man whose name appears in the Directory for England. Perhaps the sums already given, which have not generally been less than a guinea, have deterred many would-be subscribers; for we are sure there must be an earnest desire, on the part of the profession, to see a monument worthy of Harvey erected at his birthplace. We, therefore, earnestly recommend all to subscribe to this object. Let each member of our profession send his mite—say ten, or even five shillings—and the Committee, relieved from all pecuniary difficulties, will be able to proceed in the matter. The work should be done at once, however; and we trust a hearty response will be made to this appeal. The Treasurers of the fund are Sir G. Burrows, Bart., and Mr. Prescott Hewett; and the Honorary Secretaries are Mr. George Eastes, M.B., 69, Connaught Street, Hyde Park Square, London, W., and Mr. W. G. S. Harrison, B.A., Town Clerk, Folkestone, to either of whom subscriptions may be sent.

## HOSPITAL AND DISPENSARY MANAGEMENT.

**HOSPITAL SUNDAY AND HOSPITAL SATURDAY IN LIVERPOOL.**  
We have received a paper giving full details of the above collections and contributions for the present year; and, while the amounts of the metropolitan collections are coming in, we may, perhaps without any odious comparisons, notice some of the more important particulars contained in it. The church and chapel collections realised a total of £7,542, and comprised two hundred and seventy-eight different congregations. The largest collection was that made in a Unitarian chapel, which was £417 19s.; the lowest, 10s. 6d., at a small mission-room. There were fifteen collections which exceeded £100 each, the items varying from £110 to £278. A very gratifying circumstance is, that, in the chapels of the Royal Infirmary, the Northern, and the Royal Southern Hospitals respectively, there were collected the sums of £2 11s. 6d., £4, and £3 10s.; showing that patients are willing to avail themselves of this excellent opportunity of contributing towards those noble institutions to which they are so much indebted. The Hospital Saturday boxes realised £2,436, the largest item being £137 10s. 5d., received from Messrs. D. and C. MacIver's sailing and stewards' departments; the smallest being 2½d., found in a box at a confectioner's. In Liverpool, the second Sunday in the year is Hospital Sunday, which this year was January 14th; formerly, the following Saturday was Hospital Saturday; but latterly it has been found desirable to hold this in March, and the 10th of that month was selected this year. Both the Sunday and Saturday collections are managed by the same Committee, which includes clergy and laymen of all denominations, among the latter being several members of our profession. They distributed this year the sum of £9,650 among sixteen medical charities, as was noticed in the JOURNAL, April 21st, page 492. It will be seen that the sums realised in Liverpool by these means are proportionately very liberal.

## THE LEAMINGTON PROVIDENT DISPENSARY.

We have received the Report of the Leamington Provident Dispensary for the year 1876. This institution has now been in operation eight years, and we are glad to observe that it continues to prosper. In 1875, it was removed to more commodious premises in Holly Walk; and in the report before us, the Committee are able to announce that the debt incurred by the purchase of the new house has been completely extinguished. They are also about to add to the efficiency of the Dispensary by establishing a Nursing Institute in connection with

it. Of course, this will involve considerable annual expenditure, although the present house will provide an admirable home for the nurses. It is hoped that the expense will be met in part by the employment of the nurses in private families when their services are not required by provident members. The number of cases attended during the year was 3,990. The payments of provident members shewed an increase of £48:2:6 upon the previous year. The sum of £385:14:10 was divided among the four medical officers.

## ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL:  
NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Freemasons' Tavern, Great Queen Street, Lincoln's Inn Fields, London, on Wednesday, the 11th day of July next, at Two o'clock in the afternoon.

FRANCIS FOWKE,

*General Secretary.*

36, Great Queen Street, London, W.C., June 16th, 1877.

BRITISH MEDICAL ASSOCIATION:  
FORTY-FIFTH ANNUAL MEETING.

THE Forty-Fifth Annual Meeting of the British Medical Association will be held in the Owens College, Manchester, on Tuesday, Wednesday, Thursday, and Friday, August 7th, 8th, 9th, and 10th, 1877.

*President.*—M. M. DE BARTOLOMÉ, M.D., Senior Physician to the Sheffield General Infirmary.

*President-elect.*—M. A. EASON WILKINSON, M.D., Senior Physician to the Manchester Royal Infirmary.

An Address in Medicine will be given by WILLIAM ROBERTS, M.D., F.R.S., Manchester.

An Address in Surgery will be given by T. SPENCER WELLS, F.R.C.S., London.

An Address in Obstetric Medicine will be given by ROBERT BARNES, M.D., F.R.C.P., London.

The business of the Association will be transacted in Six Sections, viz. :—

**SECTION A. MEDICINE.**—*President:* Sir William Jenner, Bart., M.D., K.C.B., F.R.S. *Vice-Presidents:* Samuel Crompton, M.D.; Wilson Fox, M.D., F.R.S.; Henry Simpson, M.D. *Secretaries:* Julius Dreschfeld, M.D., 292, Oxford Road, Manchester; F. T. Roberts, M.D., F.R.C.P., 53, Harley Street, London, W.

**SECTION B. SURGERY.**—*President:* Edward Lund, F.R.C.S. *Vice-Presidents:* W. Adams, F.R.C.S.; F. A. Heath, M.R.C.S. *Secretaries:* S. M. Bradley, F.R.C.S., 272, Oxford Road, Manchester; Henry Morris, F.R.C.S., 2, Mansfield Street, London, W.

**SECTION C. OBSTETRIC MEDICINE.**—*President:* W. O. Priestley, M.D., F.R.C.P. *Vice-Presidents:* A. H. McClintock, M.D., LL.D.; James Whitehead, M.D. *Secretaries:* David Lloyd Roberts, M.D., 23, St. John Street, Manchester; John Thorburn, M.D., 333, Oxford Road, Manchester.

**SECTION D. PUBLIC MEDICINE.**—*President:* Surgeon-Major F. S. B. De Chaumont, M.D., *Vice-Presidents:* Alfred Aspland, F.R.C.S.; W. H. Corfield, M.D., F.R.C.P. *Secretaries:* William Armistead, M.B., Station Road, Cambridge; John Haddon, M.D., Monk's Hall, Eccles, Manchester.

**SECTION E. PHYSIOLOGY.**—*President:* Arthur Gamgee, M.D., F.R.S. *Vice-Presidents:* John Cleland, M.D., F.R.S.; Thos. Lauder Brunton, M.D., F.R.S. *Secretaries:* Joseph Coats, M.D., 33, Elmbank Street, Glasgow; William Stirling, M.D., University, Edinburgh.

**SECTION F. PSYCHOLOGY.**—*President:* J. C. Bucknill, M.D., F.R.S. *Vice-Presidents:* H. Rooke Ley, M.R.C.S.; G. W. Mould, M.R.C.S. *Secretaries:* P. M. Deas, M.B., County Asylum, Macclesfield; T. Clay Shaw, M.D., Middlesex County Asylum, Banstead.

*Local Secretaries:* Dr. Leech, 96, Mosley Street, Manchester; C. J. Cullingworth, Esq., 260, Oxford Street, Manchester; Dr. Hardie, St. Ann's Place, Manchester.

## EXCURSIONS, ETC.

In addition to the excursions already announced, a luncheon will be provided by the High Sheriff of Cheshire, Thomas H. Brocklehurst, Esq., at his seat, Henbury Hill, Cheshire, for as many members as may like to go. After luncheon, which will take place on Saturday, the 11th of August, arrangements will be made for drives through the park



of Lord Stanley to Alderley, and past the celebrated Cat and Fiddle, the highest inhabited house in England, to Buxton. Members availing themselves of this invitation, will have an opportunity of visiting the County Lunatic Asylum at Macclesfield, and some interesting and important silk manufactories.

#### ANNUAL MUSEUM.

THE Subcommittee appointed to superintend the collection and arrangement of objects for exhibition at the forthcoming meeting will be glad to receive—1. Pathological specimens (wet or dry); 2. Drawings or diagrams illustrative of disease; 3. Casts and models; 4. Surgical instruments and appliances; 5. Microscopic preparations; 6. Microscopes, thermometers, and other instruments of investigation; Preparations, diagrams, etc., relating to investigations in anatomy and physiology.

The work of forming a careful catalogue will be greatly facilitated if intending exhibitors will kindly bear in mind the following points: 1. That it is impossible that descriptions, etc., can be included in the catalogue, unless sent in early; and 2. That the descriptions should be written on one side of the paper only, so that they can be forwarded at once to the printer.

Specimens may be addressed to "THE SECRETARIES OF THE MUSEUM SUBCOMMITTEE, OWENS COLLEGE, MANCHESTER"; or, if for special reasons they cannot safely be sent direct, any of the gentlemen named in the subjoined list of the Museum Subcommittee will be happy to receive and take charge of them. All articles must be sent during the first fortnight in July, unless by special understanding with the Secretaries.

*Microscopic Preparations.*—This year, a room shall be set apart for the exhibition of microscopic preparations. The Secretaries hope to secure about seventy microscopes for the use of exhibitors.

Messrs. Cole and Son of Liverpool have already promised to send to this department a large number of their exquisitely prepared pathological specimens. A number of microphotographs of the *diatomacea* have also been promised; and Drs. Gull and Sutton will exhibit specimens of the hyalin-fibroid change in the blood-vessels.

*Pathological Department.*—The valuable collection of urinary calculi, removed by the late Mr. Southam, will form an important feature of the Museum. It consists of more than sixty specimens, no fewer than four being examples of cystine calculus. The collections of calculi formed by the late Mr. William Smith, the late Mr. Dumville, Mr. F. A. Heath, and Mr. Lund will also be exhibited.

A series of seventy-two separate water-colour drawings of skin-diseases, life-size, will be kindly lent by Dr. Tilbury Fox. These drawings will be of great interest, as illustrating, for the most part, new clinical points in dermatology. Attention will be directed to these points in the description of the drawings contributed by Dr. Tilbury Fox to the Museum Catalogue.

*Instruments and Appliances.*—Some of the first microscope-makers in the world have promised to send specimens of their most highly valued instruments. Mr. J. B. Dancer and the Messrs. Armstrong of Manchester will be large exhibitors of scientific instruments; and Messrs. Mottershead will furnish examples of Dr. J. Dixon Mann's modification of the Leclanché battery.

A section of the Museum will be devoted to the display of new apparatus for use in the physiological laboratory. Dr. Arthur Ransome will demonstrate, on the model, the use of his stethometer; and will exhibit a number of different instruments which have been devised by himself and others in connection with the measurement and determination of the respiratory movements.

The collection of midwifery instruments from the Radford Museum at St. Mary's Hospital, Manchester, which formed so attractive a feature at the *conversazione* of the Obstetrical Society, held in May of last year at the Royal College of Physicians, will be lent for exhibition on this occasion, through the kind influence of Dr. Thomas Radford, their original owner.

The following is a list of the Museum Subcommittee; to any member of which communications, etc., may be addressed. Professor Thorburn (Chairman), 333, Oxford Road, Manchester; Dr. Anningson, Pathological Museum, Cambridge; Mr. J. Broadbent, Alexandra Road, Moss Side, Manchester; Dr. Caton, 18A, Abercromby Square, Liverpool; Professor Cleland, Vicarscroft, Galway; Mr. C. J. Cullingworth, 260, Oxford Road, Manchester; Dr. Dreschfeld, 292, Oxford Road, Manchester; Dr. Duffey, 30, Fitzwilliam Place, Dublin; Professor Arthur Gamgee, Owens College, Manchester; Dr. Goodhart, 27, Weymouth Street, Portland Place, London, W.; Dr. C. E. Glascott, 25, St. John Street, Manchester; Mr. J. D. Hamilton, Pathological Laboratory, the University, Edinburgh; Dr. James Hardie, 1, St. Ann's Place, Manchester; Mr. Jonathan Hutchin-

son, 15, Cavendish Square, London, W.; Dr. Humphreys, Children's Hospital, Pendlebury; Dr. D. J. Leech, 96, Mosley Street, Manchester; Professor Lund, 22, St. John Street, Manchester; Professor McKendrick, the University, Glasgow; Dr. J. Dixon Mann, St. John Street, Manchester; Dr. Alexander Ogston, 252, Union Street, Aberdeen; Dr. Arthur Ransome, 1, St. Peter's Square, Manchester; Dr. D. Lloyd Roberts, 23, St. John Street, Manchester; Dr. Henry Simpson, 3, Oxford Street, Manchester; Mr. A. W. Stocks, 23, the Crescent, Salford; Professor Morison Watson, Owens College, Manchester; Dr. James Whitehead, 87, Mosley Street, Manchester; Dr. M. A. Eason Wilkinson, 96, Mosley Street, Manchester; Professor Boyd Dawkins, Owens College, Manchester; Mr. Young, Owens College, Manchester.

*Secretaries* { THOS. JONES, F.R.C.S., 96, Mosley Street, Manchester.  
JAMES ROSS, M.D., 335, Oxford Road, Manchester.

Gentlemen desirous of reading papers, cases, or other communications, are requested to forward the titles to the General Secretary, or to one of the Secretaries of the Section in which the paper is to be read. All papers should be forwarded to the Secretaries of Sections on or before the 1st of August.

No paper must exceed twenty minutes in reading, and no subsequent speaker must exceed ten minutes; all speeches at the General Meeting must not exceed ten minutes each.

FRANCIS FOWKE, *General Secretary*.

36, Great Queen Street, W.C., June 21st, 1877.

#### NORTH WALES BRANCH.

THE twenty-eighth annual meeting of this Branch will be held at the Corsygedol Arms, Barmouth, on Wednesday, July 11th, at 1 P.M. The President, Dr. RICHARDS, will resign the Chair to the President-elect, ROBERT ROBERTS, Esq., who will deliver an address.

Gentlemen intending to read papers, or be present at the dinner, are requested to inform the Honorary Secretary on or before July 1st.

Dinner at 3.30 P.M. Tickets, 7s. 6d., exclusive of wine.

T. EYTON JONES, M.D., *Honorary Secretary*.

Wrexham, June 18th, 1877.

#### WEST SOMERSET BRANCH.

THE annual meeting of this Branch will be held at the Railway Hotel, Taunton, on Thursday, July 12th, at 2.30 P.M.

Dinner at 5 o'clock.

Gentlemen wishing to read papers are requested to send early notice to the Honorary Secretary.

W. M. KELLY, M.D., *Honorary Secretary*.

Taunton, June 23rd, 1877.

#### BORDER COUNTIES BRANCH.

THE annual meeting of this Branch will be held at Carlisle, on Friday, July 20th. President: Dr. BARNES. President-elect: Dr. LOCKIE.

Members wishing to communicate papers or cases are requested to send notice to the Secretaries.

RODERICK MACLAREN, M.D. } *Honorary Secretaries*.  
JOHN SMITH, M.D.

Carlisle, June 16th, 1877.

#### METROPOLITAN COUNTIES BRANCH.

THE twenty-fifth annual meeting of this Branch will be held at the Alexandra Palace, on Tuesday, July 24th, at 4 P.M. President: JONATHAN HUTCHINSON, Esq., F.R.C.S. President-elect: SEPTIMUS W. SIBLEY, Esq., F.R.C.S.

Dinner at 5.30 precisely. Tickets, 15s. each, exclusive of wine.

Further particulars in circulars.

ALEXANDER HENRY, M.D. } *Honorary Secretaries*.  
ROBERT FARQUHARSON, M.D.

London, June 18th, 1877.

#### NORTH OF ENGLAND BRANCH.

THE annual meeting of this Branch will be held in Bishop Cosin's Library, Durham, on Thursday, July 26th, at 2 P.M.

G. H. PHILIPSON, M.D., *Honorary Secretary*.

Newcastle-upon-Tyne, June 12th, 1877.



## CORRESPONDENCE.

## THE PATHOLOGICAL SOCIETY AND PUERPERAL FEVER.

SIR,—I have to-day received, in common with the other members of the staff of the hospital to which I am attached, a circular signed by the Secretaries of the Pathological Society, inviting my co-operation in "an investigation, proposed and undertaken by the Society, relating to the nature, causes, and prevention of the infective diseases known as pyæmia, septicæmia, purulent infection, and *puerperal fever*". I am next informed that the inquiry has been entrusted to a committee, consisting, firstly, of four members of the Society specially qualified to engage in the necessary anatomical and chemical investigations; and, secondly, of a number of "surgeons and physicians representing the hospitals of the metropolis".

No one will question the importance of such a proposal; but I apprehend that many will doubt the probable value of an investigation into the nature, causes, and treatment of puerperal fever, carried on by a committee which does not contain the name of a single individual who practises obstetrics. Surely, it is something like a "*reductio ad absurdum*" that a Society like the Pathological should propose to study puerperal fever without the assistance of an obstetrician; and it seems to me that we have here an excellent illustration of the justice of the complaint that obstetricians often make, of not receiving proper appreciation at the hands of their professional brethren.—I am, etc.,

June 22nd, 1877.

OBSTETRICUS.

## VOTING BY PROXY.

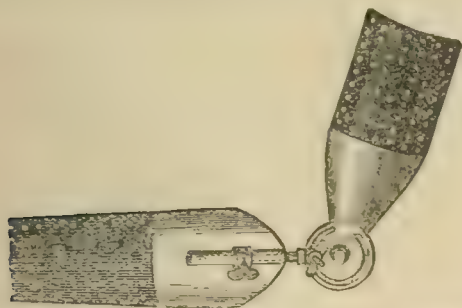
SIR,—I beg to suggest to the Council of the Royal College of Surgeons of England that all Fellows, who reside more than sixty miles from London, should be permitted to vote *in absentia*, like graduates of the universities do, as this will be a great convenience to Fellows who live some hundreds of miles from town. If this were allowed, I should be spared taking the long journey from Cornwall to vote on July 5th.—I am, your obedient servant,

HENRY HARRIS.

Redruth, June 25th, 1877.

## THE USE OF SPLINTS IN EXCISION AND DISEASES OF THE ELBOW.

SIR,—Without wishing to detract in any way from the utility of the splint described by Mr. Jacobson in the JOURNAL of the 23rd instant, you will perhaps permit me to say that, about fifteen years ago, I brought under the notice of the profession a splint to be used in cases of excision of the elbow, as well as in injuries and diseases of that joint; and in which provision is made for effecting pronation and supination, on precisely the same kind of mechanism as that alluded to by Mr. Jacobson. The instrument is well known, and extensively employed at the present time. The original splint is described and figured in the *Lancet* of April 12th, 1862, page 381, and the accompanying woodcut illustrates the kind of apparatus now commonly in use.



I need not dwell on what I conceive to be the advantages of my splint further than to say that, besides the movements of pronation and supination referred to, it admits of very free flexion and extension, and is available for either the right or the left limb; moreover, the articular ends of the bones may be separated to any required extent. I may add that the forearm part is of sufficient length to receive the hand.

Your obedient servant,

FRANCIS MASON.

5, Brook Street, Grosvenor Square, June 25th, 1877.

## OBITUARY.

## WILLIAM ALLISON, M.R.C.S.ENG.

WE very much regret to have to announce the death of Mr. William Allison, which occurred on the 14th instant, at Scarborough, at the advanced age of eighty years.

The late Mr. Allison resided, and practised his profession as a surgeon, at East Retford, from June 1824 to September 1869; and for twenty-six years—viz., from 1826 to 1852—he was the partner of the late Mr. William Mee. After the retirement of Mr. Mee, Mr. Allison continued to practise at Retford until, finding his health and strength fast failing, at the age of seventy-two, and after a residence of forty-five years in Retford, he retired from the labours of an active medical man in large practice, and went to reside at Scarborough. The entire rest and bracing air obtained at Scarborough soon reinvigorated him; and, up to a short time before his death, Mr. Allison was able to walk five or six miles daily without fatigue, and expressed himself as having become much stronger and more hardy than he had been during some preceding years.

Few medical men had more real friends and earned the respect and confidence of others to a greater extent than Mr. Allison did; and had it not been for his modest opinion of his own merit, and a sensitive shrinking from aggrandisement, he would on more than three occasions have been presented with public testimonials, in recognition of his worth and the estimation in which he was universally held.

He wrote much, and did many generous and courageous acts to further science and in application to his profession in the cause of suffering humanity. Before the passing of the Medical Act and the formation of the Medical Council, and both before and after he was elected by his medical brethren of the Parliamentary district of Retford as their representative on the London Managing Committee of the professional National Institute, Mr. Allison contributed frequently to the *Times* and to the BRITISH MEDICAL JOURNAL, and other journals, on the desirability of a higher standard of General Medical Education, and of a preliminary examination of students in general attainments, and also on various practical points in his profession.

In the year 1832, the Asiatic cholera became epidemic in Retford, and Mr. Allison went at once both to the Manchester and Liverpool Cholera Hospitals to ascertain the nature and most successful treatment of the disease. In the summer of that year, many of the inhabitants of Sutton's Row, Retford, became subjects of the malady; and, after several deaths had occurred, so great was the panic produced that no one could be induced to place the corpses in coffins. Mr. Allison then, as a volunteer, himself performed the duties which others refused to do. He also, by the use of disinfectants, and by breaking windows where proper ventilation could not otherwise be obtained, assisted in the prevention of the spread of the disease.

Though Mr. Allison lived to follow most of his earlier friends and professional colleagues to the grave, and he died away from the town in which his best life was spent, he will, for many years to come, be remembered with feelings of greatest respect and esteem by all who had the privilege of his acquaintance and friendship; and we doubt not the force of his most useful and exemplary life will leave its happy influence in the world long after he may be personally forgotten.

PUBLIC HEALTH  
AND  
POOR-LAW MEDICAL SERVICES.

## POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

SIR,—I trust you will permit me to remind the members of the Poor-law Medical Service that the annual meeting of the Association will be held at 3, Bolt Court, Fleet Street, on Tuesday, July 3rd, at 3 P.M. precisely, when, besides certain matters of a routine character, subjects of considerable interest to metropolitan as well as provincial members will be discussed—such as the abuse of authority by the police, in converting workhouse infirmaries into continuous police-stations; the extension of the provision by boards of guardians of expensive medicines; the necessity for the establishment of dispensaries in provincial towns; the consideration of some important correspondence with the Local Government Board anent the question of extra fees; the Permissive Superannuation Act, etc.

The work done by the Council during the last twelvemonth, though not attracting public attention so markedly as in past years, has, never-



theless, shown the absolute necessity for such an organisation, seeing that we have been frequently applied to for information, advice, and support by Poor-law medical officers who, without our assistance, would have been at a loss to know where to go to for help.

The Council, therefore, trust that members and friends of the Association will strive to put in an appearance, as it is very desirable that no apathy or lack of interest should be exhibited.—I am, sir, yours obediently,

JOSEPH ROGERS, *Chairman of Council.*

Dean Street, June 25th, 1877.

#### SANITARY FEES.

SIR.—I shall be very much obliged if you or any of your readers could inform me what are the fees charged by medical officers of health when they make reports, and do they vary the charge according to distance? I am a medical officer of health, and was called in by a neighbouring sanitary authority to make a report on some property three miles from my house. What fee ought I to charge? Yours truly,

ARTHUR ROBERTS.

Albert Street, Keighley, June 25th, 1877.

#### THE CROYDON BOARD OF HEALTH AND INFECTIOUS CASES.

SIR,—In common, I have no doubt, with many others, I read with some surprise the paragraph under the above heading in last week's *JOURNAL*. The importance—nay, the necessity—of every local authority being in a position to offer to the residents in its own district the means of isolating infectious disease, quite irrespective of whether they are paupers or not, is now so universally admitted by all authorities on sanitary matters (though not, unfortunately, by all sanitary authorities), that it needs no argument in its support. The position taken up, therefore, by the Croydon Local Board is a most mischievous and retrograde one; and that it should receive the support of one who has done so much good work in the cause of sanitary progress as Dr. Alfred Carpenter, cannot but be a subject of regret to all earnest sanitarians. I think, therefore, that Dr. Carpenter owes it to the profession to explain in your columns on what grounds he lends his support to a policy which is so little in harmony with an enlightened regard for the public health.—Yours truly,

A MEDICAL OFFICER OF HEALTH.

#### RURAL SANITARY AUTHORITY.

SIR.—How is a rural sanitary authority constituted? The *Local Government Directory* gives the officers, but does not say if they are under the control of the members, or whether they of themselves are the authority.

\* Consult the Public Health Act, 1875, for an answer to this very elementary question.

### MILITARY AND NAVAL MEDICAL SERVICES.

DR. WILLIAM PARRY, Deputy Inspector-General of Hospitals (retired), died on June 19th, at the age of 87, at Chatham, where he had lived for many years. He entered the service as assistant-surgeon in 1813, and he had seen much service in various parts of the world. Dr. Parry was in surgical charge of the wounded at Fort Pitt, Chatham, during and after the Crimean war.

DEPUTY SURGEON-GENERAL THOMAS MOORHEAD, M.D., recently employed at Hong-Kong, died at Tunbridge Wells a few days since, aged 55. He entered the Medical Department of the Army as assistant-surgeon in October 1845, and served in the Crimean campaign from November 1854, and was surgeon of the 7th Fusiliers at the capture of the Quarries on June 7th, and assaults of the Redan on June 18th and September 8th, for which he received the medal with clasps and the Turkish medal. He served also as sanitary officer to the British troops in Abyssinia during the campaign of 1868, for which he received a medal.

We (*Naval and Military Gazette*) understand that the Secretary of State for War has arranged that the pay and allowances of medical army officers on home service shall be issued by Messrs. Vesey W. Holt and Co., of 17, Whitehall Place, from 1st July next. This is but a return to an old arrangement, for Sir John Kirkland, Messrs. Holt's predecessor in business, was agent to the Army Medical Department for many years. The contemplated change, we may add, will not involve any expense to the public.

### MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, June 21st, 1877.

*Public Health (Metropolis) Bill.*—In answer to Sir J. M'GAREL HOGG, Mr. SCLATER-BOOTH said he had no objection that further time should be taken before the Public Health (Metropolis) Bill went into Committee. As he had already explained, the measure was, with

little exception, essentially one for the consolidation of the existing law. He proposed to fix the Committee for that day week.

*The Arctic Expedition.*—Captain PIM asked whether Captain Nares had been called upon to explain why he did not observe the orders he received with respect to sledge parties? why he remained on board ship instead of placing himself at the head of the Polar sledge party? and why, at the end of August 1876, he did not make another attempt to reach the Pole? and he further asked whether the expedition returned in consequence of the outbreak of scurvy?—Mr. A. EGERTON thought the best answer he could give to the honourable and gallant member, without trespassing on the time of the House, was to tell him that all the communications which had been addressed by the Admiralty to Sir G. Nares, relating to his conduct while in command of the Arctic Expedition, had been laid on the table of the House. To those papers he must refer the honourable and gallant gentleman.

*Indian Medical Service.*—Sir C. O'LOGHLEN (in the absence of Mr. Stacpoole) asked the Under Secretary of State for India why the examination of medical officers for promotion to the rank of Surgeon-Major was retained in the Indian Army, although discontinued in the British Army.—Lord G. HAMILTON: The discontinuance of the examination of medical officers for promotion to the rank of Surgeon-Major in the British Army was coincident with an entire alteration in the constitution of that service, whereby the greater number of those officers will not be eligible for promotion at all, as their term of service is to be only ten years in all, whereas twelve years' service are required to qualify for promotion to the rank of Surgeon-Major. No such change has been made in the Indian Service; and the grounds whereon the system was originally adopted as desirable in the British Service still hold good there. The point has, however, been brought to the notice of the Secretary of State by the Government of India; but, as a report on the general question of the organisation of the entire Indian Medical Service is shortly expected from India, it was determined to await that report before coming to any decision on this individual point.

### MEDICAL NEWS.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 21st, 1877.

Cardew, George Arthur, Cheltenham  
Taylor, Moses, Cannock, Staffordshire  
Webb, Henry Langley, Cheadle, Staffordshire

The following gentlemen also on the same day passed their primary professional examination.

Oxley, Alfred James Rice, London Hospital  
Pritchard, Samuel Evan, London Hospital

#### MEDICAL VACANCIES.

THE following vacancies are announced:—

BATH UNION.—Medical Officer for the Workhouse and First District.  
BRIGHTON and HOVE DISPENSARY.—Resident House-Surgeon. Salary, £130 per annum, with furnished apartments, coals, gas, and attendance. Applications to be sent in on or before July 2nd.  
FREEBRIDGE LYNN UNION.—Medical Officer for the Workhouse and the Second Eastern District.  
NEW HOSPITAL FOR WOMEN, Marylebone Road.—Junior Physician; also, Resident Medical Officer. Women only eligible. Salary, £50 per annum, with board, lodging, washing, and attendance.  
ROYAL BERKS HOSPITAL, Reading.—House-Surgeon. Salary, £90 per annum, with board, lodging, and washing. Applications to be made on or before July 14th.  
WARWICK COUNTY ASYLUM.—Junior Assistant Medical Officer. Salary, £100 per annum, with furnished apartments, board, and attendance.

#### BIRTHS, MARRIAGES, AND DEATHS.

The charge for inserting announcements of Births, Marriages, and Deaths, is 3s. 6d., which should be forwarded in stamps with the announcement.

##### BIRTH.

WHARTON.—On June 25th, at 39, St. George's Road, Kilburn, the wife of Henry Thornton Wharton, M.A., M.R.C.S., of a son.

##### DEATHS.

WHITE.—On May 28th, at Indore, Central India, Edith Letitia, the beloved wife of Surgeon-Major Charles White, and the much loved youngest daughter of \*Joseph Seaton, M.D., of Holford House, Sunbury.

WILLIAMS.—On June 22nd, at her residence, 13, Newhall Street, Birmingham, Sarah, the beloved wife of \*Thomas Watkin Williams, F.R.C.S., late General Secretary to the British Medical Association.

BEQUEST.—It is announced that Mr. Francis Askens, late of Pembroke Road, Dublin, has bequeathed to St. Vincent's Hospital, Stephen's green, the sum of £300.



## OPERATION DAYS AT THE HOSPITALS.

**MONDAY.....** Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.

**TUESDAY.....** Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Westminster Ophthalmic, 1.30 P.M.—West London, 3 P.M.—National Orthopaedic, 2 P.M.

**WEDNESDAY..** St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.30 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—King's College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Cancer Hospital, Brompton, 3 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.

**THURSDAY....** St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—Hospital for Women, 2 P.M.—St. Thomas's (Ophthalmic Department), 4 P.M.—Charing Cross, 2 P.M.

**FRIDAY.....** Royal Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.—Royal South London Ophthalmic, 2 P.M.—Guy's, 1.30 P.M.

**SATURDAY....** St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—East London Hospital for Children, 2 P.M.—Royal Westminster Ophthalmic, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Royal Free, 9 A.M. and 2 P.M.

## MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

**WEDNESDAY.**—Obstetrical Society of London, 8 P.M. Specimens. Mr. T. Spencer Wells, "Additional Cases of Ovariectomy performed during Pregnancy"; and other communications.

## LETTERS, NOTES, AND ANSWERS TO CORRESPONDENTS.

**CORRESPONDENTS** not answered, are requested to look to the Notices to Correspondents of the following week.

**AUTHORS** desiring reprints of their articles published in the *BRITISH MEDICAL JOURNAL*, are requested to communicate beforehand with the printer, Mr. Thomas Richards, 37, Great Queen Street, W.C.

**PUBLIC HEALTH DEPARTMENT.**—We shall be much obliged to Medical Officers of Health if they will, on forwarding their Annual and other Reports, favour us with *Duplicate Copies*.

**CORRESPONDENTS**, who wish notice to be taken of their communications, should authenticate them with their names—of course not necessarily for publication.

**WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.**

**COMMUNICATIONS** respecting editorial matters, should be addressed to the Editor, 37, Great Queen Street, W.C.; those concerning business matters, non-delivery of the *JOURNAL*, etc., should be addressed to the General Manager, at the Office, 36, Great Queen Street, W.C., London.

## DEAF-MUTES.

**SIR,**—The report of a meeting held at the Mansion House relative to the oral education of deaf-mutes, as given in your last issue, is somewhat incomplete. Having been present and taking an interest in the subject, I am very much surprised to find that the remarks relative to the system of teaching made by the Rev. J. Watson, Principal of the Deaf and Dumb Asylum, Old Kent Road, are not even alluded to. As however they were, from a physiological point of view, exceedingly interesting, more especially to members of the medical profession, I think a brief summary of them may be acceptable. He stated that for upwards of a century the combined system of teaching by lip-reading, articulation, manual alphabet, and signs, had been carried out at the asylum, first under the superintendence of his grandfather, subsequently his father, and latterly himself: that in the case of congenital deafness, there was an absolute necessity for making use of all subsidiary aids towards their instruction, as in the majority of instances they were of feeble intellect, almost approaching idiocy, and consequently to confine the instruction to lip-reading alone would be useless; whereas those who had been born with organically perfect brains, but who afterwards had lost their hearing through disease or by injury, could be much more readily taught articulation or lip-reading; but that the German system, or that of entirely depending on lip-reading alone, to the exclusion of other methods, as used in the combined system, was not adapted to the education of deaf-mutes generally. Having myself visited the institution of the Old Kent Road, I can endorse Mr. Watson's remarks, as there you can readily pick out those congenitally deaf from those who have lost their hearing from disease. In the case of the congenitally deaf, the expression of countenance is dull, the head is of bad conformation and small; in some cases, absolutely microcephalic, their whole appearance giving the idea of arrested and feeble development. Mr. Watson stated that at one time the proportion of congenital deafness to those from disease, inmates of the Asylum, was about equal; but that of late years, owing to improved medical treatment in disease, such as scarlet fever, etc., where the hearing was so often lost, the ratio of cases from disease was a decreasing one. Before, therefore, coming to a conclusion to adopt a system (viz., the German one) which elsewhere has been tried and failed, it is very desirable that some inquiry into the experience of those who have devoted themselves to the training of the deaf and dumb in this country, should take place as to the best system; and that now the Local Government Board have taken the subject up, a commission might be appointed to investigate the whole matter, as to the best method of educating deaf-mutes. We are now in danger of having a system which has worked well and given good results, overthrown by the action of a few dilettanti enthusiasts, having no practical experience, whose motives are good, but whose action is likely to be mischievous.—I am, etc.,

June 1877.

P. C. MURIE, Staff-Surgeon R.N.

**CORRESPONDENTS** are particularly requested by the Editor to observe that communications relating to Advertisements, changes of address, and other business matters, should be addressed to Mr. Francis Fowke, General Secretary and Manager, at the Journal Office, 36, Great Queen Street, W.C., and not to the Editor.

## UNIVERSITY MEDICAL DEGREES.

**SIR,**—Will you permit me to reply to some remarks in the *JOURNAL* of June 23rd, on the subject of University medical degrees, signed by Γαμμα. He says: "Universities have abandoned for the most part their legitimate functions, as the trainers, educators, and branders of a higher class of consulting practitioners." Will Γαμμα be good enough to inform us at what period the medical curriculum at any British University was better calculated than at present to produce a "higher class of consulting practitioner", when the standard of age and thoroughness of examination was stricter, and when the M.D. signified a man more perfectly qualified than it now does? Until he has done so, the above quoted sentence is simply meaningless. A glance at an University Calendar would have prevented the most palpable error of writing of "young men of twenty-one or twenty-two years of age branded with the M.D. degree". I write under correction as regards other Universities; but in Edinburgh, at any rate, ever since 1862, the minimum age at which the M.D. is procurable has been twenty-four. Moreover, the minimum number of years of study required is six—viz., four before taking the M.B., and two thereafter, which latter may be spent in the public services, in hospital work, or in private practice. It is to men thus slowly and laboriously trained that your correspondent applies such criticism as "want of knowledge of common things", "inexperience", "poor and needy", "barely sufficient means and manners", "rawness of mind", etc. If Γαμμα have never yet met with middle-aged and elderly practitioners (*sine M.D.*) to whom such language might with equal or greater justice be applied, his experience is certainly less than my own, for I beg to say that I frequently have, although I fail to see what good can accrue from the employment of such terms. We are next informed that "within a period of a few months, youths of the class named have come into my neighbourhood"; and this statement goes a long way, I believe, to explain his virtuous indignation. To see "a youth scarcely out of his boyhood" wearing a badge of professional distinction which oneself in vain aspires to cannot be comforting, but to depreciate the value of a rival's acquisitions is scarcely dignified, even were there better ground for so doing than there is. If it be true, as Γαμμα says, that "under present circumstances the degree of M.D. become the badge of youth, inexperience, and want of practice", why should he be so clamorous to obtain it? and how comes it that the public, from whose dictum, for better or worse, there is no appeal, have attached a certain value to the degree? And what is this latter but merely the sum total of public experience of the men who are and have been in times past distinguished by that degree?

To sum up, the position of Γαμμα is simply this: that at the time of life when, in this as in all other callings, men embark upon their training, he omitted, or declined, or at any rate did not go through an University curriculum and take its degree. In after years, he discovers that it might have been better for him if he had done so, as the public, for some reason or other, would seem to prefer the man so trained. And so he comes forward with the cry of the foolish virgins, "Give us of your oil, for our lamps have gone out". I conceive it to be a very great mistake, and one tending to debase the value of all M.D. degrees, that some Universities have committed in relaxing the residence clauses, for a degree without residence is not, strictly speaking, a degree at all. A degree implies, or should imply, that the graduate has been trained by certain masters, has been imbued with the traditions and *esprit* of his alma mater, and mixed freely with his contemporaries within its walls. And I wish that it would become the custom for a M.D., as it often is for a M.A., to write the contracted name of the University to which he belongs after his degree, so that all might know whence he comes, and whether he be really a "Varsity man", or one whose sole residence in an University consisted in a round of the clock, more or less, all told. What should we say of the man who trundled a cask of wine to the Château Lafite, and inviting comparison between his production and that of that vineyard, requested the owners, for a consideration, to affix their brand to his cask? Would not the owners be right in saying, "Nay; but if your wine is as good as you affirm, call it by its own name, and people will soon be as eager to have it as they now are to have ours."

The last sentence in Γαμμα's letter contains, however, a really good suggestion: "Universities might be brought to do justice by simply being abandoned altogether by the profession and students." Now, strong as his party is in numbers and intelligence, there should be little difficulty in instituting an entirely new professional designation altogether; and as the M.D. has become "the badge of youth and inexperience", let the new title be the badge of age, experience, culture—in one word, professional perfection. And most assuredly if the title really signify true worth, the public will forsake the wearers of the badge of youth and inexperience for those who hold the new distinction. Such a course, if these premises be correct, must succeed; and it certainly would be more noble and manly than the persistent attempts made to break into the fold which others have entered by the legitimate door. As for those others, who, as pointed out by your other correspondent "A Disgusted M.D.", coolly assume the title of "Doctor" in face of the disclaimers of the Colleges and the press, I blush to think that ours is the only profession where such conduct goes unchecked. No subaltern in the army dare style himself "captain", no junior call himself a "barrister" until called, no artist an "academician" until elected. And it is very properly considered bad taste and the reverse of a compliment to style a man by any higher designation than he rightly bears—as, for instance, to style in English "captain", or in French "mon lord". But as apparently in our calling every man is free to adopt any designation which he conceives will render him more important in the eyes of the public, I suppose that we need not be surprised ere long to find the non-content practitioner styling himself "professor" upon the plea that he belongs to a "profession". This will be no less logical than that of those who rest their claim to the title "Doctor" solely, so far as I can see, upon the fact that they "doctor" people, to make use of a vulgar and barbarous verb.

As there would seem to be no spirit in us to check such irregularities in our ranks, is there, Mr. Editor, any power which we graduates, who have borne the burden and heat of a six years' curriculum, can invoke to prevent such a thing from the spoiler? Yours, etc.,

Our witty contemporary *Punch* thus amusingly alludes to the numerous "aid" medical charities lately given in Great Britain: "Poor old Dr. Ball, I say, Mary says: 'No; we are engaged to the Lord and the Lord's will be done.' I have met him at the Epileptic Dance on Saturday." "Oh, yes; we are sure to be there!" Epileptic stewards are so deluged!



**NOTICES of Births, Deaths, Marriages, and Appointments, intended for insertion in the BRITISH MEDICAL JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.**

**PRIVATE LUNATIC ASYLUMS.**

SIR.—A correspondent seeks information through the JOURNAL on the above named subject. He may find in the following named works some suggestions:—Crowley, *On the Construction and Government of Lunatic Asylums*—Plans, 1247; Browne, *What Asylums were, are, and ought to be*, 1866; Milligan's *Aphorisms, with Considerations on Public and Private Asylums*, 1840; Williams, *The Lunatic Benefited, and on Public and Private Asylums*, 1852; Jacobi, *On the Construction and Management of Hospitals for the Insane*, 1841; Kirkcaldie, *On the Organisation and General Management of Hospitals for the Insane*—Plans, Philadelphia, 1854.—I am, etc., E. N.

**PRURITUS ANI.**

M.R.C.S.E. writes:—From fifteen to twenty-five years ago I was a sufferer from this troublesome disease. The symptoms invariably came on at night, when warm in bed—not regularly every night, but sometimes for several nights in succession. Free ablation of the parts with cold water almost invariably gave relief, but did not effect a radical cure. I therefore applied freely "violet powder", at first two or three times a day, and afterwards after every evacuation. When at home, I keep a box containing violet powder and a puff in my water-closet, and have continued to use it daily for the last fifteen years. I have not had any return of the disease since I commenced this simple treatment. I attribute the cure, in my own case, to the powder having a slightly astringent effect when applied to the parts affected; or it may have a mechanical effect, by stopping up the pores, and at the same time of absorbing any acrid secretion produced by the inflammatory action of the parts.

**PRACTICE IN FRANCE.**

Would the Editor of the BRITISH MEDICAL JOURNAL kindly inform a subscriber what steps it is necessary for him to take to enable him to practise in one of the French towns on the Mediterranean?

\* \* Apply through the Foreign Secretary and English Ambassador, with full details of diploma, for an authorisation to practise, to the French Minister of the Interior; or present himself for examination to the Paris Faculty of Medicine by letter, stating diploma, or to the Dean of the Faculty of Medicine, University of Paris.

**TESTIMONIALS TO CHIROPODISTS.**

SIR,—I beg to draw your attention to the newspaper, which I send by this post, and to ask your opinion as to the propriety and wisdom of respectable surgeons giving testimonials to chiropodists. My own opinion is that, if not a breach of etiquette, such a proceeding is, to say the least, highly injudicious, and not to be passed over without comment or protest. I am sure that in the present case, not one of the four gentlemen whose testimonials are advertised had any sinister or ulterior motive, their concession being simply the result of good nature.—Yours faithfully, VIGILANS.

DR. GREATERE should apply to the Registrar of the General Medical Council, Oxford Street.

**DEGREES FOR LONDON STUDENTS, PAST AND PRESENT.**

SIR,—The University of Durham affiliates colleges in arts and theology in different parts of the world. Why should it not affiliate all the London medical schools, giving students M.B. and M.D. after passing a set of fair and reasonable examinations either in London or Durham—not such terrific ordeals as the London University ones?—The way would then be open for admitting qualified men—past students of London hospitals—to modified preliminary and primary examinations, and to a thoroughly good practical and scientific final. No student or practitioner would then have any cause for complaint; and if an Oxford, London, or even a St. Andrew's graduate should despise the Durham man's degree, he could easily show the (supposed) superiority of his own by adding to it the name of his University. Probably Durham would give honorary degrees to any disgraced London graduates who do not care to share their degrees with medical women.—I am, sir, yours, etc., June 1877. M.D.CAMB., B.Sc.LOND.

**TWO CASES OF MOTHERS' MARKS.**

SIR,—The two following cases are, I think, sufficiently worth recording, as bearing on your article on Mothers' Marks in the JOURNAL of the 16th instant. Although the results are different, the alleged causes were so definite that I think we cannot fail to attribute to nerve-influence the bringing about of the unfortunate deformities.

Mrs. W., attended by a midwife, asked me to see her infant, six months old, for some deformity of the genitals. I found these parts in a thorough nondescript state. There were slight traces of external labia, no appearance of vagina, no opening of urethra, but a number of spongy fleshy masses, through which the urine seemed to filter away, and kept in a constant state of dribble. I tried to pass a probe, and, if possible, to find or establish an urethra; but after many attempts I failed, and felt sure that, with such a state of things, the child would never live to grow up. She is now ten years old, a fairly strong and healthy girl, but still suffers from inability to hold her water, which dribbles away as at first. The labia are a little larger, and approximate somewhat more, but the parts within present the same appearance. The mother told me that when about three months gone, whilst carrying something in her hands she tripped her foot against a nail standing by the fender and fell heavily forwards, striking the external genitals severely against the sharp edge of the nail. She was extremely frightened and hurt, and at once was filled with apprehension how it would affect her child. Pain and discomfort from the blow lasted with her for some considerable time, and after the birth of the child she was not in the least surprised when told of the deformity.

The second case is that of an infant whom I found after its birth to have a very large port-wine stain on the left side of the face, taking in half the nose, and extending across to the ear and on to the neck; half the tongue and all that side of the interior of the mouth were affected as well. It was the most extensive marking I had ever seen. On asking the mother, a publican's wife, how she accounted for it, she said that when about four months gone she was joking with a man in the bar who suddenly took up a handful of malt grains, and holding her head fast, rubbed them all over her face and into her mouth. Some neighbours who witnessed the occurrence told her directly she might look out for her child being marked, and so sure enough it was.

The two cases are interesting, because there is no necessity to trespass on the imagination, as is often the case. If strong impressions are transmissible through nervous agency, the effects produced are well exemplified in these two cases.—I am, etc.,

FREDK. LONG, L.R.C.P. LOND.

**NOTICE TO ADVERTISERS.**—Advertisements for insertion in the BRITISH MEDICAL JOURNAL, should be forwarded direct to the Publishing Office, 36, Great Queen Street, W.C., addressed to Mr. FOWKE, not later than *Thursday*, twelve o'clock.

**SALICYLIC ACID AND ITS SALTS.**

SIR,—I would feel obliged if some of your correspondents who have been using salicylic acid or its salts, would say with what priced preparation their results have been obtained. In Hopkins and Williams's list, these preparations are quoted as "natural" and "artificial", the latter being only one-fifth the price of the former. If the dear article be the only useful one, it will be necessary for the profession—especially in the country—to see that their prescriptions be properly compounded. If the cheap one be equally serviceable, it is a matter which should be widely known, as the very high price of the natural acid and salts must greatly limit its use in private practice among the poorer classes.—Yours truly, Portrush, Co. Antrim, June 13th, 1877. A. T. CARSON, M.D.

P.S.—I have myself tried the expensive salt with good results.

**THE BUNHILL FIELDS BURYING GROUND.**

SIR,—Seeing a statement in the papers some time ago—say about three months—that the cemetery of the Society of Friends, Bunhill Fields, Finsbury, was in part to be built upon, I have for long watched to see whether any Londoner would raise his voice against the scheme so condemned by the late Dr. Parkes in his *Manual of Hygiene*, ch. viii., "Soils," p. 304 (4th edition); but the clause 68 of Mr. Slater-Booth's Bill on page 754 of the Association JOURNAL for last week should draw attention to this subject. If such a mode of utilising the site of the burial-ground be really in contemplation, pray act on the principle that "prevention is better than cure", and let the local authorities concerned be warned in time.—I am, etc., June 20th, 1877. SURGEON-MAJOR.

We are indebted to correspondents for the following periodicals, containing news, reports, and other matters of medical interest:—The Birmingham Daily Post; The York Herald; The Bridlington Quay Gazette; The Scarborough Daily Post; The Blyth Weekly News; The Glasgow Herald; The Malvern News; The Liverpool Porcupine; The Sheffield and Rotherham Independent; The Liverpool Mercury; The Carlisle Journal; The Merthyr Express; The Sussex Daily Post; The Sheffield Daily Telegraph; The Nottingham Journal; The Manchester Free Lance; The Belfast News Letter; The Manchester Courier; The Macclesfield Courier; The North Wales Chronicle; The Sunderland Daily Post; The Western Daily Mercury; The Sunderland Daily Times; The Sunderland Daily Echo; The Liverpool Daily Courier; The Farmer; The Living Age; The Metropolitan; The Glasgow Herald; The Redditch Indicator; The Eastbourne Standard; etc.

\* \* We shall be greatly obliged if correspondents forwarding newspapers will kindly mark the passages to which it is desired to direct attention.

**COMMUNICATIONS, LETTERS, etc., have been received from:—**

Dr. George Johnson, London; Dr. Wm. Rutherford, Edinburgh; Dr. F. P. Atkinson, Kingston-on-Thames; Dr. W. M. Kelly, Taunton; Dr. W. Marcet, London; Dr. J. Hughlings Jackson, London; Dr. Joseph Bell, Edinburgh; Mr. W. E. Buck, Leicester; Dr. C. Theodore Williams, London; Dr. W. Fairlie Clarke, Southborough; Dr. J. Milner Fothergill, London; Dr. W. Bathurst Woodman, London; The Rev. R. T. Leslie, Liverpool; Mr. W. F. Teevan, London; The Secretary of the Obstetrical Society; Mr. James Morton, Glasgow; Mr. C. Whipple, Plymouth; Mr. R. P. Oglesby, Leeds; Dr. A. S. Taylor, London; Dr. Tripe, London; Mr. Holmes, London; Dr. Baylis, Tunbridge Wells; Dr. A. B. Greatere, London; Dr. Pavy, London; Dr. De Pietra Santa, Paris; Dr. Bond, Gloucester; Dr. Urban Pritchard, London; The Secretary of the Sanitary Institute; Dr. Sawyer, Birmingham; Mr. Lowndes, Liverpool; Mr. Nock, London; Mr. Jacobson, London; Mr. Sampson Gamgee, Birmingham; Dr. Sturges, London; Surgeon-Major; The Right Honourable the Lord Mayor; Dr. Warner, London; Dr. Joseph Rogers, London; Dr. Corfield, London; Obstetrician; Dr. John Spear, South Shields; Mr. F. R. Fisher, London; Messrs. Salt and Son, Birmingham; The Secretary of Apothecaries' Hall; Dr. J. W. Moore, Dublin; Dr. A. Hughes Bennett, London; An Associate; Mr. N. A. Humphreys, London; Dr. G. Y. Heath, Newcastle-on-Tyne; The Registrar-General of Ireland; Dr. Henry Harris, Redruth; The Registrar-General of England; Dr. Theodore Maxwell, Hanwell; Our Paris Correspondent; Dr. C. M. Campbell, Torquay; Mr. Richard Weaver, London; Our Edinburgh Correspondent; Mr. Francis Mason, London; Dr. Maclaren, Carlisle; The Rev. David Macrae, Gourrock; Our Dublin Correspondent; Mr. Wanklyn, London; Dr. Bradbury, Cambridge; Dr. Stirling, Edinburgh; Dr. Sieveking, London; The Secretary of St. Thomas's Hospital Medical School; Dr. H. Macnaughton Jones, Cork; Mr. H. M. Jay, Chippenham; M.D. Edin.; A Subscriber; Mr. Arthur Roberts, Keighley; Dr. Mahomed, London; Mr. Richard Davy, London; Dr. Armstrong, Newcastle-on-Tyne; Dr. Mackey, Birmingham; Dr. Leech, Manchester; Mr. Hogg, London; Mr. Liddle, London; Mr. Roberts, London; M. Lacassagne, Paris; Dr. Josiah Oliver, Maidstone; Messrs. Cook and Co., London; Dr. Seaton, Sunbury; Dr. Coats, Glasgow; Mr. Tarzwell, Sturminster; Mr. Herbert M. Morgan, Lichfield; M. Vignal, Paris; Dr. Birkbeck Nevins, Liverpool; etc.

**BOOKS, ETC., RECEIVED.**

On Idiocy and Imbecility. By William W. Ireland, M.D. London: J. and A. Churchill. 1877.  
An Introduction to Practical Histology. By George Thin, M.D. London: Baillière, Tindal, and Cox. 1877.  
Notes from a Dentist's Case-Book. By Felix Weiss, L.D., L.R.C.S. London: J. and A. Churchill. 1877.  
Explorations of the Aboriginal Remains of Tennessee. By Joseph Jones, M.D. Smithsonian Institution. 1877.



















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